SPR 96-092

APL 97-004

Daybreak Resources

RESOLUTION NO. 1997-10-14

A Resolution relating to Shoreline Management, regarding that certain Appeal identified as Daybreak Resources/Friends of the East Fork, Case File # APL 97-004-1842; located south of NE J.A. Moore Road and West of NE 61st Avenue, at approximately the 28000 block of NE 61st Avenue near La Center, Washington. The property is also identified as Tax lot 107 (225047), located in the Southwest quarter of Section 18, Township 4 North, Range 2 East, of the Willamette Meridian; in unincorporated Clark County, Washington.

WHEREAS, John Dentler, representing J.L. Storedahl and Sons, Inc., as a party of record for Appeal APL #97-004-1842 (Daybreak Resources/Friends of the East Fork), has petitioned the Board of County Commissioners pursuant to Chapter 18.600.100 of the Clark County Code (CCC) for Appeal to the Board of Commissioners from the Clark County Hearings Examiner's decision; and

WHEREAS, A public hearing was held before a Hearings Examiner on May 21, 1997, to consider an appeal by the Friends of the East Fork of a Planning Director determination that a Shoreline permit was not required for placement of a conveyor belt system for mined aggregate transport within the 100-year floodplain of the East Fork of the Lewis River at the Daybreak Resources site by J.L. Storedahl and Sons, Inc., and;

21 WHEREAS, The Hearings Examiner issued a written decision on July 1, 1997,
22 requiring a Shoreline Management conditional use permit for placement of the conveyor
23 belt system at the Daybreak Resources site, thus supporting the appeal by Friends of the
24 East Fork. The decision overturned a Planning Director determination that a Shoreline
25 Management permit was not required for the conveyor belt system; and
26
27 WHEREAS, The Hearings Examiner's decision was timely appealed to the Board
28 of County Commissioners by J.L. Storedahl and Sons, Inc., and
29
30 WHEREAS, The Board of County Commissioners held a public meeting on August
31 5, 1997, to consider the appeal; and
32
33 WHEREAS, The Board of County Commissioners continued the public meeting to
34 a limited public hearing on August 25, 1997; and
35
36 WHEREAS, The Storedahl appeal of the Hearings Examiner's decision requested
37 that the Board of County Commissioners, (1) reverse the Hearings Examiner's decision by
38 affirming the Planning Director's determination that a shoreline permit is not required for
39 the project as proposed and that the site plan review application may be processed for the
40 proposed mining and transport activities, and (2) provide other appropriate relief as the
41 Board deems appropriate; and
42

WHEREAS, The Board of County Commissioners found that the Hearings Examiner did not err in determining that FEMA floodplain maps outline the 100-year floodplain for the purposes of Shoreline Management jurisdiction according to Clark County Code; and

WHEREAS, The Board of County Commissioners found that the Hearings Examiner did not err in determining that the subject 19-acre mining project constituted an unlawful segmentation and piecemeal review under Shoreline Management and that mining on as much of the 349-acre site as is intended to be mined should be addressed as one project; and

WHEREAS, The Board of County Commissioners found that the Hearings Examiner did err in determining that because the use of the conveyor belt system for mineral transport was not listed as a permitted use in the Clark County Shoreline Management Master Program, a Shoreline Management conditional use permit was required by language contained in the Master Program. The Board found that a Shoreline Management conditional use permit was not required for the conveyor belt because every use not listed as permitted in the Shoreline Management Master Program is required to obtain a conditional use permit under the language contained in the Master Program; and

WHEREAS, The Board of County Commissioners found that the Hearings Examiner did err in determining that the conveyor belt system for mineral transport was not constructed in the 100-year floodplain (Shoreline Management jurisdictional area) and did

not therefore, require a Shoreline Management substantial development permit. The Board found that the conveyor belt system does require a Shoreline Management substantial development permit because it meets the definition of a structure that is constructed in the Shoreline Management jurisdictional area; therefore

BE IT ORDERED AND RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF CLARK COUNTY, STATE OF WASHINGTON, as follows:

The Hearings Examiner's decision on Appeal Case File #97-004-1842 (Daybreak Resources/Friends of the East Fork) is upheld in part and overturned in part as decided by the Hearings Examiner. The Hearings Examiner's findings relative to the floodplain mapping and area of Shoreline jurisdiction are affirmed. The Hearings Examiner's findings that the 19-acre mining project constitutes an unlawful segmentation and piecemeal review under Shoreline Management are affirmed. The Hearings Examiner's determination that a Shoreline Management conditional use permit is required is overturned. A Shoreline Management conditional use permit is not required for the conveyor belt system. The Hearings Examiner's determination that a Shoreline Management substantial development permit is not required is overturned. A Shoreline Management substantial development is required for the conveyor belt system to be constructed.

ADOPTED this 14 day of October, 1997.

Attest:

Tamie Richards
Clerk to the Board

BOARD OF COUNTY COMMISSIONERS
FOR CLARK COUNTY, WASHINGTON

By

Mel Gordon, Chair of the Board

Approved as to Form Only
ARTHUR D. CURTIS
Prosecuting Attorney

By _____
Betty Sue Morris, Commissioner

By _____
Richard S. Lowry
Senior Deputy Prosecuting Attorney

By _____
Judie Stanton, Commissioner

CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT

MEMORANDUM

TO: Clark County Board of Commissioners

FROM: Planning Staff

DATE: July 31, 1997

SUBJECT: APL 97-004-1842 (Daybreak Resources)

Public Meeting Date: August 5, 1997

Public Meeting Place: Board Conference Room

Purpose of Public Meeting: Appeal of Hearings Examiner's Decision regarding an appeal by the Friends of the East Fork of a Planning Director's determination that a Shoreline Management permit is not required for placement of a conveyor belt in the 100-year floodplain of the East Fork of the Lewis River. Appellant requests that the Hearings Examiner's decision be reversed and/or that the Board of County Commissioners provide other appropriate relief to the appellant. Reference SPR #96-092 (Daybreak Resource Project).

Identified Issues:

* Appellant contends that the Hearings Examiner erred in concluding that the site plan review for surface mining on a 19-acre portion of the Ray Woodside property constitutes an unlawful segmentation and piecemeal review of a larger proposal under the Shoreline Management Act.

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(360) 699-2375 • FAX (360) 699-2011 • TDD (360) 737-6057

* Appellant contends that the Hearings Examiner erred in concluding without substantial evidence that the applicant had not met its burden of proof in demonstrating the "boundaries of the 100-year floodplain are where it claims it is."

* Appellant contends that the Hearings Examiner erred in concluding without factual support or alternatively, erroneous fact finding, that the Federal Emergency Management Agency (FEMA) rejected a proposed revision of the 100-year floodplain presented by the applicant.

* Appellant contends that the Hearings Examiner erred in finding that the placement of a conveyor belt on the site requires a Shoreline Management conditional use permit.

* Appellant contends that the Hearings Examiner's conclusion that the placement of a conveyor belt requires a Shoreline Management conditional use permit was in error because such conclusion was not the basis of the Planning Director's determination and as such was not properly before the Hearings Examiner.

* Appellant contends that the Hearings Examiner's finding that SPR 96-062 cannot be approved because a Shoreline Management permit may or may not be required is without basis in law.

* Appellant contends that the Hearings Examiner's reliance on the Surface Mining Act to determine whether a site plan review application may be processed or approved is without basis in law.

Recommendation: **Deny the appeal. Uphold the Hearings Examiner's decision.**

Expected Staff Attendance: Gary T. Fish, Planner II, extension 4968
Monty Anderson, Rural Team Leader, extension 4499

Anticipated continuance: N/A

CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT

STAFF SUMMARY AND RECOMMENDATION TO THE BOARD OF CLARK COUNTY COMMISSIONERS

TO: Clark County Board of Commissioners

FROM: Gary T. Fish, Planner II Gary T. Fish
for: Michael V. Butts, Current Planning Manager

DATE: July 31, 1997

SUBJECT: Appeal of Hearings Examiner's Decision regarding an appeal by the Friends of the East Fork of a Planning Director's determination that a Shoreline permit is not required for placement of a conveyor belt in the 100-year floodplain of the East Fork of the Lewis River. Reference SPR #96-092-1842 (Daybreak Resource Project). **APL 97-04-1842 (Daybreak Resources)**

ISSUES:

* Appellants contend that the Hearings Examiner erred in concluding that the site plan review for surface mining on a 19-acre portion of the Ray Woodside property constitutes an unlawful segmentation and piecemeal review of a larger proposal under the Shoreline Management Act.

* Appellants contend that the Hearings Examiner erred in concluding without substantial evidence that the applicant had not met its burden of proof in demonstrating the "boundaries of the 100-year floodplain are where it claims it is."

* Appellants contend that the Hearings Examiner erred in concluding without factual support or alternatively, erroneous fact finding, that the Federal Emergency Management Agency (FEMA) rejected a proposed revision of the 100-year floodplain presented by the applicant.

* Appellants contend that the Hearings Examiner erred in finding that the placement of a conveyor belt on the site requires a Shoreline Management conditional use permit.

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* Appellants contend that the Hearings Examiner's conclusion that the placement of a conveyor belt requires a Shoreline Management conditional use permit was in error because such conclusion was not the basis of the Planning Director's determination and as such was not properly before the Hearings Examiner.

* Appellants contend that the Hearings Examiner's finding that SPR 96-062 cannot be approved because a Shoreline Management permit may or may not be required is without basis in law.

* Appellants contend that the Hearings Examiner's reliance on the Surface Mining Act to determine whether a site plan review application may be processed or approved is without basis in law.

REQUEST:

The appellant requests that the Hearings Examiner's decision be reversed by affirming the Planning Director's original determination that a Shoreline Management permit is not required for the project as proposed, and that the site plan review project approval be processed by the County. The appellant also requests that the Board of County commissioners provide other relief to the appellant as is deemed appropriate.

DISCUSSION:

1) **Appellant contends that the Hearings Examiner erred in concluding that the site plan review for surface mining on a 19-acre portion of the Ray Woodside property constitutes an unlawful segmentation and piecemeal review of a larger proposal under the Shoreline Management Act.**

The Hearings Examiner discussed this issue on page 5 of the decision, Findings #2(a) and #2(B). The Examiner relied on several court cases as precedent, as well a considerable volume of material in the hearing record, in arriving at the conclusion that site plan review # SPR 96-092 is an unlawful segmentation of a larger proposal and constitutes piecemeal review under the Shoreline Management Act.

Staff believes that the Hearings Examiner's discussion, findings, and conclusions are reasoned and correct as to the issue of segmentation and piecemeal review. There is no error in application of law or fact. The appellant currently has a Shoreline Management permit application on the larger site filed for processing with the County, for which preparation of an Environmental Impact Statement (EIS) was underway. According to the appellant's attorney, the appellant is not actively pursuing processing of this permit or preparation of the EIS, but does decline to withdraw the larger application at this time.

2) **Appellant contends that the Hearings Examiner erred in concluding without substantial evidence that the applicant had not met its burden of proof in demonstrating the "boundaries of the 100-year floodplain are where it claims it is."**

The Hearings Examiner discussed the floodplain issue at page 6 of the decision, Finding #3(a). The Examiner's discussion clearly states what evidence was used to reach the conclusion that the applicant had not met its burden of proof to demonstrate that the boundaries of the 100-year floodplain are where it claims.

Staff believes that the Examiner's findings and conclusion are correct.

3) **Appellant contends that the Hearings Examiner erred in concluding without factual support or alternatively, erroneous fact finding, that the Federal Emergency Management Agency (FEMA) rejected a proposed revision of the 100-year floodplain presented by the applicant.**

Again, the Hearings Examiner discussed the floodplain issue at page 6 of the decision, Finding #3(a). An October 2, 1996, letter from FEMA to Dave Sturdevant, Clark County Board of Commissioners, is specifically referred to in the discussion. The Examiner went on to state that "<u>The examiner does not expressly find that the applicant must obtain a FEMA map amendment to demonstrate the extent of the floodplain</u>." (emphasis added). The examiner did rely on FEMA's expertise in evaluating the proposed map revision and the extent of the 100-year floodplain. According to the Examiner's discussion, "substantial evidence in the record is not sufficient to overcome FEMA's conclusion that the applicant's analysis is incorrect."

Staff believes that the Examiner was correct in his conclusion. As the Examiner did not specifically state that the applicant must obtain a letter of map revision to demonstrate that the floodplain is other than that recognized by FEMA, the above appeal point does not appear to be determinative in the final decision.

4) **Appellant contends that the Hearings Examiner erred in finding that the placement of a conveyor belt on the site requires a Shoreline Management conditional use permit.**

The Hearings Examiner discussed the Shoreline permit issue at page 8 of the decision, Finding #5. The finding clearly states that the Examiner relied upon the Clark County Shoreline Management Master Program (SMMP), Chapter VI, p. 62, in reaching the conclusion that a Shoreline Management conditional use permit was required for the conveyor system. The proposed use is not identified as a permitted use in the SMMP and therefore, must required a conditional use permit.

Staff believes that the Examiner's findings and conclusion are correct, and that a Shoreline Management conditional use permit is required for placement and use of the conveyor system to transport mined material across the 100-year floodplain.

5) **Appellant contends that the Hearings Examiner's conclusion that the placement of a conveyor belt requires a Shoreline Management conditional use permit was in error because such conclusion was not the basis of the Planning Director's determination and as such was not properly before the Hearings Examiner.**

The Hearings Examiner discussed the issue of the extent of the appeal at page 5 of the decision, Finding #1. The discussion clearly identified that "CCC 18.600.100.C authorizes the Examiner to hear appeals of planning director's decisions as a *de novo* matter. The Examiner is required to conduct an independent review of the record. The planning director's decision is entitled to considerable weight in this appeal, but is not binding to the examiner. The examiner can reach a different decision even though the planning director's decision was reasoned, based on substantial evidence, and within his delegated authority."

Staff believes that the Examiner's discussion and code citation are correct. Since the appeal hearing is to be conducted as a *de novo* matter, the issue was properly before the Examiner, and the conclusions reached in the decision are correct.

6) **Appellant contends that the Hearings Examiner's finding that SPR 96-062 cannot be approved because a Shoreline Management permit may or may not be required is without basis in law.**

The Hearings Examiner discussed this issue on page 5 of the decision, Findings #2(a) and #2(B). The Examiner determined that site plan review # SPR 96-092 is an unlawful segmentation of a larger proposal and constitutes piecemeal review under the Shoreline Management Act. The discussion indicates that this unlawful segmentation and piecemeal review is the reason that SPR 96-062 cannot be approved, not the need or lack thereof for a Shoreline Management permit.

Staff believes that the Hearings Examiner is correct on this point.

7) **Appellant contends that the Hearings Examiner's reliance on the Surface Mining Act to determine whether a site plan review application may be processed or approved is without basis in law.**

The Hearings Examiner discussed this issue on page 7 of the decision, Findings #3(b)(i), (ii), and (iii). The Surface Mining Act was relied upon as one source of definitions related to mining activities, as was the Shoreline Management Program Handbook. It does not appear that the Examiner relied on the Surface Mining Act to determine whether or not the site plan review may be processed or approved, merely as a source of help in defining "mining activities". Therefore, it appears that this appeal point is without basis and is not determinative.

RECOMMENDATION:

Staff recommends that the Board of County Commissioners uphold the Hearings Examiner's decision as written.

GF:gf

H:\GARY-F\APPEAL 97\DAYBREAK.DOC

Changed from 10 am

NOTICE OF HEARING

The Clark County Board of Commissioners will hold a limited public hearing on Monday, the **25th day of August 1997 at 4:00 p.m.**, in the Commissioners' Hearing Room, 2nd Floor, Franklin Building, 1013 Franklin Street, Vancouver, Washington to consider the appeal of the Clark County Land Use Hearing Examiner decision that a Shoreline Permit is required for placement of a conveyor belt in the 100-year floodplain of the Lewis River, located south of NE J.A. Moore Road and east of NE 61st Avenue (*APL 97-004 Daybreak Resources*).

Daybreak Resources and Friends of the East Fork, or their representatives, are to present argument. Fifteen minutes is allowed for each representative. No other comments will be taken by the Board of Commissioners.

More information concerning this matter may be obtained from the Clark County Department of Community Development Planning, 1408 Franklin Street, Vancouver, Washington, telephone (360) 699-2375 extension 4968.

BOARD OF CLARK COUNTY COMMISSIONERS

Pam Richards
Clerk of the Board

Approved as to Form Only
ARTHUR D. CURTIS
Prosecuting Attorney

By Richard Lowry
Richard Lowry
Chief Civil Deputy

Please publish: August 11, 1997
Charge: C70265

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Persons requiring auxiliary aids or special arrangements in order to participate in this hearing should call 699-2232, Commissioners Office, or TDD 737-6032, Human Resources Dept., at least two days prior to the scheduled meeting

Michelle Harry

RECEIVED
JUL 22 1997
CLARK COUNTY
Plan & Dev. Review

NOTICE OF PUBLIC MEETING

RE: APL 97-04-1842 DAYBREAK RESOURCES

REGARDING AN APPEAL BY FRIENDS OF THE EAST FORK OF A PLANNING DIRECTOR'S DETERMINATION THAT A SHORELINE PERMIT IS NOT REQUIRED FOR PLACEMENT OF A CONVEYOR BELT IN THE 100-YEAR FLOODPLAIN OF THE LEWIS RIVER

AN APPEAL, of the Clark County Land Use Hearing Examiner's decision on the above-referenced matter has been filed by James Sellers representing J.L. Storedahl & Sons, Inc., requesting the Clark County Board of Commissioners to review the Land Use Hearing Examiner's decision dated July 1, 1997.

A public meeting is scheduled by the Board to consider the appeal on Tuesday, **the 5th day of August, 1997, at 10:45 a.m.**, or as soon thereafter as the matter may be heard, in the Commissioner's Hearing Room, 2nd Floor, Franklin Center, 1013 Franklin Street, Vancouver, Washington. At this meeting the Board will consider the matter based upon the written record before the Land Use Hearing Examiner, the Land Use Hearing Examiner's decision, and any written arguments as to whether the Hearing Examiner erred in deciding the issues under appeal. The written arguments must be received in the Board's office at P.O. Box 5000, 1013 Franklin St. Vancouver, Washington 98666 by **5:00 p.m. on Friday, August 1, 1997.** The Board of Commissioners shall not consider evidence outside the record of the examiner. THE BOARD WILL NOT RECEIVE ADDITIONAL TESTIMONY, ORAL OR WRITTEN, at such meeting.

At the aforementioned meeting date the Board may accept, modify, or reverse the Land Use Hearing Examiner's decision, remand to the Examiner, or continue the matter to a later date for receipt of limited oral argument.

More information concerning this matter may be obtained from the Clark County Planning & Development Review Division, 1408 Franklin Street, Vancouver, Washington, telephone (360) 699-2375 ext 4499. A copy of the appeal letter may be obtained in the Clark County Commissioners' Office, 1013 Franklin Street, Vancouver, Washington, (360) 699-2232.

Clerk of the Board

Louise Richards

Mailed: July 22, 1997

Revised 2/97

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Co./Dept. Michelle	Co. BOCC	
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Fax #	Fax #	

CASE FILE

Office of the
CLARK COUNTY LAND USE HEARING EXAMINER

1408 Franklin Street
P.O. Box 9810
Vancouver WA 98666-9810
Phone (360) 699-2375

NOTICE TO PARTIES OF RECORD
CASE: APL #97-004 (Daybreak Resource)

The attached decision of the Land Use Hearing Examiner will become final and conclusive unless a written appeal therefrom is filed with the Board of Clark County Commissioners, 2nd Floor, Franklin Center Building, 1013 Franklin Street, Vancouver, Washington, no later than 5:00 p.m. on **July 15, 1997** (14 calendar days after written notice of the decision is mailed).

All appeals must be written and must contain the case number designated by the County and the name of the applicant; the name and signature of each petitioner for the appeal and a statement showing that each petitioner is entitled to file the appeal as an interested party in accordance with CCC 18.600.100A; the specific aspect(s) of the decision being appealed, the reasons why each aspect is in error as a matter of fact or law, and the evidence relied on to prove the error; accompanied by a fee of $25.00; provided, that the fee will not be charged to a department of the County or other than the first appellant, and the fee shall be refunded if the appeal is withdrawn in writing by the petitioner at least 15 calendar days before the public meeting to consider the appeal.

SEPA appeals: For those proposals subject to approval following a public hearing, if the SEPA determination was duly appealed to the examiner at least 3 days prior to the public hearing, a subsequent SEPA appeal to the Board of Commissioners may be made by filing a written appeal with the Board of commissioners within the appeal period of the underlying application. The SEPA appeal will be decided by the Board in conjunction with the decision on the underlying recommendation based on the written record of the original public hearing (s).

The Board of Commissioners shall hear appeals of decisions on the record, including all materials received in evidence at any previous stage of the review, an audio or audio/visual tape of the prior hearing(s) or transcript of the hearing(s) certified as accurate and complete, the final order being appealed, and argument by the parties. No new evidence will be accepted.

The Board may either decide the appeal at the designated meeting or continue the matter to a limited hearing for receipt of oral argument. If so continued, the Board of Commissioners shall designate the parties or their representatives to present argument, and the permissible length thereof, in a manner calculated to afford a fair hearing of the issues specified by the Board of Commissioners. At the conclusion of its public meeting or limited hearing for receipt of oral legal argument, the Board of Commissioners may affirm, reverse, modify or remand an appealed decision.

Mailed on: **July 1, 1997**

PARTIES OF RECORD

API. #97-004 (Daybreak Resource)

MAY 8, 1997

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32501 NW EAGLE CREST DR.
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WEST CONSUTLANTS, INC
12509 BEL-RED ROAD SUITE 100
BELLEVUE WA 98005

INTEROFFICE AGENCIES
APL #97-004 (Daybreak Resource)
HEARING DATE: May 8, 1997
DECISION MAILED: July 1, 1997

LOUISE RICHARDS
B O C C
* * INTEROFFICE MAIL * *

CASE FILE

GARY FISH/MONTY ANDERSON
CASE PLANNER

MICHELLE EISENBISE
OFFICE ASSISTANT
INTEROFFICE

JOHN HARRIS
WR/DEVELOPMENT REVIEW FOR
COMMUNITY DEVELOPMENT

INTEROFFICE

JOHN RUBEN
DEVELOPMENT REVIEW FOR
COMMUNITY DEVELOPMENT
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RECREATION

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JANET
ASSESSOR'S OFFICE
INTEROFFICE MAIL

CARLA SOWDER,
SW WASHINGTON HEALTH DISTRICT
INTEROFFICE MAIL

LINDA MOORHEAD
CODE ENFORCEMENT
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ATTN: MARY LEGRY
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VANCOUVER WA 98668-1709

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#13
LAKE OSWEGO OR 97035

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* * INTER OFFICEMAIL * *

DIANA ALLEN
PLANNING TECH

INTEROFFICE MAIL

BEFORE THE LAND USE HEARINGS EXAMINER
OF CLARK COUNTY, WASHINGTON

Regarding an appeal by Friends of the East Fork of a planning director's determination that a Shoreline Permit is not required for placement of a conveyor belt in the 100-year floodplain of the Lewis River in unincorporated Clark County, Washington	))))	FINAL ORDER APPEAL 97-04-1842 (Daybreak Resources)

I. SUMMARY

1. J.L. Storedahl and Sons, Inc., dba Daybreak Resources (the "applicant") applied for Site Plan Review to operate a surface mine for extraction of sand and gravel on approximately 19 acres in the AG-20-S (Agriculture with Surface Mining Combining) District, south of NE J.A. Moore Road and east of NE 61st Avenue (the "site"). The applicant proposed to transport the extracted material via a system of conveyor belts to an existing aggregate processing operation located within the mapped 100-year floodplain. The conveyor belt system also would be within the mapped 100-year floodplain. By written decision dated April 4, 1997, the planning director approved the application subject to certain conditions. See SPR 96-092 (Daybreak Resource Project).

2. Friends of the East Fork appealed the planning director's decision by letter dated February 10, 1997. The appeal letter raised the following issues:

a. Mining the 19-acre parcel is an unlawful segmentation of a larger project subject to the Shoreline Management Act (the "SMA") and shoreline permit requirements;

b. The approved site plan would allow mining in lands under the jurisdiction of the SMA and a shoreline permit is required;

c. Placement of the proposed conveyor system within the boundaries of the 100-year floodplain constitutes mining in the 100-year floodplain;

d. Placement and use of the proposed conveyor system in the boundaries of the 100-year floodplain constitutes "development" under RCW 90.58.030(3)(d) (the SMA). The fair market value of the placement and use of the conveyor belt exceeds $2500 and/or materially interferes with normal public use of the shorelines of the state and, as such, must have a shoreline management substantial development permit;

e. Failure to require a shoreline management permit violates the Clark County Shoreline Management Master Program; and

f. The county failed to follow its process for making a shoreline management permit determination under CCC 18.330.040 (Shoreline Combining District).

3. A county hearings examiner held a duly noticed public hearing to receive public testimony and evidence regarding the appeal, and held open the record after the hearing to receive additional written testimony and evidence. This final order contains the examiner's findings and conclusions.

4. It is a gross understatement to say that the issues in this case are complex or that the matter will be resolved by this final order. But, having considered those issues to the best of my ability and for the reasons provided herein, the examiner hereby grants the appeal, reverses the planning director's decision and denies the site plan review application.

II. HEARINGS AND RECORD

1. Clark County Hearings Examiner Larry Epstein (the "examiner") received testimony at the public hearings about this appeal on May 8 and 20, 1997. A record of that testimony is included herein as Exhibit A (Parties of Record), Exhibit B (Taped Proceedings), and Exhibit C (Written Testimony). These exhibits are filed at the Clark County Department of Community Development.

2. At the May 8, 1997 hearing, county planner Monty Anderson testified that the applicant requested a continuance due to a personal emergency. The examiner granted that request and continued the hearing to May 20, 1997. No substantive testimony was received.

3. The following testimony was offered at the May 20, 1997 hearing.

a. County planner Gary Fish reviewed the history of the case and the Staff Report and Recommendation to the Hearings Examiner dated May 1, 1997 (the "Staff Report"). He noted that the applicant originally proposed to mine the entire 20-acre site, including areas of the site located within the mapped 100-year floodplain. The applicant subsequently revised the site plan to exclude the areas within the mapped floodplain. He noted that the boundaries of the shoreline management area include areas within 200 feet of the ordinary high water mark or the 100-year floodplain, whichever is greater. He testified that the planning director concluded, based on the opinion of the County Prosecuting Attorney, that the proposed conveyor belt system constitutes "equipment" rather than "development" as defined by the SMA. Therefore a shoreline permit is not required.

b. Diane Murbach, Virgil Barnett, Tom Grindeland, Peter Klingeman, Ray Woodside, John Dentler, and Charles Rowe appeared on behalf of the applicant, J.L. Storedahl and Sons.

(1) Ms. Murbach, an engineering geologist, summarized the existing conditions on the site and the proposed mining operations.

(2) Mr. Barnett introduced several photographs of the proposed conveyor system. Exhibit 31. He testified that the individual sections of the conveyor system are mounted on wheels and are easily transported. The sections weigh about 15,000 pounds and must be transported to the site by truck. The individual sections are not connected together or to the ground. Material is dumped from one section of the conveyor to the next. Each section costs about $20,000. Four to six sections will be required to transport material from the site to the processing area. He opined that the conveyor system could be setup to transport mined materials to the processing area without placing any of the conveyor sections within the 100-year floodplain. Mined material could be transported to the processing area by trucks. The applicant is not currently preparing or processing plans for additional mining within the 100-year floodplain.

(3) Mr. Grindeland, a hydraulic engineer, argued that the actual 100-year floodplain is smaller than the FEMA mapped 100-year floodplain, based on his analysis of the East Fork of the Lewis River (the "East Fork") after the February 1996 floods. He introduced several maps showing the boundaries of the FEMA-mapped floodplain and what he concluded were the actual boundaries of the 100-year floodplain. FEMA has not altered the delineated floodplain based on his study. He argued that the SMA defines the 100-year flood as a flood event with a 1 percent chance of occurring in a given year. It does not rely on the FEMA-mapped floodplain.

(4) Professor Klingeman concurred with Mr. Grindeland's analysis of the floodplain. He argued that the February 1996 flood far exceeded the 100-year flood. Based on prior flood events, the 1996 flood would be a 1000 year flood. He testified the FEMA map contains several errors based on the actual topography in the area. Several areas within the mapped floodplain are actually higher than the maximum flood elevation.

(5) Mr. Woodside, the owner of the site and other property in the area, testified that he has never granted a public easement over the site. The site does not provide public access to the East Fork. He occasionally allows members of the public to cross his property for recreational purposes. However no one has ever requested permission to cross the 19-acre site to access the river. Nor has he observed anyone doing so without permission. He testified that off-road vehicles have been on his property without permission.

(6) Mr. Dentler argued that the FEMA-mapped floodplain is irrelevant. The SMA uses a probabilistic definition of the 100-year floodplain; a flood event with a 1 percent chance of occurring in a given year. Where, as here, there is a conflict between the map and the criteria, the criteria prevail, citing WAC 173-22.055. He argued that the county ordinance prohibiting mining within the FEMA-designated 100-year floodplain is irrelevant. That ordinance is separate from the shoreline permit requirements. He argued that the proposed transport of extracted material on a conveyor system does not constitute "mining" as defined by the SMA. He argued that the conveyor system is mobile "equipment", not "development" as defined by the SMA and the Code. If the legislature had intended to include "equipment" in the definition of "structure" it could have done so expressly by including "equipment" in the list of things meeting the definition. The broad definition in the statute is overly inclusive. He noted that the Washington Supreme Court determined that removal of a railroad trestle is not "development" as defined by the SMA. He noted that the SMA states that if conditions change so land is no longer in the floodplain the SMA no longer applies, citing RCW 90.58.020. He argued that overall review could occur in the future if DNR determines that an overall reclamation plan is required. Approval of this site plan does not restrict the County's ability to condition or deny future development. He argued that the planning director's interpretation is entitled to deference. He argued that the *Clamshacks* case allows the County to require a permit. It does not require it to do so. He argued that a shoreline permit is not required simply because an activity may affect the shoreline. Almost all activities affect the shoreline in some way. He requested the examiner hold the record open for 10 days to allow an opportunity to respond to issues raised at the hearing.

(7) Mr. Rowe argued that the Department of Natural Resources (DNR) has no special expertise regarding the SMA. DNR's role is limited to reclamation. Where mining is permitted to occur is up to the County.

c. David McDonald, Dan Miller and Richard Dyrland appeared on behalf of the Appellant, Friends of the East Fork.

(1) Mr. McDonald argued that the site is subject to the SMA as "adjacent lands which are integrally related to the shoreline." The site is adjacent to the floodplain, and mining operations on the site will have an impact on the floodplain. Therefore a shoreline permit is required. He argued that the conveyor system and processing area located within the 100-year floodplain are interrelated with the proposed mining site. He argued that the conveyor system is a "structure" as defined by the County Code and WAC 173-14-030. The individual sections are connected, although loosely, are on supports and can only be moved with a truck. The individual sections are not divisible. They act as a single unit. The definition does not need to list "equipment" because

equipment is included within the broad definition of "structure". He argued that the decisions in *Clamshacks* and *Buckle* require the SMA and the definitions therein to be broadly construed. The *Cowiche* case cited by Mr. Dentler involved an interpretation of the term "alteration" not "structure". "Structure" is defined in the SMA; alteration was not. He argued that the conveyor system constitutes "mining" as defined by the County Code and SMA. He argued the County is allowed to designate permitted uses within the jurisdiction of the Shoreline Master Program. Any use that is not a permitted use requires a conditional use permit and a shoreline permit. He argued that state law allows the County to designate the boundaries of the shoreline using the FEMA-mapped floodplain or 200 feet from the ordinary high water mark. Clark County chose to use the FEMA-designated floodplain.

(2) Mr. Miller, a professional geologist, noted that portions of the 19-acre site are located within the mapped 100-year floodplain. The conveyor system is entirely within the 100-year floodplain and crosses portions of the 10- and 50-year floodplains. All processing operations are proposed to occur within the 100-year floodplain. He argued that the County designated the 100-year floodplain as a critical area. He argued that the river has meandered as far south as it can. It is likely to begin meandering to the north, through the processing area and the 19-acre site, in as little as 13 years, based on historic meander rates.

(3) Mr. Dyrland, a professional hydrologist, characterized the historic meander pattern of the East Fork. He argued that the river in the area of the site is very dynamic and subject to extreme meanders. He argued flooding of the wide, shallow river channels in the area of the site are likely to raise the height of the floodplain over time.

d. Rex Hapala appeared on behalf of DNR, under subpoena issued by Mr. McDonald. He testified that DNR issued an operating permit to mine the entire 350 acres owned by Mr. Woodside, including the 19-acre site that is the subject of this application. DNR approved a reclamation plan for the previously mined 71-acre parcel abutting the 19-acre site. He opined that, based on state law, the 19-acre site is "linked" to the 71-acre site for reclamation purposes. Therefore a reclamation plan is required for the combined site. He noted that RCW 78.44.031 defines "surface mine" to include "areas in close proximity" as a single mining operation. He opined that a shoreline permit or an environmental impact statement could be required as part of the reclamation plan.

e. County Chief Deputy Prosecuting Attorney Rich Lowry opined that the potential environmental impacts of the mining operation are irrelevant to the appeal. He testified that the County adopted the FEMA floodplain maps as part of its floodplain ordinance. However the SMA is separate from the County floodplain ordinance. The SMA defines the floodplain based on criteria rather than the FEMA maps. Where the criteria conflict with the map, the criteria control. However the County is not prepared to accept or reject the floodplain as determined by the applicant. He argued that the examiner should assume the FEMA maps are accurate for purposes of this appeal. He argued that there is insufficient evidence of a relationship between this project and other activities subject to SMA requirements to require overall review pursuant to WAC 197-11-060. He conceded that the County Code and the SMA do not distinguish between "equipment" and "structures". He argued that such a distinction is implicit. To hold otherwise would lead to an absurd result of requiring a shoreline permit to park a car in the floodplain.

f. Scott Rose argued that the conveyor will have an adverse impact on wildlife which inhabit the shoreline area. He argued that the conveyor system is generally anchored to the ground and may be difficult to remove in the event flooding occurs.

4. The examiner held the record open four weeks to allow interested parties an opportunity to submit additional written evidence to address issues raised at the hearing. The record in this case closed at 5 PM on June 17, 1997.

III. EVALUATION

1. CCC 18.600.100.C authorizes the examiner to hear appeals of planning directors decisions as a *de novo* matter. The examiner is required to conduct an independent review of the record. The planning director's decision is entitled to considerable weight in this appeal, but it is not binding on the examiner. The examiner can reach a different decision even though the planning director's decision was reasoned, based on substantial evidence, and within his delegated authority.

2. The examiner finds that approval of this proposal to mine a 19 acre portion of the 349 acre site would allow an unlawful segmentation of a larger project subject to the Shoreline Management Act. Such segmentation is prohibited under *Merkel v Port of Brownsville* and subsequent caselaw. However, like most of the issues in this case, this is a close call.

a. The current proposal is limited to mining of a 19-acre upland area. However the applicant claims pre-existing rights to mine the entire 349 acre site, including areas within the floodplain, under an existing DNR permit. DNR has refused to "split" the operating permit and approve a reclamation plan for a portion of the site. DNR insists that the applicant submit a reclamation plan for the entire 349-acre site. The applicant has a pending, although inactive, shoreline permit application to mine the entire 349-acre site. The applicant maintains a contractual agreement with the property owners to mine the entire site. As in *Merkel*, there is "nothing" which "indicates that the contemplated construction has ever been anything but one project." The applicant claims that it "is unlikely" that any further requests for mining in the floodplain will be made. Yet the applicant has taken no actions to relinquish its claims that it has a pre-existing right to do so. Therefore the entire site should be considered as a single project. To hold otherwise would allow mining of the upland portions of this 349-acre site without review and in isolation of future mining activities in the floodplain. To paraphrase the court in *SOIL*, the examiner finds that in this case "the intended use of the adjacent lands should be considered...in order to achieve the coordinated development of the shorelines which is the object of the SMA". Although in this case no action will be taken under the SMA at this time because no mining or other regulated activity is proposed within the floodplain, future mining activities on the 349-acre site will fall within the SMA jurisdiction.

b. The examiner finds that approval of this project will not be "coercive of future expansion." San *Juan County v. Natural Resources*. Unlike *Merkel*, this project is not dependent to any extent on approval of future development within the shoreline area. Mining on this portion of the site can stand alone. The applicant could, in theory, mine all of the upland areas subject to its existing permit and "walk away" without triggering the need for a shoreline permit. However DNR has refused to approve a reclamation plan for less than the entire site. They believe the 19-acre site is part of a larger ongoing project. The examiner agrees. Therefore the examiner finds the application should have addressed the whole 349-acre site or as much of it as may be used for mining. It did not do so. Therefore it must be denied.

3. The examiner finds that approval of the proposed site plan will not authorize additional mining on lands subject to the SMA jurisdiction. Therefore a Shoreline permit is

not required under RCW 90.58.140(2).[1] All extraction operations will occur in the upland portion of the site. The processing area is an existing permitted use, separate from and unaffected by this site plan. Although the extracted materials will be transported from the upland portion of the site to the processing area over lands subject to the SMA jurisdiction, no "mining" will occur within the shoreline.

a. The examiner finds that the "shoreland areas" under the jurisdiction of the SMA includes the FEMA mapped 100 year floodplain. The examiner agrees that where the map and the criteria conflict, the criteria control. Such a conflict may exist in this case. However the applicant has not met its burden of proof to demonstrate that the boundaries of the floodplain are where it claims. FEMA expressly rejected the applicant's determination of the floodplain as inaccurate. See October 2, 1996 FEMA letter to Dave Sturdevant, Clark County Board of Commissioners. The examiner does not expressly find that applicant must obtain a FEMA map amendment to demonstrate the extent of the floodplain. However, based the examiner relies on FEMA's expertise in reviewing and rejecting the applicant's analysis. The examiner finds the substantial evidence in the record is not sufficient to overcome FEMA's conclusion that the applicant's analysis is inaccurate. Therefore, for purposes of this review, the examiner finds that the "shorelands area" as defined by RCW 90.58.030(2)(f), coincide with the FEMA mapped 100-year floodplain.[2] A substantial development permit must be obtained prior to any mining within the floodplain.

b. However the location of the 100-year floodplain is not determinative because the examiner finds that the approved site plan will not authorize additional "mining" in the floodplain as that term is used in the SMA.

i. The examiner finds that the applicant's current processing operation is "mining" as defined by the Shoreline Management Program Handbook (the "handbook") which states that:

> Mining is the removal and primary processing of naturally occurring materials from the earth for economic use. For purposes of this definition, "processing includes screening, crushing, stockpiling...

---

[1] RCW 90.58.140(2) provides that

> A substantial development shall not be undertaken on shorelines of the state without first obtaining a permit from the government entity having administrative jurisdiction under this chapter

RCW 90.58.030(3)(d) defines "development" as "[A] use consisting of ...removal of any sand, gravel or minerals..."

[2] RCW 90.58.030(2)(f) defines "shorelands" or "shoreland areas" as

> [T]hose lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet form such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the department of ecology. Any county or city may determine that portion of a one-hundred year-floodplain to be included in its master program as long as such portion includes, as a minimum, the floodway and the adjacent land extending landward two hundred feet therefrom...

However, based on a separate determination by the County, this operation is currently permitted in the shoreline area as a legal non-conforming use. If the processing operation is permitted as a nonconforming use it is irrelevant whether the processed material is extracted from the 19 acre parcel or imported from somewhere else. The issue of whether the processing operation is permitted as a nonconforming use is currently the subject of a pending Notice and Order action. However the outcome of the Notice and Order is irrelevant to this decision as approval of the site plan will not authorize any *new* mining within the floodplain. Therefore the examiner finds that a shoreline permit is not required to process material from the 19 acre site at the applicant's existing processing operation located in the floodplain.

ii. The examiner finds that transport of extracted materials by conveyor system is not "mining" as that term is used in RCW 78.44, and as incorporated by reference, in CCC 18.329.010. Although the term "mining" is not expressly defined, the statute clearly distinguishes between "mining" and "transport" of mined materials. RCW 78.44.031(8) defines "operations" to include:

> (a) The *mining* or extraction of rock, stone, gravel, sand, earth and other minerals...
>
> (b) *Transporting* materials to and from the mine... (emphasis added).

Therefore the examiner finds that the transport of mined materials across the floodplain is not "mining" as the term is used in the statute.

(iii) The examiner finds transport of mined materials does fall within the definition of "surface mine". "Surface mine" means any area or areas in close proximity to each other...where the extraction of minerals from the surface results in...[m]ore than three acres of disturbed area..." RCW 78.44.031(17)(a)(i). The transport system will create "disturbed area" defined by RCW 78.44.031(5) as placement and operation of the conveyors will physically disrupt, cover, compact or otherwise alter the characteristics of soil and vegetation. Therefore the proposed transport system is part of the "surface mine". However the examiner finds that "surface mine" is not the same thing as "mining" as those terms are used in the SMA.

4. The examiner finds that the proposed conveyor system is not "development" as defined by the SMA.[3] Therefore a shoreline substantial development permit is not required for it.

a. The examiner finds that the conveyor system is a "structure" as that term is broadly defined in the WAC and in CCC 18.104.715. The conveyor system as a whole and the individual sections are "[w]ork artificially built or composed of parts joined together in some definite manner..." This is an extremely broad definition. There is no indication that the definition was intended to be less inclusive.

b. However the examiner finds that placement and use of the system of conveyor "structures" within the boundaries of the 100-year floodplain does not constitute "development" as no "construction or exterior alteration" of the structures will occur within the floodplain. The individual conveyor sections will be constructed elsewhere, outside of

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[3] "Development" is defined as "[a] use consisting of the *construction* or exterior alteration of structures..." RCW 90.58.030(d). (Emphasis added).

the floodplain area. The applicant proposes to tow the sections onto the floodplain area and park them in a line.[4] No construction is proposed in the floodplain.

5. The examiner finds that placement and operation of the conveyor system does require a conditional use permit. The Clark County Shoreline Management Master Program (the SMMP) provides that

> Any activity proposed within a shoreline environment in which such activity is not identified as a permitted use shall require a conditional use approval... (SMMP Chapter VI, page 62.)

The proposed placement and use of a system of conveyors to transport mined materials across the floodplain is not identified as a permitted use in the SMMP. Therefore a conditional use permit is required.

IV. CONCLUSION AND DECISION

1. Based on the above findings and discussion, the examiner concludes that the site plan review application cannot be approved because:

a. The proposal to mine a 19 acre portion of the 349 acre site constitutes an unlawful segmentation and piecemeal review under the SMA; and

b. A conditional use permit is required under the SMMP before a site plan can be approved for the conveyor system.

Therefore the examiner should reverse the decision of the Planning Director in this matter.

2. In recognition of the findings and conclusions contained herein, the examiner hereby grants Appeal 97-04-1842 and reverses the decision of the Planning Director in this matter. The proposed site plan is hereby denied.

DATED this 1 day of July, 1997.

Larry Epstein

Larry Epstein, AICP
Clark County Hearings Examiner

[4] The examiner assumes the applicant will use the wheeled conveyor system shown in the photographs submitted by Mr. Barnett. Exhibit 31. This is a different style of conveyor system then is shown in the advertisement submitted by the appellants.

HEARING EXAMINER EXHIBITS

APPLICATION: APL #97-004 (Daybreak Resource)

HEARING DATE: May 8, 1997

Continued to 5-20-97

EXHIBIT NO.	DATE	SUBMITTED BY	DESCRIPTION
1		CC Planning	Aerial map
2		CC Planning	Vicinity map
3		CC Planning	Zoning map
4		CC Planning	Comp. Plan Map
5		Applicant	Preliminary plat maps
6	2-10-97	David T. McDonald	Ltr: Appeal of Decision: Lack of Necessity for Shoreline Permit
7	2-11-97	Richard Dyrland, Supervisory Hydrologist	Ltr in response to the determination of the necessity of a Shoreline Permit w/ attached photos
8	2-11-97	Scott & Carol Rose	Ltr in favor of the appeal
9	2-13-97	Richard Lowry, Chief Civil Deputy	Ltr to David T. McDonald confirming phone conversation re: CCC 18.505.005
10	2-13-97	David T. McDonald	Amended Notice on additional grounds for the appeal
11	2-13-97	David T. McDonald	2nd appeal letter w/ attachments
12		CC Planning	Notice of Public Hearing
13		CC Planning	Certification of Mailing / Posting
14		CC Planning	Chapter 173-14 WAC
15		CC Planning	Chapter 90.58 RCW Shoreline Management Act of 1971
16	4-18-97	DOE	Comments
17	4-18-97	Dept. of Natural Resources	Comments
18		CC Planning	Shoreline Management Master Program
19	4-4-97	CC Planning	SEPA / Staff Report for SPR #96-092
20	4-18-97	Scott Rose	Comments and concerns
21		Applicant	Proposed area expansion
22		Applicant	Photos
23	4-21-97	David T. McDonald	Mining Operation at or new 100 year flood plain of East Fork of the Lewis River
24	5-1-97	Gary Fish	Staff Report

25	5-5-97	Richard Lowry, Chief Civil Deputy	Summary
26	5-16-97	David McDonald	Memo w/ attached exhibits
27	5-19-97	WA State Dept. of Natural Resources	Ltr re: Potential impacts
28	5-19-97	Perkins Coie	Brief of J.L. Storedahl & Sons Inc. Applicant and party of record
29	5-20-97	David McDonald	Ltr: Supplementing & correcting his letter of May 16, 1997
30	5-20-97	Diane Murbach	Resume
31	5-20-97	Virgil Barnett	9 Pictures of Conveyer Belts
32	5-20-97	Diane Murbach	Existing Condition Plan
33	5-20-97	Diane Murbach	Proposed Landscape Plan
34	5-20 97	Thomas Grindeland	Resume
35	5-20-97	Virgile Barnett	100 yr flood plain map
36	5-20-97	Tom Grindeland	Aerial Photo
37	5-20-97	David McDonald	Aerial Photo
38	5-20-97	Peter Klingeman	Resume
39	5-20-97	Peter Klingeman	Letter: re Analysis & Conclusions
40	5-20-97	Peter Klingeman	Summary of Analysis
41	5-20-97	David McDonald	Aerial Photo w/ plane wing
42	5-20-97	Rex Hapala	Aerial Photo Acetate
43	5-20-97	Rex Hapala	Chapter 78.44 Surface Mining
44	5-20-97	John Dentler	Ltr from DNR RE: Reclamation Permit No 70-011236 Date 9-13-97
45	5-20-97	John Dentler	Ltr from DNR dated 5-25-90
46	5-20-97	Dan Miller	Ltr of comments & concerns w/ attachments
47	5-20-97	Richard Dyrland	Ltr asking what is the flood plain
48	5-20-97	John Dentler	Updated topo map
49	5-20-97	Scott Rose	Comments and concerns
50	5-20-97	Lane & Marshall	Response to Motion to Produce for Pacific Rock

51	5-29-97	John Calnan	Ltr of Comments and concerns
52	6-1-97	David McDonald	Ltr requesting a reconsideration for determination
53	6-2-97	Scott Rose	Ltr of comments and concerns
54	6-2-97	West Consultants, Inc.	Ltr re: The necessity of a shoreline permit
55	6-2-97	Richard Dryland	Ltr of comments and concerns w/ attachments
56	6-3-97	David T. McDonald	Original Supplemental brief of Appellant in Support of Reversal of the County's Determination w/attachments
57	6-6-97	Hall, Holland & Dimitrov	Original Affidavit of Service re: service of Subpoena to Attend Motion to Compel Hearing Served on Ray Woodside.
58	6-2-97	David T. McDonald	Ltr: Reconsideration of Determination allowing operations in the floodplain w/o a shoreline permit
59	6-3-97	Hall, Holland & Dimitrov	Notice & order No 95-Z-11-95
60	6-9-97	Lane & Marshall	Ray & Merry Woodside's Motion to Quash subpoena
61	6-16-97	Perkins Coie	Motion to Strike & Responsive Brief
62	6-16-97	Tom Grindeland	Rebuttal
63		Brian Collins, 10,000 yrs. Institute	Application of Geomorphology to Planning & Assessment of Riverine Gravel Removal in WA.

HEARING DATE: May 20, 1997

Office of the
CC COMMUNITY DEVELOPMENT
LAND USE HEARING
Clark County, Washington

PARTIES of RECORD REGISTER

APPLICATION: APL #97-004 (Daybreak Resource)

PLEASE PRINT LEGIBLY

FULL NAME	COMPLETE MAILING ADDRESS	ZIP CODE
SCOTT E. MORRISON	P.O. Box 47775, Olympia WA	98504-7775
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REX J. HAPALA	PO Box 280 Castle Rock WA	98611-0280
Ray Woodside	5015 NE J A Moore Rd La Center	98629
Peter C. Klingeman	3225 NW Elmwood Dr Corvallis OR	97330
Thomas R Grindeland	15172 11th Ave NE Bothell WA	98011
DIANE MURBACH	29270 NE WINDSONG LN, NEWBERG, OR	97132
DAVID NEWTON	1201 SW 12TH Suite 400 Portland	97205
John Dentler	[illegible]	[illegible]
DAVID TM-DONALD	2212 NW 209th St RIDGEFIELD	98642
———	510 SW 3rd #302 PORTLAND	97204
C. DAN MILLER	11207 NE 206th St Battle Ground	98604
RICHARD DYRLAND	27511 NE 29th AVE, RIDGEFIELD WA	98642
Virgle Barnett	12316 NE 13th Ave Vanc	98685
REUEL F. EMERY	SWWHD	98668
SCOTT ROSE	27313 NE Bennett Rd BG	98605
Dan Sellers	PO Box 6535 Vanc	98666

HEARING DATE: May 20, 1997

Office of the
CC COMMUNITY DEVELOPMENT
LAND USE HEARING
Clark County, Washington

ORAL TESTIMONY

APPLICATION: APL #97-004 (Daybreak Resource)

PLEASE PRINT LEGIBLY

FULL NAME	COMPLETE MAILING ADDRESS	ZIP CODE
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John Dentler	Perkins Coe	
Diane Murbach	29270 NE Windsong Lane OR	OR POR sign in
Virgile Barnett	12316 NE 13th AV	
David McDonald	510 SW 3rd AV. Suite 302	Portland, OR 97204
Tom Grindeland	15772 111th AV NE	Bothelle WA
Peter Klingeman	O.S.U. POR	sign in.
Ray Woodside	5015 NE J.A. Moore Rd	Lacenter
Rex Happala	DNR Castle Rock.	98611
Charles R.	Perkins Coe	
Dan Miller	see POR sign-sheet	
Richard Dyland	27511 NE 79th AV R.F.	98642
Rich Lowry		
Scott Rose	27213	

PARTIES OF RECORD

APL #97-004 (Daybreak Resource)

MAY 8, 1997

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ROBERT G. WHITLAM PH.D
DEPT. OF COMMMUNITY, TRADE &
ED
PO BOX 48343
OLYMPIA, WA. 98504-8343

WILLIAM H. BACKOUS P.E.
DEPT. OF ECOLOGY
PO BOX 47775
OLYMPIA, WA. 98504- 7775

RAMORA MONROE
STOEL RIVES
600 UNIVERSITY, SUITE 3600
SEATTLE, WA. 98101

RICHARD AND SALLY DANIELSON
27901 NE 61ST AVENUE
BATTLE GROUND, WA. 98604

HAROLD HART
6106 NE 284TH STREET
BATTLE GROUND, WA. 98604

LEE AND PAT CRAWFORD
28011 NE 61ST AVENUE
BATTLE GROUND, WA. 98604

DARLENE AND DALE DORCHEUS
28001 NE 61ST AVENUE
BATTLE GROUND, WA. 98604

FRIENDS OF THE EAST FORK
LOIS MILLER
11207 NE 266TH
BATTLE GROUND WA 98604

SWAPCA
1308 NE 134TH ST
VANCOUVER WA 98685-0925

JOHN CLANAN
32501 NW EAGLE CREST DR.
RIDGEFIELD WA 98642

WEST CONSUTLANTS, INC
12509 BEL-RED ROAD SUITE 100
BELLEVUE WA 98005

HEARING DATE: May 8, 1997

Office of the
CC COMMUNITY DEVELOPMENT
LAND USE HEARING
Clark County, Washington

ORAL TESTIMONY

APPLICATION: APL #97-004 (Daybreak Resource)

PLEASE PRINT LEGIBLY

FULL NAME	COMPLETE MAILING ADDRESS	ZIP CODE
Monty Linderson		

Planning
Mary - Marty - Lori

Christine O. Gregoire
ATTORNEY GENERAL OF WASHINGTON
1125 Washington Street SE • PO Box 40100 • Olympia WA 98504-0100

April 23, 1997

RECEIVED
APR 25 1997
Clark County
Community Dev/Records

The Hon. Rynold C. Fleck
Administrative Law Judge
Office of Administrative Hearings
P.O. Box 9406
Olympia, WA 98504-9406

RE: J.L. Storedahl & Sons, Inc. v. DNR
Surface Mining Permit No. 70-010139

Dear Judge Fleck:

Thank you for your letter of April 18, 1997. I am writing to clarify the Department's position regarding the various intervention petitions.

First, you should be aware that Ray and Merry Woodside are the holders of the surface mining reclamation permit at issue. As such, the Department believes that they are necessary parties under CR 19, such that we would be unable to have a binding decision without their presence in the case. Virginia Woodside, as a part owner of the property to which the mining permit applies, also has clear rights at stake. Their motion to intervene should be treated as an intervention of right under CR 24(a), and unconditionally granted.

With regard to the motion to intervene filed by the Friends of the East Fork of the Lewis River (FOEF), the Department is of the impression that this is an application for permissive intervention under CR 24(b). The Department does not oppose this motion, although it believes that FOEF's intervention should be limited to the issue(s) raised by the appeal; namely, whether the Department's acted properly when it decided not to process the reclamation plans submitted by Storedahl.

Thank you once again for the opportunity to comment on this matter.

Very truly yours

Philip M. Ferester
Assistant Attorney General

PMF
cc.
J. Dentler/C. Roe, Counsel for Storedahl
Casey Marshall, Counsel for the Woodsides
David McDonald, Counsel for FOEF
Monte Anderson, Clark Co. Dept. of Comm. Development
Rex Hapala, Geologist, DNR SW Region
Bill Lingley, Asst. State Geologist, DNR-Geology Division - Olympia

RECEIVED

COMMUNITY DEVELOPMENT

MAR 12 1997

CLARK COUNTY
Plan & Dev. Review

MEMO

DEVELOPMENT ENGINEERING

TO: Karen Williams, Planning

FROM: John Rüben, extension 4102

DATE: 3-12-97

SUBJECT: SPR 96092

Please refer to this subject number on any future communication.

Please provide a copy of this review to the applicant as soon as possible.

I received the request for this review on 3-10-97

None of the issues discussed in the subject submittal deals with Development Engineering conditions; therefore, we have no comments to make for the record.

It would be wise to send a copy of this submittal to Transportation Engineering for their review and comment.

JAN 3 0 1997

CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

RECEIVED
FEB 1 3 1997
Board of Commissioners

January 29, 1997

Robert B. Laird
David J. Newton & Associates
1201 SW 12th Avenue Suite 400
Portland, OR 97205

John Dentler
Perkins Coie
1110 Capitol Way South #405
Olympia, WA 98501

RE: Determination on the necessity of a Shoreline Permit for SPR #96-092 (Daybreak Resource Project)

Dear Mr. Dentler and Mr. Laird:

This letter constitutes the planning director's determination on the requirement of a Shoreline Permit for the above referenced site plan application.

The site plan application involves the mining of an approximately 19 acre parcel and the placing of a conveyor belt to haul the mined sand and rock to an existing rock crusher located on an adjacent parcel. Portions of both the proposed mining operation and the proposed conveyor are located within the 100-year regulatory floodplain for the East Fork of the Lewis River. However, the applicant has indicated that the site plan will be revised to indicate that no mining will occur within the 100-year regulatory floodplain.

The Planning Director has determined that if no mining occurs in the 100-year regulatory floodplain, and the site plan is revised to reflect this, then a Shoreline Permit under County's Shoreline Master Program and Shoreline Ordinance is not required for the proposal.

The Planning Director's determination is based on (a) no mining within the area of Shoreline Jurisdiction and (b) a determination that the conveyor is equipment and the proposed placement of the conveyor does not constitute a "substantial development" under the Shoreline Management Act of 1971 (Ch. 90.58 RCW). Specifically, the use of equipment is not required to obtain a Shoreline Permit because it is not included in the definition of Development contained within RCW 90.58.030 (Shoreline Management Act of 1971).

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FAX (206) 699-2011 • (206) 699-2375

Recycled Paper

Persons with questions regarding this determination should contact the Planning and Development Review Division. Aggrieved parties may appeal any aspect of this decision to the Clark County Land Use Hearing Examiner within fourteen (14) calendar days from the date of this letter. **Requests to appeal this determination must be made in writing. The letter of appeal should state that the appeal is to this determination and to Title 18 (Zoning Ordinance) and must state the provision(s) being appealed and the reasons for such appeal.** A fee of **$340.00** must accompany the appeal. Submit the appeal request and fee to the address below. A hearing will be scheduled before the Hearings Examiner. For more information on the appeal process, please refer to "Clark County Zoning Ordinance", Section 18.600.

Land Use Hearing Examiner
Department of Community Development
1408 Franklin Street / P.O. Box 9810
Vancouver, WA 98668-9810

Questions regarding this determination should be directed to Melissa Remick or Brian Carrico with the Department of Community Development at 699-2375.

Sincerely,

Monty K. Anderson, Senior Planner
for Jerri Bohard, Acting Planning Director

c: Parties of Record
Monty Anderson
Rich Lowry
Jerri Bohard
Melissa Remick
Brian Carrico
Rex Happala, DNR
Lloyd Handlos, DNR
Rich Hines

H:\BPC\SITEPLAN\DAYSHORE.DOC

CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

January 29, 1997

Mr. Robert B. Laird
David J. Newton & Associates
1201 SW 12th Avenue, Suite 400
Portland, OR 97205

RE: SPR #96-092, Daybreak Resource Project

Dear Mr. Laird:

Staff has reviewed the revised site plan for the Daybreak Resource Project submitted on January 17, 1997 and determined that additional revisions are necessary in order for staff to complete the review and issue both a SEPA determination and site plan decision. Please revise the site plan to reflect the comments noted on the enclosed redlined site plan, and ***return four (4) copies of the latest revision and the redlined site plan to the front counter***. Until this information is submitted, our review of the Daybreak Resource Project is on hold.

If you have any questions about the enclosed redlined plan, do not hesitate to contact me at (360) 699-2375, extension 4097.

Sincerely,

Melissa Remick
Planner II

c: Monty Anderson
Brian Carrico
Karen Williams
SPR#96-092 Project File

H:\REMICK\SPREVIEW\SPR96092\SPR96092.LT1

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** CONDITIONS OF PERMIT/APPROVAL **

DATE: 01/07/97
PAGE: 1

Activity No: SPR96092 TYPE: SITEPLAN
Location: NE 61ST AV

WATER QUALITY

D302 - A FINAL EROSION CONTROL PLAN SHALL BE A SEPARATE PLAN AND SH ALL MEET THE REQUIREMENTS OF CCC 13.27.
The plan is to protect the county right of way from silt entering during the construction of the berm.

PERKINS COIE

A LAW PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS
1110 CAPITOL WAY SOUTH, SUITE 405 OLYMPIA, WASHINGTON 98501-2251
TELEPHONE: (360) 956-3300 FACSIMILE: (360) 956-1208

December 24, 1996

RECEIVED

DEC 24 1996

Clark County
Community Dev/Public Works

Mr. Monty Anderson
Commercial/Industrial Team Leader
Department of Community Development
Clark County
1408 Franklin Street
P.O. Box 9810
Vancouver, WA 98666-9810

Re: Follow-Up Meeting Regarding Remaining Issues on SPR 96-092 and Necessity of Shoreline Permit for Conveyor Belt

Dear Monty:

The purpose of this letter is two-fold. First, I am confirming our scheduled meeting of December 31, 1996, at 10:00 a.m. I am hopeful that you and the staff will address any remaining concerns regarding Storedahl's site plan review. As I recall, when we met in your office on December 6, we agreed that, after review by you and your staff of Storedahl's responses to comments submitted to the County on SPR 96-092, we would hold a meeting to discuss and clarify issues that, in the view of the Planning Department, need further clarification, responses, or further attention. If there are other issues that you believe need be addressed, please let me know now so that I may address them more fully at our meeting.

Second, the Planning Department identified one issue that Storedahl's December 6 submission did not address and which I attempt to do so now. As you are aware, the County asserted that J. L. Storedahl & Sons, Inc. must obtain a shoreline permit prior to or in conjunction with site plan review because "since the proposal involves the extraction of mineral resources in areas located within the 100-year floodplain, and a new conveyor belt is proposed to be located in the 100-year floodplain to convey extracted material from the site to an off-site processing area." Letter of Monty Anderson to Robert B. Laird at 2 (Dec. 6, 1996).

[/96351.005]

Storedahl clarified in its December 6, 1996 letter to you that it is not proposing to undertake mining in the delineated regulatory 100-year floodplain. Storedahl is willing to accept a clarifying clause to this effect as a condition of site plan review approval. Assuming that this particular matter is dispensed with, the next issue would appear to be whether a shoreline substantial development permit is required where an existing conveyor belt would be extended over the 100-year floodplain so as to convey sand and gravel to an existing sand and aggregate processing site for purposes of ultimate sifting, sorting, washing, and crushing.

Storedahl believes that, for a number of reasons, a shoreline substantial development permit is not required for the mere placement of a conveyor belt, even if segments thereof cross portions of the 100-year floodplain:

1. Even if the Placement of a Conveyor Belt on a Portion of the 100-Year Floodplain Was Substantial Development Requiring a Shoreline Permit, It Is an Existing Activity Not Requiring Such Permit

A. The Shoreline Act Was Not Intended to Operate Retroactively

As noted in the County's Notice and Order, at 11-13, the then Planning Director, Mr. Craig Greenleaf, concluded that surface mining processing activities were lawfully established uses as of 1968-70 and were not shown to have been subsequently abandoned. Mr. Richard S. Lowry, has previously stated that:

> Such uses, unless abandoned are, therefore, grandfathered under both the County Zoning Code and the Shoreline Management Act.

Letter of Richard S. Lowry to David T. McDonald (Aug. 12, 1996). As the aforenoted letter notes, however, this conclusion could change if this particular finding is overturned by the hearing examiner. However, in view of this conclusion, it is our position that the conveyance of sand and aggregate to the existing processing site does not require a permit because the substantial development permit program of RCW 90.58.140 does not apply to developments undertaken prior to June 1, 1971. I would appreciate knowing of your (or Rich Lowry's) reasoning if you believe that a shoreline permit is required for the conveyor belt system.

B. The Conveyor Belt System Is Intended to Move as Mining Moves

In the sand and gravel industry, it is the common practice in a mining operation where extracting and processing are located in a single geographic operational area to convey aggregate to the processing site as extracting proceeds. The normal method of conveying such material is simply to move the conveyor belt, as appropriate, when the location of the extraction moves within the operational area.

In such a factual situation, the Shoreline Management Act does not, in our view, contemplate that a permit is required each time such belts are moved within the mining operation area. The conveyor belt may be likened to a sprinkler pipe system to irrigate a field. The piping is used to convey water; however, a permit is not triggered merely by moving the mobile pipes from one location to another within the field.

Assuming that you continue to believe that by moving the conveyor belt within a single location within the field mining operation a shoreline permit is potentially required, I call your attention to the following observations.

2. A Conveyor Belt Does Not Require a Shoreline Permit Because (i) Placement of a Conveyor Belt Would Not Interfere With the Surface Waters of the State, and (ii) Placement of a Conveyor Belt Would Likely Not Cost in Excess of $2,500 and Is Not, Therefore, "Substantial Development"

In order for the shoreline permit requirement to apply, the new undertaking in question must be "development" and "substantial development." RCW 90.58.140(2). The SMA describes "development" as a "use consisting of the construction or exterior alteration of structures; . . . removal of any sand, gravel, or minerals, . . . or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level." RCW 90.58.030(3)(d). The Washington Supreme Court has construed the term quite literally and narrowly, holding that the removal of a railroad trestle over navigable water was not substantial development as the plain term was defined under the Act. Cowiche Canyon Conservancy v. Bosley, 118 Wn.2d 801, 814-816 (1992).

First, as noted, there is no new undertaking of development here. Conveyor belts would simply be moved into a new position to convey sand and gravel to the processing site. Second, the movement of the conveyor belts would not result in removal of sand and gravel from the area of shoreline jurisdiction. Thus, the plain meaning of "development," RCW 90.58.030(3)(d), is not reached on this basis.

Third, the movement of the conveyors would not interfere with the use of surface waters of the state for several reasons. First, the channel of the East Fork is some 2,300 feet from the mining site and several hundred feet of the location of where conveyor belts will be moved. There is simply no surface waters in this location and, hence, no known use of surface waters in the location where conveyor belts would be moved. Second, there is no legal public access to the shoreline on the Woodside property. See Cowiche Canyon, 118 Wn.2d at 817-819 (in order for substantial development to be reached on the basis of material interference with public access to shorelines, a bona fide public access must be at issue). Third, this provision is inapplicable where the public could simply walk around or under the "barrier" to access. Id. at 818-820 (public could simply walk around the complained of gateway and noting that the "public access" was private property). Likewise, here the public, assuming that access was at issue, could simply walk around or under the conveyor belt. Regardless of the movement of conveyor belts, the public's ability to access the East Fork will not be materially interfered with. The plain meaning of "development," once again, is simply not reached on this basis.

Finally, it is doubtful that the placement of the conveyor belts in the noted location would cost $2,500, which is the threshold level for obtaining a substantial development permit. RCW 90.58.140(2). Under the SMA, "substantial development" means:

> Any development of which the total cost or fair market value exceeds two thousand five hundred dollars, or any development which materially interferes with the normal public use of the water or shorelines of the state.

RCW 90.58.030(3)(e). As to the second prong of this provision, the placement of the conveyor belts over portions of the 100-year floodplain would not interfere with public use of the water or shorelines of the state. Here, even at a 100-year flood event, the land in question is private property and there is no normal public use of the

area in question. Furthermore, if there was a right of public access, the public could simply walk around or under the conveyors. Supra.

3. Conclusions

In summary, we believe under the factual situation involved that the movement of the conveyor belts as proposed is not a new undertaking falling within the permitting requirements of the Shoreline Management Act. We further believe that the movement of the conveyor belt is not "substantial development" as the term is defined by the Act and interpreted via case law. We would, however, be interested in meeting with you to determine whether you concur with this opinion and, if not, discuss the basis for your position.

Very truly yours,

Charles B. Roe
for John L. Dentler

JLD:nh

cc: Rich Lowry
Jerri Bohard

CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

February 18, 1997

David T. McDonald
510 SW 3 Av, Ste 302
Portland, OR 97204

RE: APL 97004 (Shoreline Permit for SPR96092, Daybreak Resource)

Dear Mr McDonald:

The application referenced above which was submitted on February 10, 1997 is found to be technically complete as of February 18, 1997.

The appeal is subject to a Type III review procedure as outlined in CCC 18.600. A public hearing on the appeal has been scheduled for May 8, 1997 before the Hearings Examiner.

Your contact person for the review of your appeal is Melissa Remick. If you have any questions regarding this notice you can contact me at 699-2375 ext 4964.

Sincerely,

Karen Williams

Karen Williams
Planning Technician II

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FAX (206) 699 2011 • (206) 699-2375

Recycled Paper

Activity No : APL97004
Status : CNTRCOMP
This type : APPEAL
Title : DAYBREAK RESOURCE PROJECT
Parcel number : 225047-0000
Group-occup/use:

Project No : AU055152
Validated by : NL
Heat Type : COMM
Applied : 02/10/97
Tech Comp :
Hear Date :
Decision: :

Owner : WOODSIDE STUART C ET AL CONT
Applicant : FRIENDS OF EAST FORK
Applicant Addr : PO BOX 1277
Job Address : NE 61ST AV
First legal : #107 SEC 18 T4N R2EWM 20A M/L
Plat number : 070980 SECTION 18 T4N R2EWM
Census tract : 40200 School district: 101
Class code : 3
Valuation : 0
Description : APPEAL DETERMINATION
CONTRACTOR :
TIF/PIF CREDIT :
TIF/PIF CREDIT :

Phone number : 503-226-0188
BATTLEGROUND WA 98604

App # :SPR96092
Construction: OTH

EXP DAT APPEAL 340.00
CHECK 340.00
ITEM 1
02-10-97 #1 CW 0283 14:54TM

NAME : DAYBREAK RESOURCE PROJECT Lic.
Descripton of Request: APPEAL DETERMINATION
Location: EAST FORK LEWIS RIVER

Fee description	Units	Fee/Unit	Ext fee	Data
APPLICATION FEE (Y/N)			340.00	Y

Desc/date	Act	Inspector	Comments
SET UP FILE			
02/10/97	AP	NL	CC TO COMM TEAM
TECHNICALLY COMPLETE			
			** No Entries **
GRAPHICS			
			** No Entries **
PLANNER FOR STAFF REVIEW			
			** No Entries **
ROUTING (5 WEEKS B/4 HRG)			
			** No Entries **
MAIL OUT (2 WEEKS B/4 HRG)			
			** No Entries **
POSTING (RDY) & PLANNER POST			
			** No Entries **
NOTICE TO PAPER/COPIES (2 WKS)			
			** No Entries **

Activity No : APL97004 Project No : AU055152

Desc/date	Act	Inspector	Comments
TO BOARD			** No Entries **
BOARD DECISION			** No Entries **
FILE LOCATION			** No Entries **
Water Quality Plans			** No Entries **
Transportation Plans			** No Entries **
Public Works ***			** No Entries **

*** Fees Required *** *** Fees Collected & Credits ***

Account No.		Receipt No.	Date	Payment
APPEAL	827		02/10/97	340.00

Fees:	340.00		
Adjustments:	.00	Total Credits:	.00
Total Fees:	340.00	Total Payments:	340.00
		Balance Due:	.00

COPY

CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

November 13, 1996

Friends of the East Fork
Lois Miller, President
PO Box 1277
Battle Ground, WA 98604

RE: SPR 96-092 (Daybreak Resource Project)

Dear Ms. Miller,

Regarding your letter of November 8, 1996, requesting an extension of time on the comment period for SPR #96-092 (Daybreak Resource Project), please be advised that the period has been extended for one week.

Please submit your comments by November 21, 1996. I hope the extra time allotted will be sufficient for your review and evaluation of the proposal.

Thank you for your request and should I be of any further assistance, do not hesitate to contact me at 699-2375, ext. 4499 or please contact the planner, Melissa Remick at ext. 4097.

Sincerely,

Monty Anderson
Commercial/Industrial Team Leader

MKA:dl

c: Melissa Remick
Jerri Bohard
File

h:debi/sp:96092.ext

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FAX (206) 699-2011 • (206) 699-2375

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** CONDITIONS OF PERMIT/APPROVAL **

DATE: 10/29/96
PAGE: 1

Activity No: SPR96092 TYPE: SITEPLAN
Location: NE 61ST AV

TRANSPORTATION

TT - DIMENSION AND SHOW A 30-FOOT HALF-WIDTH RIGHT-OF-WAY FOR NE 61ST AVENUE/MOORE ROAD ABUTTING THE SITE ON THE SITE PLAN NOTE ON THE SITE PLAN: NO DRIVEWAY SHALL ENTER NE 61ST AVENUE/MOORE ROAD FROM THE SITE.

RECEIVED
OCT 29 1996
CLARK COUNTY
Plan & Dev. Review

ROUTING COVER SHEET

DATE: October 28, 1996

TO: Transportation, Water Quality, Fire Marshal

FROM: Commercial/Industrial Planning Team
Karen Williams, Planning Technician, xt 4964

SUBJECT: **SPR 96092 (Daybreak Resource Project)**

Please respond with comments/conditions before the due date below. Thank you!

DUE: November 11, 1996

PLANNER: Melissa Remick, xt 4097

** CONDITIONS OF PERMIT/APPROVAL **

DATE: 11/04/96
PAGE: 1

Activity No: SPR96092 TYPE: SITEPLAN
Location: NE 61ST AV

FIRE MARSHAL'S OFFICE

FP00 - NO FIRE MARSHAL CONDITIONS

TRANSPORTATION

TT - DIMENSION AND SHOW A 30-FOOT HALF-WIDTH RIGHT-OF-WAY FOR NE 61ST AVENUE/MOORE ROAD ABUTTING THE SITE ON THE SITE PLAN NOTE ON THE SITE PLAN: NO DRIVEWAY SHALL ENTER NE 61ST AVENUE/MOORE ROAD FROM THE SITE.

TYPE II APPLICATION FORM

PROJECT TITLE: Daybreak Resource Project

DESCRIPTION OF PROPOSAL:

Mining of sand and gravel, conveying offsite, and reclaimed as a pond with afteruse as open space.

APPLICANT

J.L. Storedahl and Sons, Inc. (360) 687-5663
Name Phone

2233 Talley Way
Address

Kelso WA. 98626
City State Zip

PROPERTY OWNER (list multiple owners separately)

Raymond and Merry Woodside (360) 263-2887
Name Phone

Route 1, Box 40 (5015 N.E. J.A. Moore Rd.)
Address

La Center WA. 98629
City State Zip

CONTACT PERSON (list if not same as APPLICANT) FAX # for contact: (360) 263-2965

Virgle Barnett (J.L. Storedahl & Sons, Inc.) (360) 687-5663
Name Phone

2233 Talley Way
Address

Kelso WA. 98626
City State Zip

LOCATION OF PROJECT:

Site Address N/A **Cross Street** N.E. J.A. Moore Rd. N.E. 61st Ave.

Serial #s of parcels included: Clark Co. Tax I.D. No 225047000

Comp Plan Designation: Mineral **Zoning:** Ag-20 **Overlay Zone(s):** S

S.W. **1/4 of Sec:** 18 **Township:** 4N. **Range:** 2E.

Total Acreage of Original Parcel(s): ± 18 Ac.

AUTHORIZATION

The undersigned hereby certifies that all information submitted with this application is complete and correct. I understand that any errors and/or omissions may lengthen the time to process the request.

Authorized Signature (Letter of authorization required if other than property owner) Date

SUBMIT THIS APPLICATION AT THE PLANNING APPLICATIONS COUNTER AT 1408 FRANKLIN STREET, VANCOUVER, WA (360) 699-2375

[9/95]

DAVID J. NEWTON ASSOCIATES

September 20, 1996

Ms. Melissa Remick, Planner II
Clark County Department of Community Development
Planning Division
1408 Franklin Street
PO Box 9810
Vancouver, WA 98666-9810

Re: SPC 96-034, Daybreak Resource Project
Clark County Correspondence dated May 16, 1996
Type II Application for Site Plan Review

Dear Ms. Remick:

On behalf of our client, J.L. Storedahl & Sons, Inc., David J. Newton Associates, Inc. (DNA) is responding to correspondence from the Clark County Department of Community Development dated May 16, 1996. This letter, termed a pre-Application Review Report, was generated in response to the April 25, 1996 site plan pre-application conference, and provides detailed comments regarding our client's site plan review application. During this conference, it was determined that the Daybreak Resource Project is not a typical site plan project due to its proposed use as an aggregate mining site. Therefore, many of the standard County site plan requirements are not applicable to this project, and are responded to as "not applicable"

This DNA correspondence and attachments comprise a complete submittal package for a Type II Application for Site Plan Review. Following approval of the site plan, a Final Site Plan will be prepared by DNA for recordation by the Clerk and Recorders Office. A check is enclosed in the amount of $935.00 for the Site Plan Review Application and Fire Marshall Review fees.

The following responses are addressed to ensure completeness for the Site Plan Review process:

1. A Type II application form is being submitted which is signed and dated.

2. The associated fee schedule and a check to cover the proper fees are being submitted. A SEPA review was not required at the time of submittal of the pre-application review and the fee schedule reflects this. Other review fees, such as traffic and storm water, were also deemed unnecessary and the fee schedule also reflects this

1201 S.W. 12th Ave., Suite 400 • Portland, Oregon 97205 • (503) 228-7718 • FAX 228-7781

3. The Assessor's quarter section map was submitted on 4-1-96 and is still current No new map is being submitted.

4. A legal description of the property was submitted on the preliminary site plan on 4-1-96 A further legal description is given on the conveyance document (See 5.)

5. A real estate contract and Title Search are attached showing ownership to be in the names of Ray and Merry Woodside.

6 See 5

7. This information is contained on the Site Plan and is addressed further in the responses to the pre-application conference

8 See 7.

9. Not required

10. As per stipulation of the pre-application conference, the Daybreak operations plant stormwater plan is attached which covers the area of this site plan

11. Not required.

12 Contained on the site plan and described in the responses to the pre-application conference

13 Not required.

14 Previously submitted on the preliminary site plan, reiterated on the enclosed site plan, and further described in the responses to the pre application conference

15 Attached to this submittal.

16. Not required.

17 Not required.

18. Attached to this submittal.

The following responses are provided to each comment expressed in the Clark County May 16, 1996 correspondence

ZONING

- **Existing conditions plan requirements for application**
  Response: All existing conditions required for the site plan are displayed in Figures 1-6 of the Site Plan.

  Ten (10) foot contour intervals are shown on Figure 1 of the Site Plan. The project site is an essentially flat area that has less than a 2 foot change in surface elevations.

  Physical features that are required to be shown on the site plan, but that are not present on the site, include: a. slopes in excess of 15%; b. unstable ground; c. high seasonal water table; d. impermeable soils; e. areas of severe soil erosion potential; f. severe weak foundation soils; g. significant wildlife habitat or vegetation; h. significant historic, cultural, or archeological resources; and i. rock outcroppings.

- **Preliminary site plan requirements for formal application**
  Response: The normal hours of operation for the project will coincide with those of the existing off-site operation.

  The location of the processing facility is off-site, with the approximate location shown on the operations map of the Site Plan. It has been determined that aggregate processing at this off-site location has a legal, non-conforming right to process imported material.

  The legal description of the property, with specific dimensions and acreage, is in the narrative description #6(d) of the Site Plan.

  Figure 6 of the Site Plan shows the contours of the site afteruse as a water body. Finished contours will be to the bottom of the deposit (approximately 35 feet deep), and all slopes will meet requirements of Washington Department of Natural Resources (DNR). As discussed in the conference, this is an atypical site plan due to the intended use as an aggregate mining site. Therefore, cross sections of final contours for each individual phase are not applicable.

  Physical features that are required to be shown on the site plan, but that are not present on the site, include: a. loading and service areas; b. proposed structures on site; c. curbcuts; d. exterior signs/advertising, e impervious surfaces; and f. outdoor lighting

- **Setback requirements**
  Response: The setbacks provided were deemed sufficient. These setbacks will be landscaped, and are shown in Figure 5 of the Site Plan. DNR requirements for setbacks will also be met. No parking, loading, or maneuvering will occur within proposed setbacks, except as necessary for site access purposes.

- **Lot coverage requirements**
  Response: Office/employee buildings are not proposed for this project. Therefore, the lot coverage requirements are not applicable

- **Building height requirements**
  Response: Office/employee buildings are not proposed for this project. Therefore, the building height requirements are not applicable.

- **Landscape plan, screening and buffering requirements (Clark County Code 18.402.050 and Table 402-1)**
  Response: The setback areas will landscaped upon final reclamation (see Figure 6 of Site Plan). Detailed landscape plans will be provided, as required by the DNR, within the reclamation plan. For example, a legume seeding mix would initially be utilized to stabilize areas. Subsequently, the planting of native trees, shrubs and grasses would be initiated. Species planted on site may include red osier dogwood, willow, cottonwood, big leaf maple, Oregon ash, red alder, poplar, vine maple, and reed canary grass. These species are native to the area and are easily established under a variety of soil and moisture conditions.

- **Preliminary parking and loading plan requirements (Clark County Code 18.402.060)**
  Response: Office/employee buildings are not proposed for this project. Therefore, the parking and loading plan requirements are not applicable.

- **Handicap space requirements (Washington State Barrier Free Design Standards)**
  Response: Handicap spaces are not required for this project. Therefore, the handicap space requirements are not applicable.

- **Signage requirements**
  Response: Signs are not proposed for this project. Therefore, the signage requirements are not applicable.

- **Special zoning requirements**
  Response: The Clark County special zoning requirements will be adhered to, pending Federal Emergency Management Agency (FEMA) floodplain delineation of this property.

- **SEPA checklist requirements**
  Response: A draft Environmental Impact Statement (DEIS) for the Woodside property is being prepared, and is inclusive of this site. Therefore, the DEIS provides adequate representation of the project site, including potential impacts from noise, air emissions, aesthetics, and cultural resources. Exhibit A, attached, contains responses by the State and Clark County to satisfy the cultural resources requirement.

TRANSPORTATION

- **Road Standards, Frontage Roads, Driveways, Road Plans & Profiles and As-Built Plans, Traffic Studies and Transportation Concurrency Management**
  Response: As discussed during the conference, this project will not generate any additional trips onto J.A. Moore Road, as all excavated product will be conveyed to an adjacent parcel for processing. Therefore, the transportation issues mentioned are not applicable to this site, nor is a traffic study required.

WATER QUALITY

- **Stormwater Control Ordinance**
  Response: As discussed during the conference, impervious surfaces will not be created at the project site, and all other water quality standards will be satisfied by meeting the requirements of the NPDES and Stormwater permits for the Daybreak processing facility (Exhibits B and C).

It is our intention that your concerns be fully addressed by this correspondence. If you have any remaining questions, please give me a call.

Sincerely,

DAVID J. NEWTON ASSOCIATES, INC.

Robert B. Laird

Robert B. Laird
Project Geologist

cc: File
Virgle Barnett
Craig Greenleaf
Monty Anderson
Rich Lowry

Attachments: Type II Application for Site Plan Review
Site Plan
Exhibit A
Exhibit B
Exhibit C

h:\361\115\planrev.doc

Clark County, Washington: Department of Community Development

Serial Number: 225047000
Property Address: 0

Mailing Information:

WOODSIDE STUART C ET AL CONT
5015 NE J A MOORE RD
LACENTER, WA 98629

Assessed Parcel Size: 20.00 (Acres) or 820307 (Square Feet)
Property Type: Unused land cleared.

Parcel Location Findings:

Subdivision - No
Book & Page - Z999
Zoning Overlay - Mining Combining District
Zoning Designation - Agriculture-20
Slope Stability - No
Flood Zone Designation - No
Critical Area Clearing Ordinance - No
Municipal Jurisdiction - Clark County
Urban Growth Boundary - county
Archaeological Predictive Probability - High (80% - 100%)
Archaeological Sections - Yes
Soil Classification - PuA
Hydric Soils - NONE
Wetlands - NO
School District - La Center
Slope - 0 - 5 percent
Water District - Clark Public Utilities
Fire District - 11
Sewer District - Rural/Resource
Comp. Plan Designation - Agriculture
Comp. Plan Overlay - Mining
Neighborhood Association - Friends of the East Fork Nbrhd. Assoc.
Quarter Section Quadrant - 421183
Section Grid - 18
Township Range Grid - T4R2E

First American Title Insurance Company

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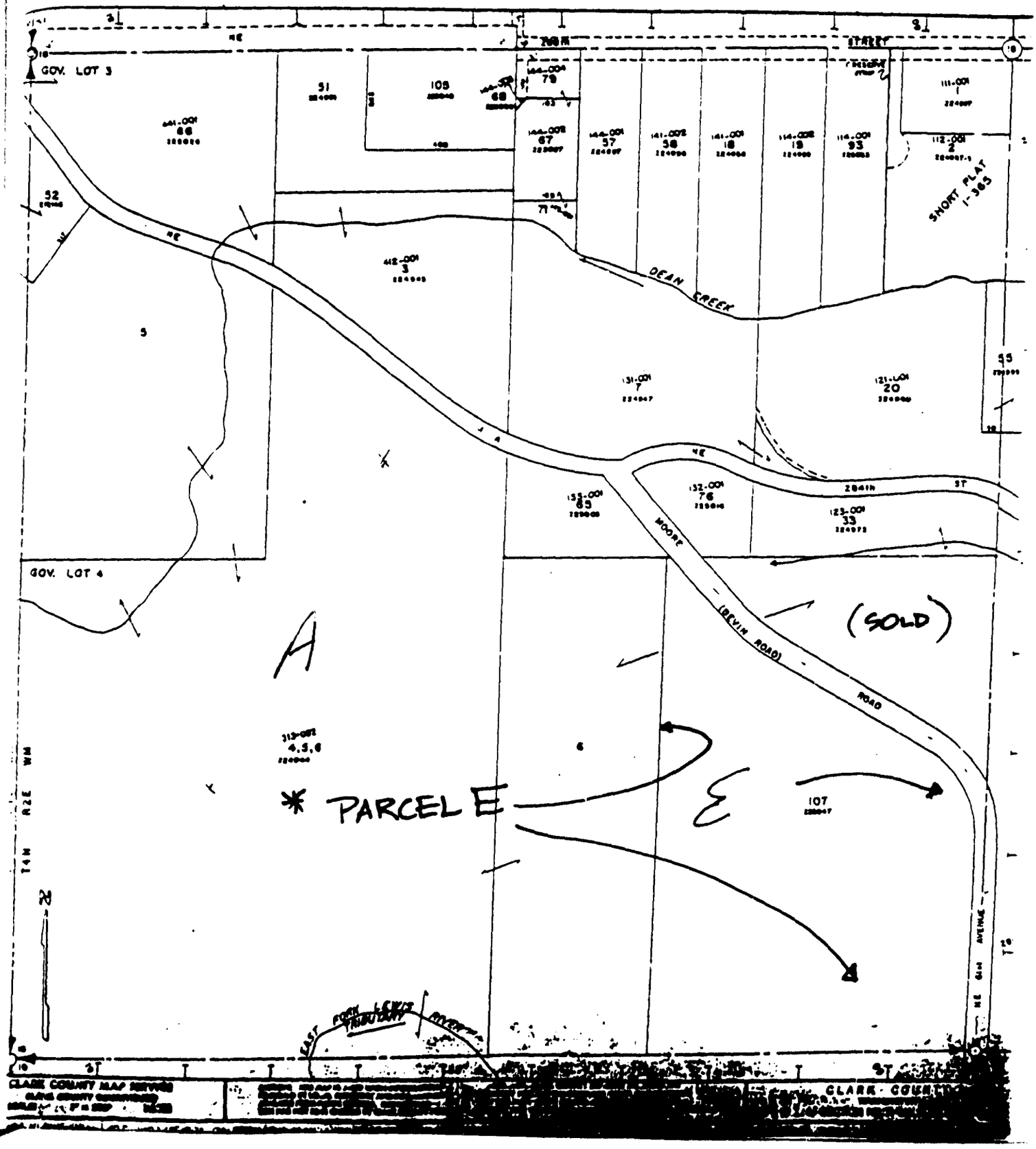

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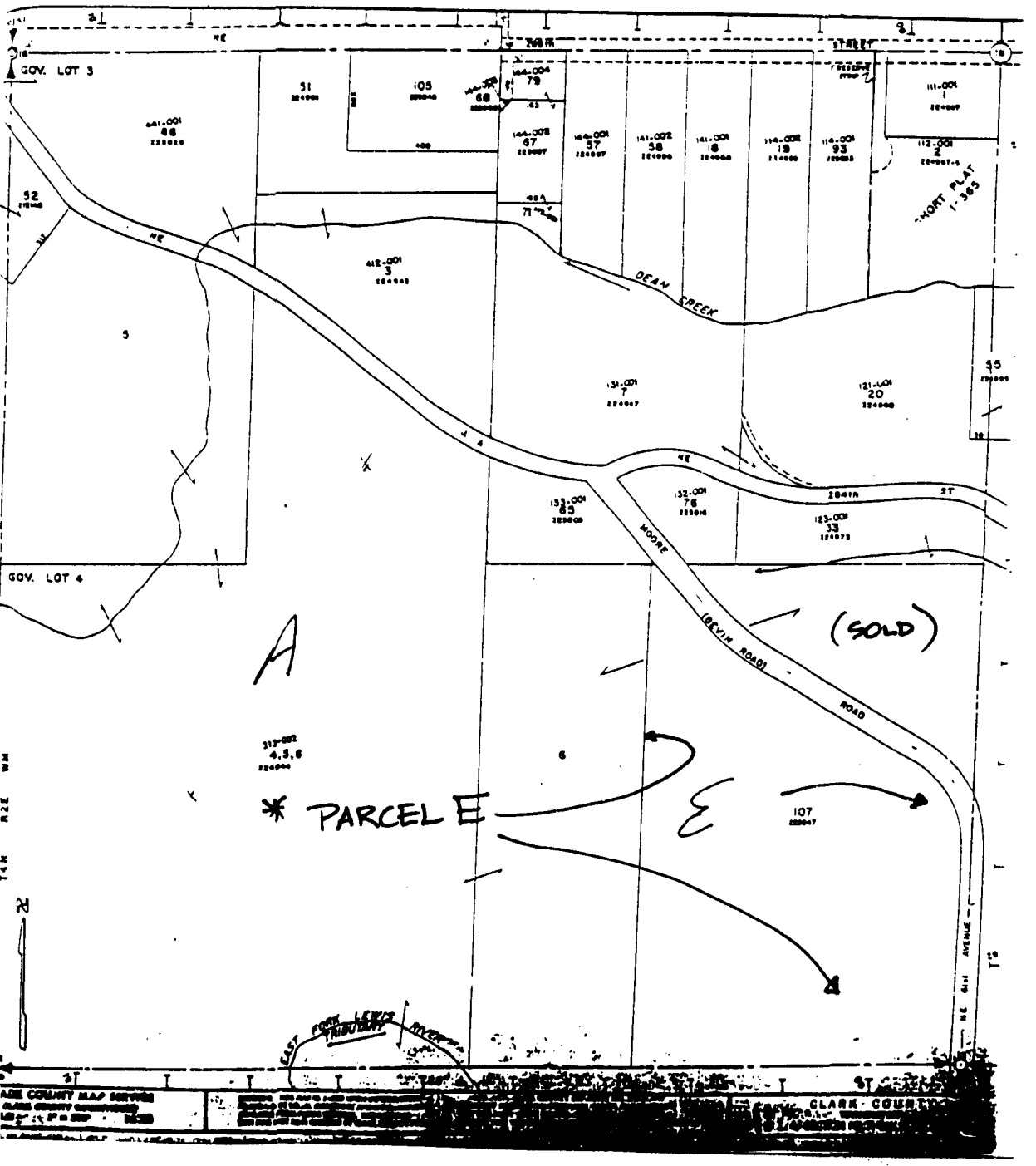

Site Plan Conference Report

CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

CLARK COUNTY
SITE PLAN/PRE-APPLICATION CONFERENCE SUMMARY

NUMBER: SPC 96-034 (Storedahl/Daybreak Resource Project)
Date of Conference: April 25, 1996; 2:00 pm
Date of Report: May 16, 1996

Representative:	Virgle Barnett, J.L Storedahl and Sons, Inc.
Applicant:	J.L Storedahl and Sons, Inc.
Owner(s):	Raymond and Merry Woodside
Land Use Review:	Site Plan Review, Type II
Location:	West of N.E. 61st Avenue, south of Bevin Road
Legal Description:	Lot #107 (225047), located in the Southwest quarter of Section 18, Township 4 North, Range 2 East, W.M.
Zoning:	Agriculture (AG) with Surface Mining Overlay (S)
Comprehensive Plan:	General Commercial
Description of Project:	Operate a commercial surface mining operation on approximately 20 acres in the AG and S zoning districts.
Staff:	Eric J. Holmes, Planner II
Telephone:	(206) 699-2375, extension 4097

Present at Conference:	Present	Not Present	Report Submitted
Eric J. Holmes, Planner II	x		x
John Ruben, Transportation	x		x
Mike Green, Water Quality	x		x
Alan Boguslawski, Planning Tech	x		
Fire Marshal		x	x
Health District		x	
Applicant	x		
Monty Anderson, Team Leader	x		

1408 FRANKLIN STREET • P.O. BOX 9810 • VANCOUVER, WASHINGTON 98666-9810
FAX (206) 699-2011 • (206) 699-2375

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I. APPLICATIONS REQUIRED

The proposed use based on information provided at the conference is permitted in the R-22 zone. Site Plan Review is required in all commercial and multi-family districts, for all Conditional Use Permits, and for all Utility Substations.

Site Plan Review	[X]
SEPA	[X]
Transportation Review	[X]
Fire Marshal Review	[X]
Preliminary Stormwater Review	[X]
Final Stormwater Review	[X]
Water Quality Inspection	[X]

Estimated fees:*

Site Plan Review Application Fee ($775.00 minimum) =	$ 775.00
SEPA =	$1,535.00
Fire Marshal Review Fee =	$ 160.00
Preliminary Stormwater Review Fee =	$ 850.00
Final Stormwater Review =	$ 580.00
Water Quality Inspection =	$ 780.00
Subtotal =	$ 4,680.00
Conference Credit =	($ 50.00)
TOTAL ESTIMATED FEES=	**$ 4,630.00**

* Fees cited are based upon the fee schedule in effect at the time of pre-application conference and are subject to change.

II. APPLICABLE CRITERIA AND CODE SECTIONS

Following are the Clark County Code (CCC) sections and Washington State Regulations which govern the development of this project. This list is not exhaustive of all state or federal regulations which may govern the development of the site, but is inclusive of those addressed by the County in the review process.

Section 12.05 (Roads)
Sections 13.25 and 13.27 (Storm Water Drainage and Erosion Control)
Section 13.36 (Wetland Protection)
Section 13.50 (Vegetation Clearing Management)
Section 15.12 (Fire Code)
Section 18.65 (Impact Fees)
Section 18.302 (AG District)
Section 18.329 (Surface Mining Overlay)
Section 18.402 (Site Plan Review)

III. REVIEW OF SUBMITTED MATERIALS

Background: The applicant proposes a 20 acre sand and gravel surface mine, going to a depth of 35 feet using a hydraulic excavation. This site is adjacent to a site that is currently the subject of a code enforcement proceeding. The notice and order for that proceeding determined that surface mining and aggregate processing are an existing, legal, non-conforming uses on a portion of the property adjacent to the site. See Notice and Order issued February, 1996.

In the context of this pre-application conference, the County acknowledges the existing lawsuit pending in Thurston County regarding the validity of mining permits issued by the State Department of Natural Resources. Clark County lacks the authority to make a determination on the validity of state issued permits, and has independently determined that the applicant does have legal, historic non-conforming rights to surface mine and process aggregate on the original 71 acre area of the Woodside property. Any information or determinations made in this report assume the validity of state issued permits, and any determination made by Clark County is subject to change pending a decision issued by Thurston County Superior Court.

Site Plan Review: Site plan review is required regardless of the permitting process for this use. Following is a review and comments of the site plan submitted in light of the applicable code sections. These comments include revisions that are required or provide you with information about the preliminary review.

Yes	No	ZONING
[x]	[ ]	**Is an existing conditions plan required for this application?** [CCC 18.402A.030(B)] An existing conditions plan shall include the following information: A vicinity map showing streets and access points, dimensions and orientation relative to north; the location, name and dimensions of public and private streets adjoining the site; the location of existing structures and other improvements on the site; elevation of the site at two (2) foot contour intervals for grades zero to ten percent (0% to 10%) and at five (5) foot contour intervals for grades more than ten percent (10%); the approximate location and description of individual trees that have a diameter of six (6) inches or more measured four (4) feet above grade at the base of the tree(s); provided, the plan may show clusters of such trees, rather than individual trees, when trees are near one another, and the approximate location of significant natural conditions, such as:

a. The one hundred (100) year floodplain
b. The location of drainage patterns and drainage courses
c. Slopes in excess of fifteen percent (15%)
d. Unstable ground (land subject to slumping, slides or movement)
e. High seasonal water table or impermeable soils
f. Areas having a severe soil erosion potential
g. Areas having severe weak foundation soils
h. Significant wildlife habitat or vegetation
i. Significant historic, cultural or archeological resources
j. Rock outcroppings

The physical features plan submitted includes most of this information. If any of the above aspects are not present on the site, then the plan should indicate which aspects are not present.

[ ] [x] **Is preliminary site plan sufficient for formal application?** Site plan drawings shall be on sheets not larger than twenty-four (24) inches by thirty-six (36) inches. Site plans shall be drawn at a scale of one (1) inch equals fifty (50) feet or larger (e.g., one (1) inch equals thirty (30) feet). A site plan application also shall include a narrative describing the uses proposed for site, hours of operation, hours and frequency of deliveries, and construction schedule [CCC 18.402A.030 (C)]. The following information was not included on the submitted plan, and must be included on the formal submittal:

- _x_ The proposed site and its dimensions and area
- _x_ Abutting properties or, if abutting properties extend more than one hundred (100) feet from the site, the portion of abutting properties within about one hundred (100) feet of the site, and the approximate location of structures and uses on abutting property or portion of the abutting property

The location and dimensions of proposed development, including the following:

- _x_ Streets and other rights-of-way and public or private access easements on and adjoining the site, including their dimensions
- _n/a_ Vehicle, pedestrian and bicycle parking and circulation areas, including dimensions of cross-aisles, standard, and handicap stalls.
- _x_ Loading and service areas, if applicable
- _x_ Above-ground utilities, if any
- ___ Existing structures to be retained on the site, if any, and their uses, height, and their distance from property lines
- _x_ Proposed structures on the site, including signs, fences, etc., along with their **uses, height, and their distance from property lines**
- _x_ Curbcuts with dimensions and internal traffic circulation
- _x_ Location and size of exterior signs and outdoor advertising, if any.
- _x_ Square footage of proposed structures, impervious surfaces, and density calculations.
- _x_ The location and type of proposed outdoor lighting and existing lighting to be retained, if any
- ___ The size and location of solid waste and recyclable storage areas

The site plan submittal must also include finish contours of the site, cross sections of existing grade, final contours and the same for each phase. Because this site is reliant upon an off-site facility for processing of aggregate, the vicinity map must include the location of the processing activity on adjacent parcels. This vicinity map must demonstrate that the material is being conveyed to a portion of the off-site area that has been determined to have legal, non-conforming right to process imported material, pursuant to the notice and order.

[X] [ ] **Are proposed setbacks sufficient?** The setbacks required for this proposal are as follows:

Front Yard:	20 feet along N.E. 61st Avenue and Moore Road (with the L3 buffer).
Side/Rear Yard:	Sufficient width to establish a 6 foot high berm with minimum side slopes of 2:1, capped with an L3 equivalent buffer.

Setbacks are measured from the property line to the top of the mined slope. Reclaimed slopes must meet the requirements of the Department of Natural Resources (2:1). All setbacks are required to be landscaped. No parking, loading or maneuvering may be located in the landscape setback area, with the exception of the minimum necessary to access the site. The formal site plan must be amended to indicate this.

[n/a] [ ] **Is lot coverage within allowed requirements?** Although lot coverage is not applicable in this application, any buildings on the site must be clearly indicated as to their use, size and location.

[n/a] [ ] **Is building height within allowed requirements?** No buildings wee included in the pre-app submittal. However, if buildings are proposed with the formal submittal, elevation plans will be required for the site plan review. Building elevations and floor plans shall be drawn at a scale of one-quarter (1/4) inch or one-eighth (1/8) inch equals one (1) foot.

[X] [ ] **Is detailed landscape plan, screening and buffering required (reference Clark County Code 18.402.050 and Table 402-1)?** Need to provide detailed landscape plan including initial planting size, species, and location for all proposed landscaping. All yards and setbacks need to be landscaped. The formal submittal must include a landscape plan meeting the provisions of CCC 18.402A.050. See Setbacks, above, for buffering requirements.

At the conference, we discussed the potential for a phased landscape plan that would allow for the landscaping to be installed as the mining progresses to each phase. This would be acceptable, provided that the buffering is installed for each phase prior to mining in that phase. The phasing progression indicated on the plan appears to be able to meet this requirement.

[?] [ ] **If submitted, is preliminary parking and loading plan adequate (reference Clark County Code 18.402.060)?** If any offices/employee buildings are to be placed on the site, they must include adequate parking per CCC 18.402A.060.

[ ] [X] **Are Handicap spaces required (reference Washington State Barrier Free Design Standards)?** No handicap spaces will be required for the project as proposed.

[?] [ ] **Is signage within code requirements?** If signs are going to be proposed. Please note that a separate Sign Permit application will need to be filed for any signs in addition to the Site Plan Review application. The fee for a Sign Permit is $155.

[X] [ ] **Any special zoning requirements?** Based upon comprehensive plan policy #4.5.8, surface mining will be prohibited in the 100 year floodplain portions of the site. However, there is a reach of floodplain that extends into the northern portion of the site from the west. It is not physically possible, let alone practical to avoiding mining this area. However, the area in the southwest portion of the site must not be mined. This prohibition does not prevent the mining to be done up to a "daylighted" boundary of the 100-year floodplain in the southwest corner of the site.

SEPA: No draft SEPA checklist was submitted with the pre-application conference for this proposal. The County understands that preparation of an EIS is underway for the balance of the Woodside property. If this project, as it stands alone, warrants a Determination of Significance (DS), the scope of the current EIS under preparation may be expanded to include the impacts from this development.

The site is in an area designated as having a high probability of containing archaeological resources. This should be addressed in your formal submittal and checklist. In addition, the potential impacts from noise, emissions and aesthetic impacts should be addressed.

IV. COMMENTS FROM OTHER DEPARTMENTS:

Transportation: (John Rüben, Transportation, ext. 4102)

THE ROAD STANDARDS:

All new developments shall comply with Chapter 12.05 of the Clark County Code (CCC), titled the Road Standards.

If the development cannot comply with the Road Standards, the applicant may request approval of a road modification in compliance with CCC 12.05.400.

If the applicant has an agreement with the County which differs from this review, a signed written copy of the agreement shall be submitted with the application for development.

A list of the materials to be submitted for our review is part of the application form. The precision of our review depends on these materials. Delays in the approval process or denial of the proposal may result if the materials are not complete, accurate, and current. The applicant did not supply most of the materials requested; therefore, this review will be incomplete.

FRONTAGE ROADS:

Criteria:

CCC 12.05.302(1) and (1)(a)
A half-width road shall be established and constructed to the applicable right-of-way or easement and improvement standards set out in Tables 1 through 5 to that portion of a frontage road which abuts a parcel being developed, unless already fully developed. Exception: CCC 12.05.302(2)(b) A rural road shall not be subject to the above half-width roadway requirements. The development shall be required to make frontage improvements in accordance with CCC 12.05.350 (intersection design requirements) and CCC 12.05.360 (sight distance requirements) and such frontage road improvements as are necessary in order to provide minimally safe access to the development.

CCC 12.05.025
The design criteria of Tables 1 through 5 are intended for normal conditions. The Director of Public Works may require higher design standards for unusual site conditions.

CCC 12.05.360
Requires minimum sight distances for driveways, controlled and uncontrolled intersections, stopping, passing, and the effect of grades on these sight distances.

Findings:

NE 61st Avenue/Moore Road is classified as a rural major collector, an arterial.

CCC 12.05.302(2)(b) exempts the development from frontage road improvements but requires that the development shall make such frontage road improvements as are necessary in order to provide "minimally safe access." Minimally safe access includes adequate passing clearance, sight distance, turning radius, emergency vehicle access, and pedestrian safety - particularly the safety of school children walking to school or to a school bus stop. The applicant has the burden to consider potential hazards, evaluate their significance, and propose mitigation measures, as needed. Pedestrian and traffic hazards frequently are brought to our attention by neighbors late in the review process. Delays in the approval process may occur or the development may be denied if the applicant cannot address these hazards as perceived by the neighbors. Transportation Division suggests that 20 feet is a minimally safe roadway width because: 1) CCC 12.05.302(1)(b) requires that the minimum half-width of any frontage roadway shall be 20 feet, 2) CCC 12.05.200 requires that the minimum width of a rural private roadway shall be 20 feet, and 3) the Uniform Fire Code requires that any road to be used by emergency vehicles shall have a 20-foot unobstructed width.

Recommendations:

For NE 61st Avenue/Moore Road, abutting the site, the applicant shall:

Dedicate, as needed, a minimum 30-foot half-width right-of-way

Construct intersection, sight distance, and frontage road improvements, as needed, in order to provide minimally safe access to the development in compliance with CCC 12.05.302(2)(b).

Present evidence with the proposed road plans and profiles demonstrating that all vehicular sight distances comply with the requirements of CCC 12.05.360.

DRIVEWAYS:

Criteria:

CCC 12.05.360:
Requires minimum sight distances for driveways, controlled and uncontrolled intersections, stopping, passing, and the effect of grades on these sight distances.

CCC 12.05.385:
Driveways shall not enter arterials. If no other access to the site exists or can be provided, this section requires minimum corner clearance, spacing, number, and width for driveways proposed to enter arterials.

Findings:

The submitted materials did not propose access to public roads.

Recommendations:

The applicant shall comply with the Road Standards.

TRANSPORTATION REVIEW FEES:

Transportation review fees will be collected with the following applications:

Plan Check Fees:

Subdivision/PUD	$1,950 + $0.58/linear foot of improvements: $1,090 due at application; $860 + $0.58/linear foot due at final plans.
Final Short Plat (Eng. Plans)	$906
Road Modifications	$105
Private Road Inspections	Fees no longer apply
Site Plan Reviews	$573

Project Review Fees:

Cond. Use Permits	$445

If there are any questions concerning transportation review fees, please contact Craig Pridemore, extension 4960.

ROAD PLANS & PROFILES AND AS-BUILT PLANS:

Criteria:

CCC 12.05.020 through .040:
Proposed road improvements require approval of plans and profiles prepared by an engineer licensed in the State of Washington.

CCC 12.05.090:
The developer shall submit a set of reproducible as-built plans prior to acceptance of any improvements for maintenance by the County. The as-built plans shall be prepared and stamped by a licensed engineer or surveyor.

CCC 12.05.330:
Road drainage facilities shall be designed to meet the requirements of the county storm water drainage and erosion control ordinances and be sufficient to prevent water damage or impairment from normal rain flow or surface water.

CCC 12.05.350:
Roads shall intersect at a right angle. The angle may be reduced, if permitted, to a minimum of 75 degrees for roads intersecting arterials or 60 degrees for residential road intersections.

CCC 12.05.360:
Provides the required minimum sight distances for driveways, controlled and uncontrolled intersections, stopping, and passing, and the effect of grades on sight distances.

CCC 12.05.302(2)(b):
Driveways entering a rural public road shall be paved from the edge of the public road to the right-of-way line or to 20 feet from the edge of the public road, whichever is greater.

Standard Drawings:
Rural private roads which intersect with a public road shall be constructed to comply with the standard drawing entitled "Rural Public/Private Road Intersection".

CCC 12.05.302(1)(c):
Where improvements are required to existing frontage roads, the County will perform pavement deflection testing to determine the adequacy of the existing pavement. Where the remaining life of the pavement is less than five years, the road shall be reconstructed to current standards to the centerline or 22 feet, whichever is less. If the remaining life is greater than five years, the road shall be cut back to a location where the structure is sound and the widening constructed. However, in no case shall the reconstruction be less than four feet in width from the existing edge of pavement to the new edge of pavement or face of curb. The County may require reconstruction to the centerline or 22 feet, whichever is less, if the Director of Public Works determines the geometry or other existing features are inadequate.

Findings:

The road plans and profiles shall also comply with the following requirements, as needed:

Present evidence, as needed, which demonstrates that sight distances comply with the requirements of CCC 12 05.360.

Establish slope easements for road improvements, as needed.

Maintain existing roads and driveways affected by construction of the development in order to provide safe, convenient, and adequate vehicular and pedestrian access at all times.

Submit a signing and striping plan showing traffic control devices, including signs and pavement markings, which will be installed concurrent with the roadway construction occurring with the development. These plans are to be stamped and signed by an engineer with expertise in traffic engineering and licensed in the State of Washington. Street name signing is not necessarily required as part of the signing and striping plan; however, the developer is responsible to see that all required signs are installed. The developer shall establish a work order with Clark County's Operations Division for the installation of all signs and striping.

If there are any questions concerning striping and signing plans, please contact Charles Green, extension 4832, or Gene Berreth, extension 4353.

Recommendations:

Road plans and profiles shall be submitted for county review and approval, as needed, with the Road Standards. As-built plans shall also be submitted in compliance with the Road Standards.

TRAFFIC STUDIES AND TRANSPORTATION CONCURRENCY MANAGEMENT SYSTEM:

Criteria:

CCC 12.05.375:
The Director of Public Works may require submittal of a traffic study by an engineer licensed to practice in the State of Washington with special training and experience in traffic engineering in order to assess the off-site traffic impacts of a proposed development.

CCC 12.40.050:
Unless waived or modified by the Director of Public Works, the applicant for a development which is projected to generate ten or more peak hour trips on an arterial/collector segment or intersection shall submit a transportation impact study pursuant to CCC 12.05.375 which includes a level of service analysis.

CCC 12.40.010 and 020:
RCW 36.70A.070 requires that counties establish level of service standards for arterial and transit routes and ensure that such standards are met or reasonably funded before new development is approved. This ordinance applies to applications for subdivision, short subdivision, site plan, and conditional use permit approvals which have a potential vehicular impact on the level of service of a segment or intersection of any roadway with a comprehensive plan functional classification of arterial or collector. It is intended to implement CCC 12.05.303.

CCC 12.05.303(1):
A proposed development can be denied if off-site road conditions are inadequate to provide minimum levels of service or a significant traffic hazard would be caused or materially aggravated by the proposed development. The developer may voluntarily agree to mitigate such direct impacts in accordance with RCW 82.02.020.

Findings:

Traffic studies and transportation concurrency issues are managed by the Transportation Engineering Section. They will determine if a traffic study is required and prepare a scoping memorandum which will describe the parameters of any study. Review of a traffic study may take up to ten working days.

A memorandum from Charles Green, Transportation Engineering Section Coordinator, dated March 20, 1995, provides general instructions and guidelines for a traffic study and includes a form with which a waiver or a reduction in the scope of a traffic study may be requested. Review of a traffic study or a waiver/reduction request may take up to 10 working days.

Whether or not a traffic study is required, the applicant should be prepared to address the following concerns which are frequently brought to our attention by neighbors late in the review process: 1) the safety of children walking to school or to a school bus stop; 2) traffic hazards, delays, or congestion in the vicinity of the access points to the development; 3) the need for additional access to the development if only one access is proposed. The applicant should consider these concerns, evaluate their significance, and propose mitigation measures, as needed. Delays in the approval process may occur or the development may be denied if the applicant cannot address these hazards as perceived by the neighbors.

If there are questions regarding traffic studies and/or transportation concurrency issues, please contact the Transportation Engineering Section, Charles Green, extension 4832 or Ejaz Khan, extension 4914.

Recommendations:

Because the sit will not generate any additional trips onto Moore Road, no traffic study is required. All arterial excavated from this site will be conveyed to the adjacent parcel for processing, and be trucked off-site by an existing fleet of trucks that current expert material from the site.

MODIFICATIONS OF THE ROAD STANDARDS:

CCC 12.05.400:
In cases where unusual topographic conditions, nature of existing construction, unique or innovative development design or similar factors would make adherence to the width, design or alignment standards of this chapter undesirable or impracticable, the requirements of this chapter may be modified. The modification may be made by the development approving County authority with each development proposal or, if such approval has already been given without consideration of the modification request, by the Director of Public Works. In the latter instance, the Director of Public Works may refer the request directly to the Hearings Examiner.

The request for a modification may be initiated by the developer by filing an application with the Director of Public Works. The application shall be accompanied by a written request stating the reasons for the request, the factors which would make approval of the request reasonable, and how the development differs from other developments. The application shall also be accompanied by a map showing the applicable existing conditions and proposed construction such as contours, wetlands, lakes, streams and rivers, structures, utilities, property lines, existing and proposed roads and driveways, existing and proposed traffic patterns, and any unusual or unique conditions not generally found in other developments. A one hundred five dollar ($105.00) fee shall be paid to the County at the time the application is presented for final consideration.

Any decision granting or denying a modification request shall be in writing and supported by findings of fact and conclusions which address the criteria for modification set forth above. Conditions may be attached to a modification approval which are necessary to protect the public interest and carry out the purpose of this chapter.

If a modification request is approved or denied by a County development approving authority in passing upon preliminary plat, preliminary short plat, conditional use or site plan approval application, such approval or denial may be administratively appealed in the same manner and within the same time as an appeal from the underlying development decision. A Director's modification decision may be appealed to the Hearing Examiner by the filing of a notice of appeal with the Director, together with an appeal fee, within fifteen (15) calendar days from the date of the Director's decision. Such notice of appeal shall state with specificity and particularity the decision appealed from the reasons why the appellant is entitled to relief. All such appeals so filed from a Director's modification decision shall be heard by the hearing examiner within forty-five (45) days from the date a notice of appeal is filed and a determination made within ten (10) days after the date of the hearing.

AN UNOFFICIAL GUIDELINE TO REQUEST A ROAD STANDARD MODIFICATION:

1-2-96

PRESENT THE APPLICATION FOR THE ROAD MODIFICATION REQUEST AND THE $105 FEE TO THE PUBLIC COUNTER LOCATED AT 1408 FRANKLIN STREET.

I. Modifications of the following standards may be considered:
   - a) Width
   - b) Design
   - c) Alignment

II. The applicant shall demonstrate that the standard is one, or both, of the following:
   a) Undesirable
   b) Impractical

III. An undesirable or impractical standard shall be for one or more of the following reasons:
   a) Unusual topography
   b) Nature of existing conditions
   c) Unique or innovative development design
   d) Similar factors, e.g., environmentally sensitive land or fully developed neighbors

IV. Submit written supporting evidence which shall include: a copy of the original and revised plat map or site plan; accurate drawings and/or maps showing existing and proposed conditions such as contours, wetlands, lakes, streams, rivers, structures, utilities, property lines, road intersections, driveways, traffic patterns, as appropriate; an analysis of any unusual or unique conditions not generally found in other similar developments.

Water Quality Division:

The provisions of the Stormwater Control Ordinance (13.25 with revisions adopted December 21, 1995) apply to the following development activities:

(a) *The creation of more than 2000 square feet or 5000 square feet outside the urban growth area of impervious surface or the division of urban single-family residential land creating the reasonable potential for more than 2000 square feet of additional impervious surface, except residential short plats creating less than 2000 square feet or 5000 square feet outside the urban growth area of new impervious surface at the time of platting shall submit a Final Stormwater Plan limited to conveyance and disposal.*

(b) *The addition of more than 1000 square feet of new impervious surfaces, other than buildings, will require oil/water separators as specified in 13.25.210 (5), to be shown on Final Engineering Plans.*

(c) *Replacement of existing structures exceeding 5000 square feet on commercial or industrial parcels.*

Impervious surface is defined in the Stormwater Control Ordinance as:

> *A hard surface area which either prevents or retards the entry of water into the soil. Examples include, but are not limited to, structures, walkways, patios, driveways, carports, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, haul roads and soil surface areas compacted by construction operations, and oiled or macadam surfaces. Open, uncovered stormwater facilities are not considered impervious surfaces.*

The information provided with the pre-application packet is not sufficient to determine the amount of new impervious surface that will be created by the project and whether or not it will be subject to the requirements of the Stormwater Control Ordinance.

At the conference it was clarified that this activity is an expansion to an existing permitted use. Transportation access, frontage improvements, staging and loading areas are not proposed on the subject property. In addition, the mining activity will recontour the site to be internal draining. This indicates on-site will not discharge off-site. Staff feel it is likely the minimum applicability criteria will not be satisfied and the project not subject to the Stormwater Control Ordinance.

If the applicability criteria is satisfied, the Daybreak Resource Project will needs to comply with all applicable requirements of CCC 13.25 and 13.27 (Stormwater Control Ordinance and Erosion Control Ordinance). Water quality shall be provide for a design storm equal to 1/3 of the 2 year developed rainfall event. Runoff rates leaving the site shall not exceed 1/2 the 2-year 24-hour pre-developed runoff rate for the 2-year developed condition and the 10- and 100-year 24-hour predeveloped rate for the 10- and 100-year 24-hour developed rainfall events. If the soil type allows, the stormwater may be infiltrated into the groundwater system after treatment.

In addition to meeting the requirement of Clark County for stormwater and erosion control, you need to coordinate and comply with the Department of Natural Resources (DNR) requirements for mining activities.

Fire Marshal's Office:

No Fire Marshal requirements for this project.

V. CONCLUSION

Based upon the information submitted, the site plan would be supportable provided the alterations recommended herein are included in the formal submittal.

VI. ATTACHMENTS

- Comments from other agencies
- Type II Site Plan Review Application
- SEPA Checklist
- Redlined Plans

An applicant may submit a written request for a second pre-application conference within one calendar year after an initial pre-application conference. There is no additional fee for a second conference if the proposed development is substantially similar to the one reviewed in the first pre-application conference or if it reflects changes based on information received at the first pre-application conference. A request for a second pre-application conference shall be subject to the same procedure as the request for the initial pre-application conference.

Pre-application review does not vest an application. A new request for or waiver of a pre-application review for a given development shall be filed unless the applicant submits a counter complete application that the Planning Director finds is substantially similar to the subject of a pre-application review within one calendar year after the last pre-application conference or after approval of waiver of pre-application review.

STAFF RESPONSES AND INFORMATION CONTAINED IN THIS PRE-APPLICATION REPORT ARE PRELIMINARY IN NATURE, AND DO NOT CONSTITUTE AN APPROVAL OR DENIAL. THE DETERMINATIONS, IF ANY, CONTAINED IN THIS REPORT WERE BASED UPON INFORMATION SUBMITTED BY THE APPLICANT, AND MAY BE SUBJECT TO CHANGE UPON FURTHER EXAMINATION OR IN LIGHT OF INFORMATION CONTAINED IN THE FORMAL APPLICATION.

NOTE: **Please submit a copy of this summary with your application.**

EJH:jb

c: File preapps
Parties of Record

Exhibit A

The
rest of this
file consists
of
Exhibits
1 thru 63

HEARING EXAMINER EXHIBITS

APPLICATION: APL #97-004 (Daybreak Resource)

HEARING DATE: May 8, 1997

Continued to 5-20-97

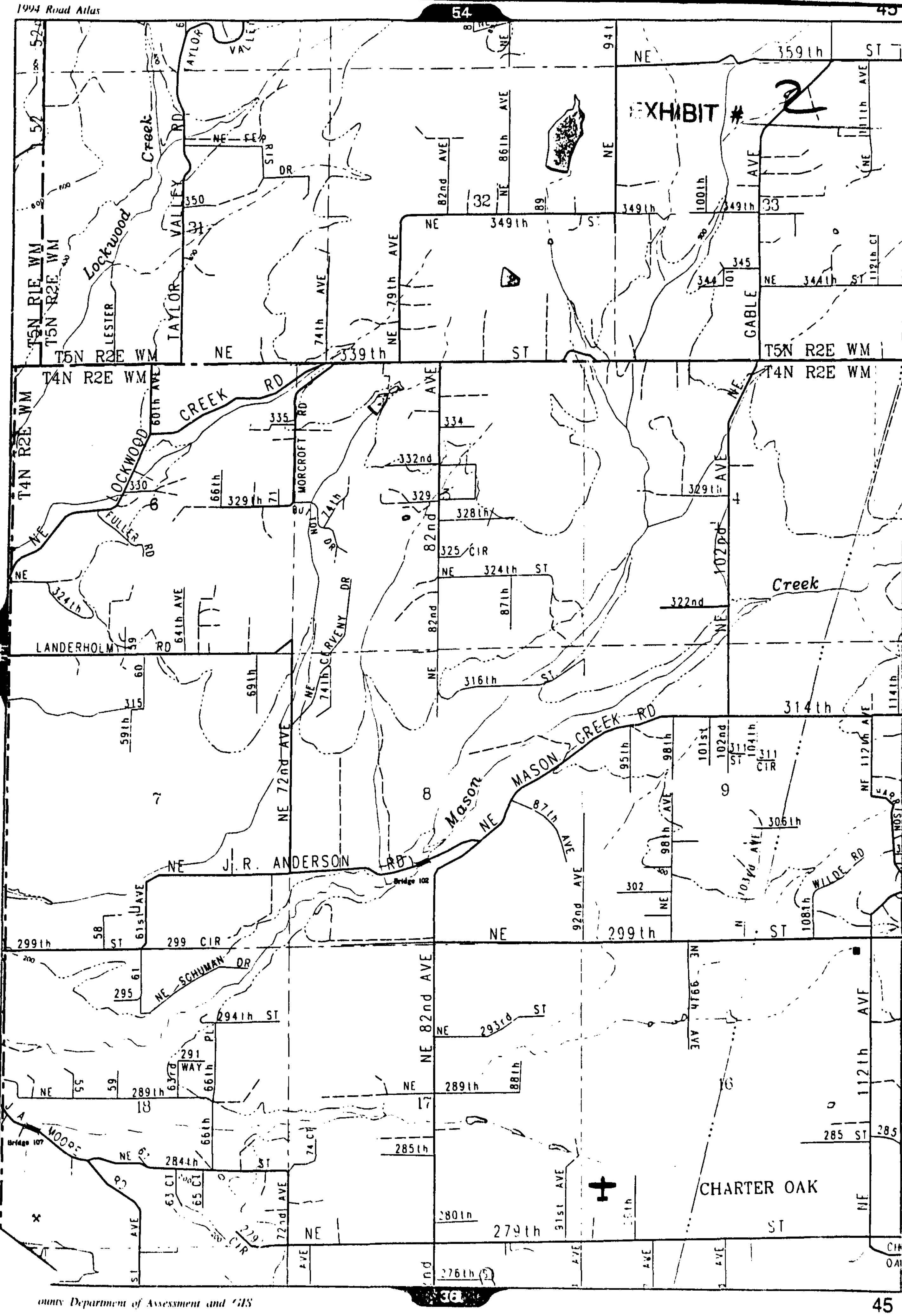
EXHIBIT NO.	DATE	SUBMITTED BY	DESCRIPTION
1		CC Planning	Aerial map
2		CC Planning	Vicinity map
3		CC Planning	Zoning map
4		CC Planning	Comp. Plan Map
5		Applicant	Preliminary plat maps
6	2-10-97	David T. McDonald	Ltr: Appeal of Decision: Lack of Necessity for Shoreline Permit
7	2-11-97	Richard Dyrland, Supervisory Hydrologist	Ltr in response to the determination of the necessity of a Shoreline Permit w/ attached photos
8	2-11-97	Scott & Carol Rose	Ltr in favor of the appeal
9	2-13-97	Richard Lowry, Chief Civil Deputy	Ltr to David T. McDonald confirming phone conversation re: CCC 18.505.005
10	2-13-97	David T. McDonald	Amended Notice on additional grounds for the appeal
11	2-13-97	David T. McDonald	2nd appeal letter w/ attachments
12		CC Planning	Notice of Public Hearing
13		CC Planning	Certification of Mailing / Posting
14		CC Planning	Chapter 173-14 WAC
15		CC Planning	Chapter 90.58 RCW Shoreline Management Act of 1971
16	4-18-97	DOE	Comments
17	4-18-97	Dept. of Natural Resources	Comments
18		CC Planning	Shoreline Management Master Program
19	4-4-97	CC Planning	SEPA / Staff Report for SPR #96-092
20	4-18-97	Scott Rose	Comments and concerns
21		Applicant	Proposed area expansion
22		Applicant	Photos
23	4-21-97	David T. McDonald	Mining Operation at or new 100 year flood plain of East Fork of the Lewis River
24	5-1-97	Gary Fish	Staff Report

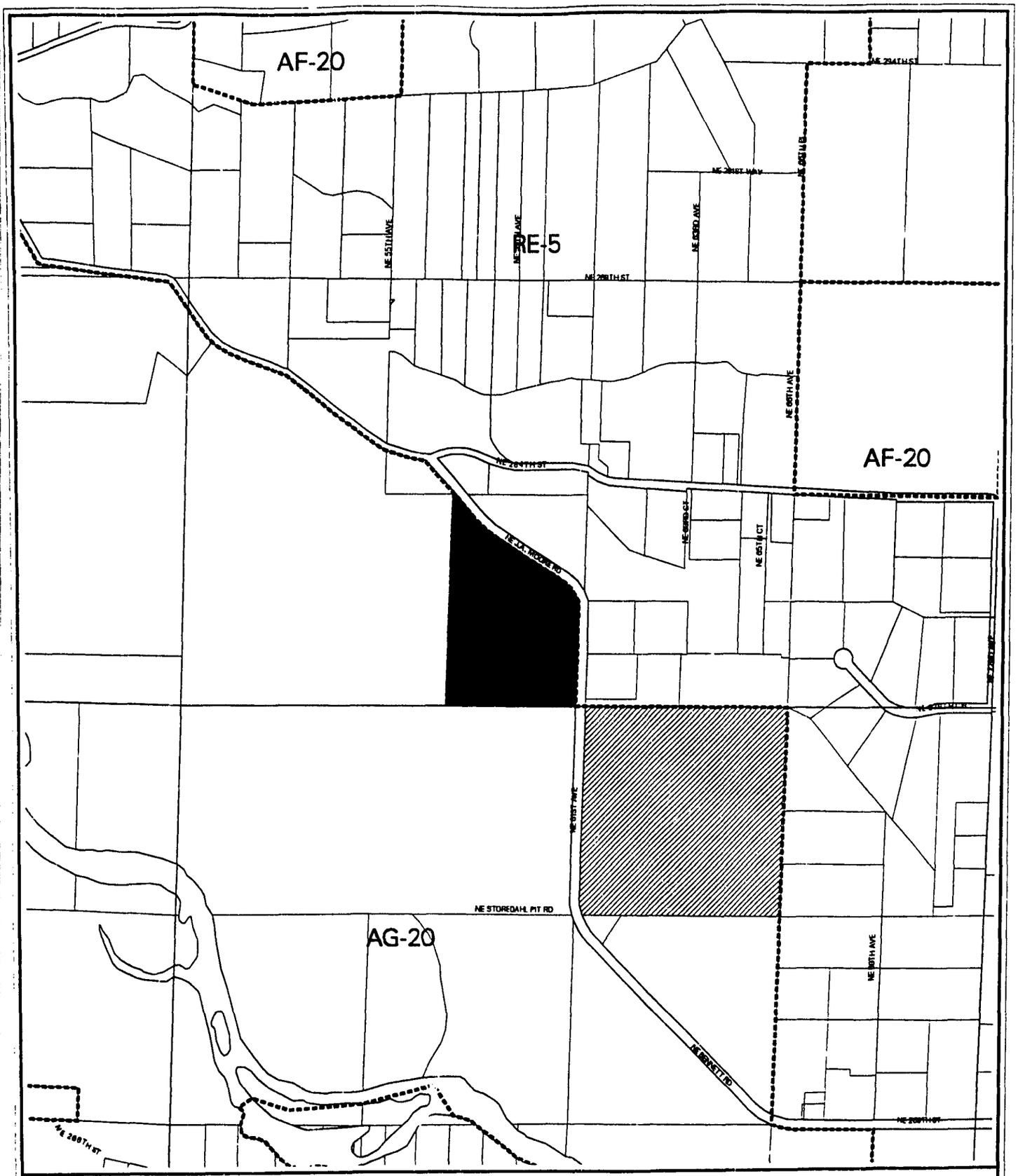
25	5-5-97	Richard Lowry, Chief Civil Deputy	Summary
26	5-16-97	David McDonald	Memo w/ attached exhibits
27	5-19-97	WA State Dept. of Natural Resources	Ltr re: Potential impacts
28	5-19-97	Perkins Coie	Brief of J.L. Storedahl & Sons Inc. Applicant and party of record
29	5-20-97	David McDonald	Ltr: Supplementing & correcting his letter of May 16, 1997
30	5-20-97	Diane Murbach	Resume
31	5-20-97	Virgil Barnett	9 Pictures of Conveyer Belts
32	5-20-97	Diane Murbach	Existing Condition Plan
33	5-20-97	Diane Murbach	Proposed Landscape Plan
34	5-20-97	Thomas Grindeland	Resume
35	5-20-97	Virgile Barnett	100 yr flood plain map
36	5-20-97	Tom Grindeland	Aerial Photo
37	5-20-97	David McDonald	Aerial Photo
38	5-20-97	Peter Klingeman	Resume
39	5-20-97	Peter Klingeman	Letter: re Analysis & Conclusions
40	5-20-97	Peter Klingeman	Summary of Analysis
41	5-20-97	David McDonald	Aerial Photo w/ plane wing
42	5-20-97	Rex Hapala	Aerial Photo Acetate
43	5-20-97	Rex Hapala	Chapter 78.44 Surface Mining
44	5-20-97	John Dentler	Ltr from DNR RE: Reclamation Permit No 70-011236 Date 9-13-97
45	5-20-97	John Dentler	Ltr from DNR dated 5-25-90
46	5-20-97	Dan Miller	Ltr of comments & concerns w/ attachments
47	5-20-97	Richard Dyrland	Ltr asking what is the flood plain
48	5-20-97	John Dentler	Updated topo map
49	5-20-97	Scott Rose	Comments and concerns
50	5-20-97	Lane & Marshall	Response to Motion to Produce for Pacific Rock

51	5-29-97	John Calnan	Ltr of Comments and concerns
52	6-1-97	David McDonald	Ltr requesting a reconsideration for determination
53	6-2-97	Scott Rose	Ltr of comments and concerns
54	6-2-97	West Consultants, Inc.	Ltr re: The necessity of a shoreline permit
55	6-2-97	Richard Dryland	Ltr of comments and concerns w/ attachments
56	6-3-97	David T. McDonald	Original Supplemental brief of Appellant in Support of Reversal of the County's Determination w/attachments
57	6-6-97	Hall, Holland & Dimitrov	Original Affidavit of Service re: service of Subpoena to Attend Motion to Compel Hearing Served on Ray Woodside.
58	6-2-97	David T. McDonald	Ltr: Reconsideration of Determination allowing operations in the floodplain w/o a shoreline permit
59	6-3-97	Hall, Holland & Dimitrov	Notice & order No 95-Z-11-95
60	6-9-97	Lane & Marshall	Ray & Merry Woodside's Motion to Quash subpoena
61	6-16-97	Perkins Coie	Motion to Strike & Responsive Brief
62	6-16-97	Tom Grindeland	Rebuttal
63		Brian Collins, 10,000 yrs. Institute	Application of Geomorphology to Planning & Assessment of Riverine Gravel Removal in WA.

1 figure x3

VERY POOR COPY WILL NOT
DUPLICATE.


54
EXHIBIT # 2
NE 359th ST
T5N R1E WM
T5N R2E WM
T4N R2E WM
Lockwood Creek
TAYLOR VALLEY RD
LESTER
NE 349th ST
GABLE AVE
NE 339th ST
LOCKWOOD CREEK RD
60th AVE
MORCROFT RD
NE 82nd AVE
102nd AVE
Creek
LANDERHOLM RD
FULLER RD
CERVENY DR
NE 72nd AVE
NE MASON CREEK RD
Mason
NE J. R. ANDERSON RD
Bridge 102
314th
NE 299th ST
NE SCHUMAN DR
NE 289th
J. A. MOORE RD
Bridge 107
NE 279th ST
CHARTER OAK
112th AVE
44
46
36



File # APL 97-04-1842 (Daybreak)
Location: T4N R2E SEC 18
Request: Appeal

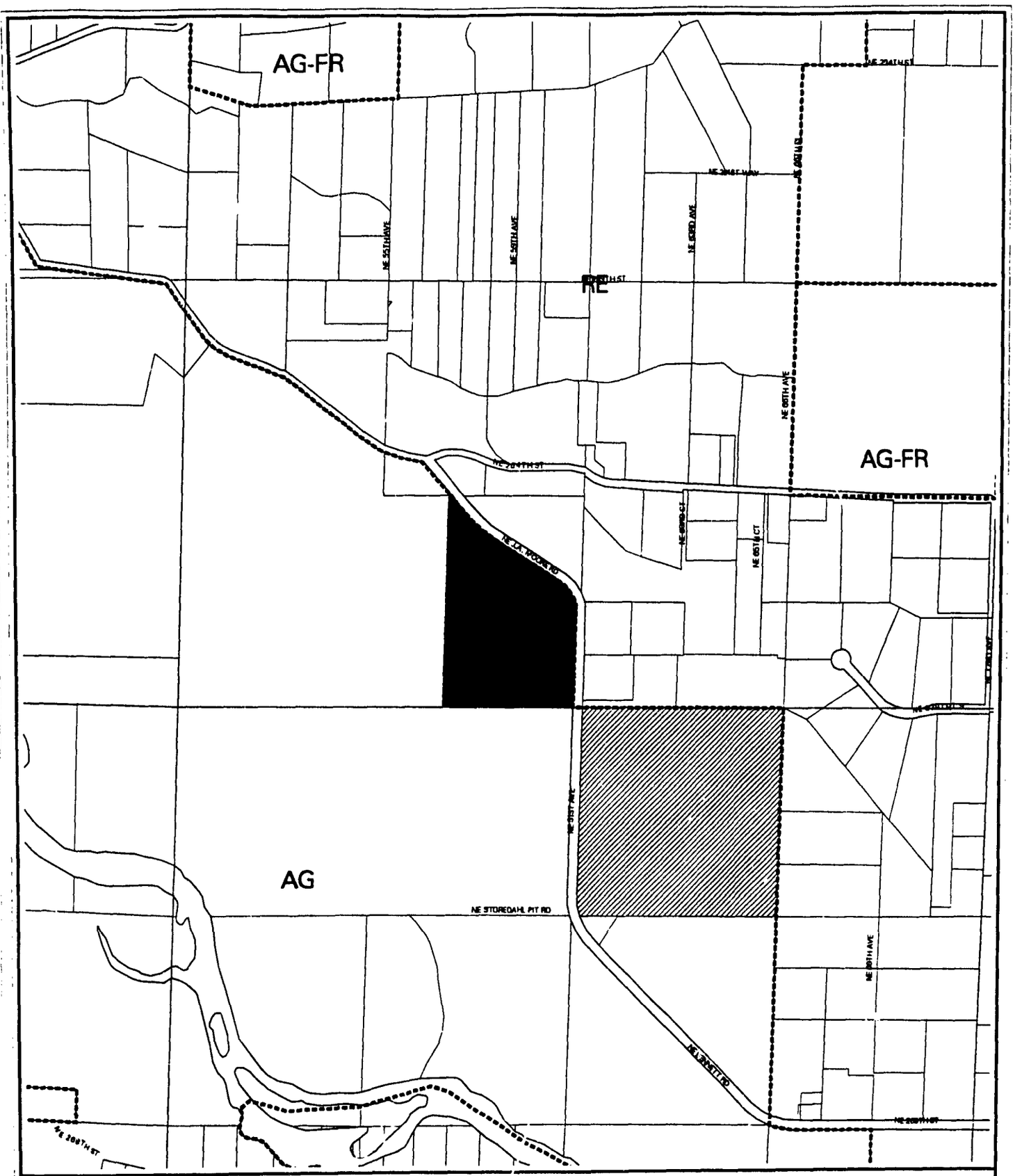
EXHIBIT # 3

CLARK COUNTY
WASHINGTON
Department of Assessment and GIS

N

Scale 1 Inch = 800 Feet
800 600 400 200 0 200 400 600 800 Feet

- Subject Property
- Zoning Boundary
- Mining Combining District
- Contingent Zoning
- Urban Holding-10
- Urban Holding-20



File # APL 97-04-1842 (Daybreak)
Location: T4N R2E SEC 18
Request: Appeal

EXHIBIT 4

CLARK COUNTY WASHINGTON
Department of Assessment and GIS

N

Scale 1 Inch = 800 Feet

800 600 400 200 0 200 400 600 800 Feet

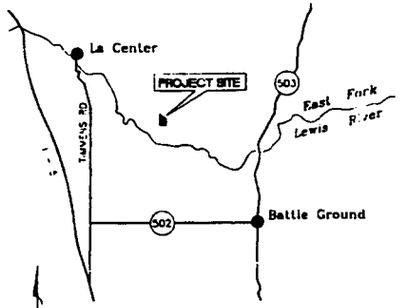
- Subject Property
- Comp. Plan Boundary
- Mining
- Industrial Reserve
- Open Space/Density Transfer
- Columbia River Gorge N.S.A.

DAYBREAK RESOURCE PROJECT

J. L. STOREDAHL AND SONS, INC.

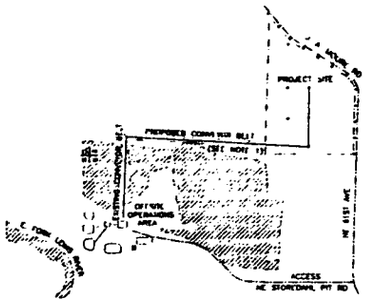
SITE PLAN REVIEW
PROJECT NO. 96092

S.E.1/4, S.W.1/4 SECTION 18 T4N, R2E
CLARK COUNTY, WASHINGTON



N.T.S.

SITE MAP



VICINITY MAP

NOTE:
NO TRANSIT STOPS, PEDESTRIAN, OR BICYCLE PATHWAYS

500' 0' 500' 1000'
SCALE: 1" = 500'

NOTES

Existing Conditions Plan

1. Pit-run material will be conveyed offsite. Storedahl understands it is the countrys position that the conveyor corridor is a part of this site plan, approval and these maps have been changed to reflect that position. The county has issued a planning directors decision that the conveyor is exempted and the proposed placement of the conveyor does not constitute a "substantial development" under the shoreline management act of 1971. Crushing and further processing of the offsite materials is a longstanding use. See in the matter of J. L. Storedahl and Sons Inc., Hearing and Order, February 27, 1995. Storedahl may also convey material off-site utilizing existing conveyor across existing pontoon bridge.

2. 1.3 acres of inward sloped ponds in the most northeast portion of the site bordering along N E 41st Ave. This inward sloped ponds to be dominated by an inventory of Douglas fir, bay-leaf maple, and Oregon Ash. The shrub layer includes Ninebark of hazel, vine maple, salmonberry, and Oregon grape. The conifers can reach a height of 80 ft. and the deciduous trees can reach a height of 40 ft.

This conditional does not dit any of the adjacent outlining a Clark County "Critical Area" as defined by Chapter 13.50 of the Clark County Code.

Most of this conditional will be removed as part of land clearing in preparation for mining of Phase 1 (See Site Plan). Approximately 2 acre of this conditional will remain within the 20 ft. wide setback area along the ponds. This setback will be flagged and individual, large coniferous or deciduous trees will be saved, if possible, even though they may exist outside the planned mining excavation.

Site Plan

3. Abutting properties to the north and east are zoned Rural Estate and ten lot parcel numbers are shown. Some parcels are separated by County roads, of which roads are owned by Clark County.

4. Public roads and easements are shown. No public access is to be allowed onto the site. No direct access onto the site from any public road will be developed. Access will be from N E Storedahl Pit Rd. which is off N E 61st Ave.

5. The only "service area" on this site will be a dirt road alongside the field conveyor to be used for access and maintenance.

6. No existing structures will be retained on the site. A 4 ft. high, 3-strand barbed wire fence will be erected around the perimeter of the site, except at the conveyor corridor.

7. The only type of outdoor lighting that will be utilized on this site will consist of 1) downward-looking, security lighting on the conveyor belt spaced approximately every 150 ft., and lighting on the hopper to shield for evening operation. Equipment will be 8 to 10 ft. below grade, so that glare will not occur.

Landscape Plan

8. The existing "landscape materials" on the site to described under Note 2, the material to be to be retained for use on final landscaping. Upon the initial conditional where mining will occur. Trees and shrubs remaining in the setback area will be a part of the final landscape plan.

9. Per State Dept of Natural Resources regulations, the mining/reclamation permit for this site will have to meet the reclamation standards of RCW 78.44. The reclamation plan submitted for this site contains the following elements for successful reclamation:
- All underwater slopes will be a minimum 1.5:1. Shoreline areas adjacent to the inland pond will have 3:1 slopes and will be backfilled to a minimum depth of 6 ft. and an average depth of 10 ft.
- Road cinders, grass and bareroot trees will be distributed in the fall at rates of 8 lbs./acre and 15 lbs./acre, respectively, on the 3:1 shores adjacent to the pond edges. On the higher ground in the remaining setback areas, intermediate wheatgrass and annual ryegrass (10 lbs./acre and 3 lbs./acre) will be added to the mix, while road cinders will be removed.
- Willow stem bundles (consisting of 10 to 15 stems) will be planted in groups of 2 to 3 approximately 3 ft. apart every 150 ft. near the waters edge in the zone of partial saturation (transition zone). Individual clumps of dogwood will be mixed with the willow of approximately 10 per grouping. Cottonwood and alder will be planted in 2 in. containers and propagated from cuttings in the hopper grouted of the setback areas. These plantings will be in groups of 3 to 5 with 3 ft. spacing approximately every 150 ft. and staggered with the willow/dogwood groupings of the transition zone.
- Cattails and rushes will naturally branch out shallow pond edges from nearby mining ponds that have been previously reclaimed. Manual transplanting could be implemented at a later time, if natural dispersal does not occur in a timely manner.
- Grasses and legumes will be drill-seeded in the fall independent to topsoil placement and trees and shrubs will be planted/propagated in the early Spring.
- See typical "Revegetation Section" on the Landscape Plan.

10. The final site configuration after mining is completed on the Daybreak Resource Project will consist of approximately 13.7 acres of open water (pond) and 4.3 acres of shoreline.

11. A 4 ft. high fence consisting of 3-strand barbed wire will enclose the site except for the conveyor corridor.

12. A temporary berm 6 ft. high and approximately 32 ft. wide with 2:1 slopes will be placed along the southern and western boundaries of the project site in an approximate 45 ft. wide setback area. This berm will consist of overburden stripped from this project site in preparation for mining and will be drill-seeded with the grass and legume mixture described above, minus the road cinders grass. This berm will be removed during the final stages of mining and the topsoil will be re-distributed on this 3:1 existing slopes in preparation for leveling and planting. See "Berm Detail" on the Landscape Plan.

INDEX TO SHEETS

1A. COVER SHEET, VICINITY MAP AND NOTES
1B. TAX LOT AND PROJECT BOUNDARY LOCATIONS
2A. EXISTING CONDITIONS PLAN (SOUTH HALF)
2B. EXISTING CONDITIONS PLAN (NORTH HALF)
3A. SITE PLAN (SOUTH HALF)
3B. SITE PLAN (NORTH HALF)
4A. LANDSCAPE PLAN (SOUTH HALF)
4b. LANDSCAPE PLAN (NORTH HALF)
5. CONVEYOR ROUTE

NO	DATE	BY	REVISIONS
2	2/3/97	DNN	CONVEYOR CORRIDOR BUFFERS, SETBACKS, EASEMENTS, CULVERT AND FLOODPLAIN

DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
12th S.W. 12th AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 228-7718 FAX (503) 228-7781

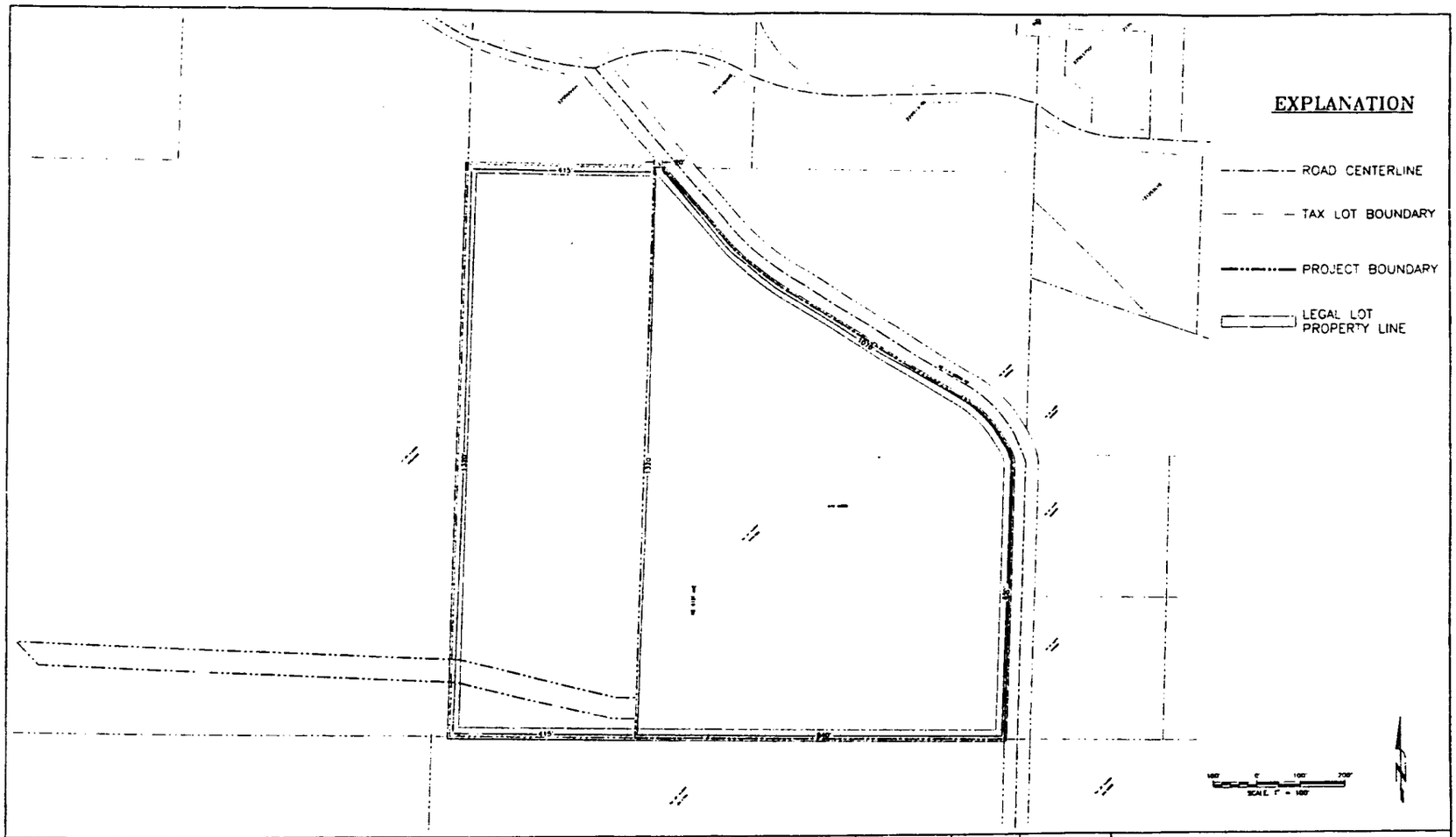
DESIGNED BY:	WRB
DRAWN BY:	RE
CHECKED BY:	RDN
DATE: OCTOBER, 1996	
SCALE: NONE	
PLOT FILE: DNA-256.PYP	

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
COVER SHEET

PROJECT NO. 351-115
FILE: C:\351\115\COVER.DWG

SHEET 1A

EXHIBIT # 5



NO	DATE	BY	REVISIONS
2	2/5/97	DM	CONVEYOR CORRIDOR BUFFERS, SETBACKS, EASEMENTS CULVERT AND FLOODPLAIN

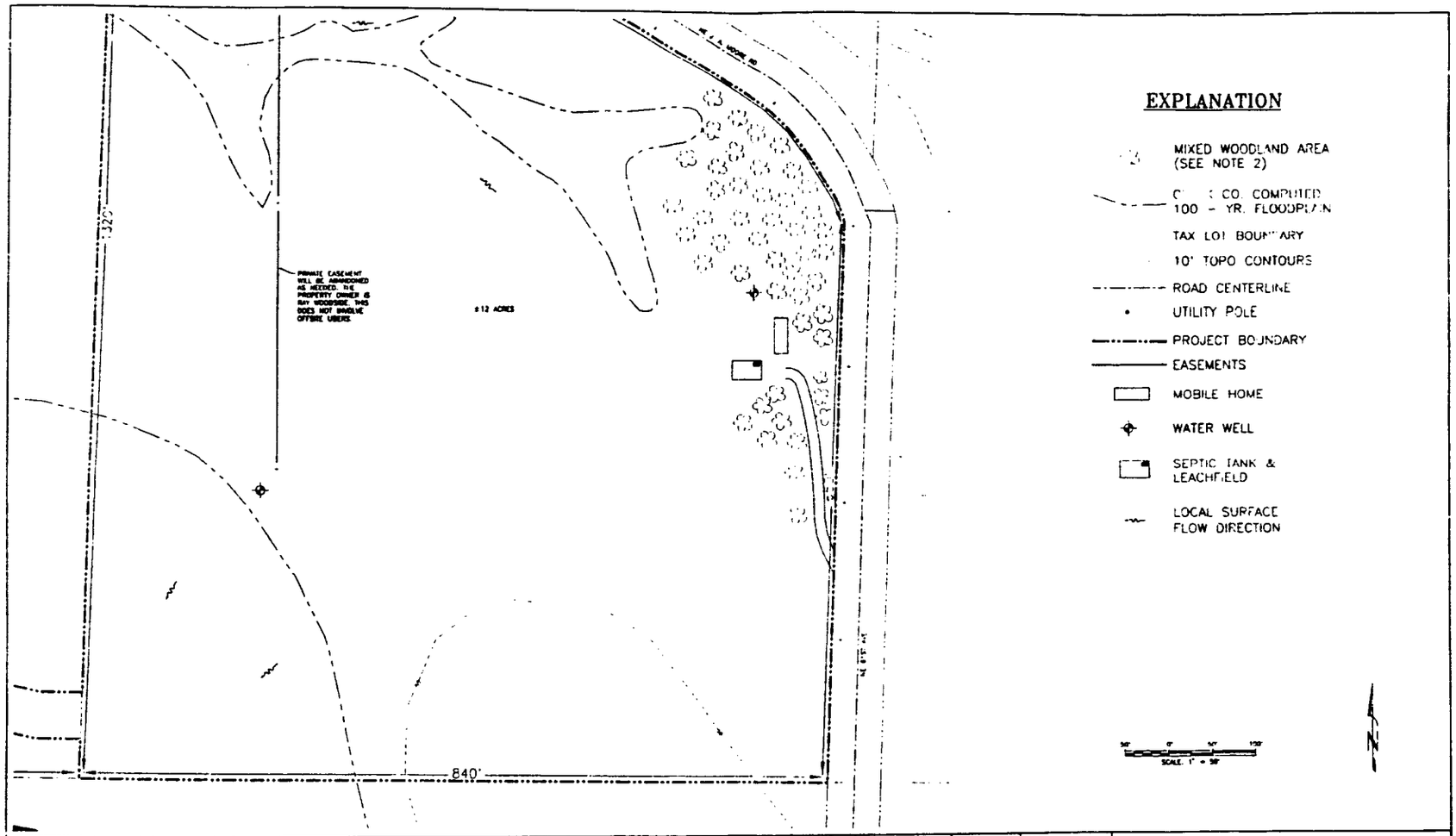
DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 220-7718 FAX (503) 220-7784

DESIGNED BY	RBL
DRAWN BY	[illegible]
CHECKED BY	RBL
DATE	OCTOBER 1996
SCALE	1" = 100'
PLOT FILE	BMA-2%.PCP

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
TAX LOT AND PROJECT BOUNDARY LOCATIONS

PROJECT NO 361-115
FILE C:\361\115\LEGAL.DWG

SHEET 1B



NO	DATE	BY	REVISIONS
2	2/3/97	DM	CONVEYOR CORRIDOR, BUFFERS, SETBACKS, EASEMENTS, CULVERT AND FLOODPLAIN

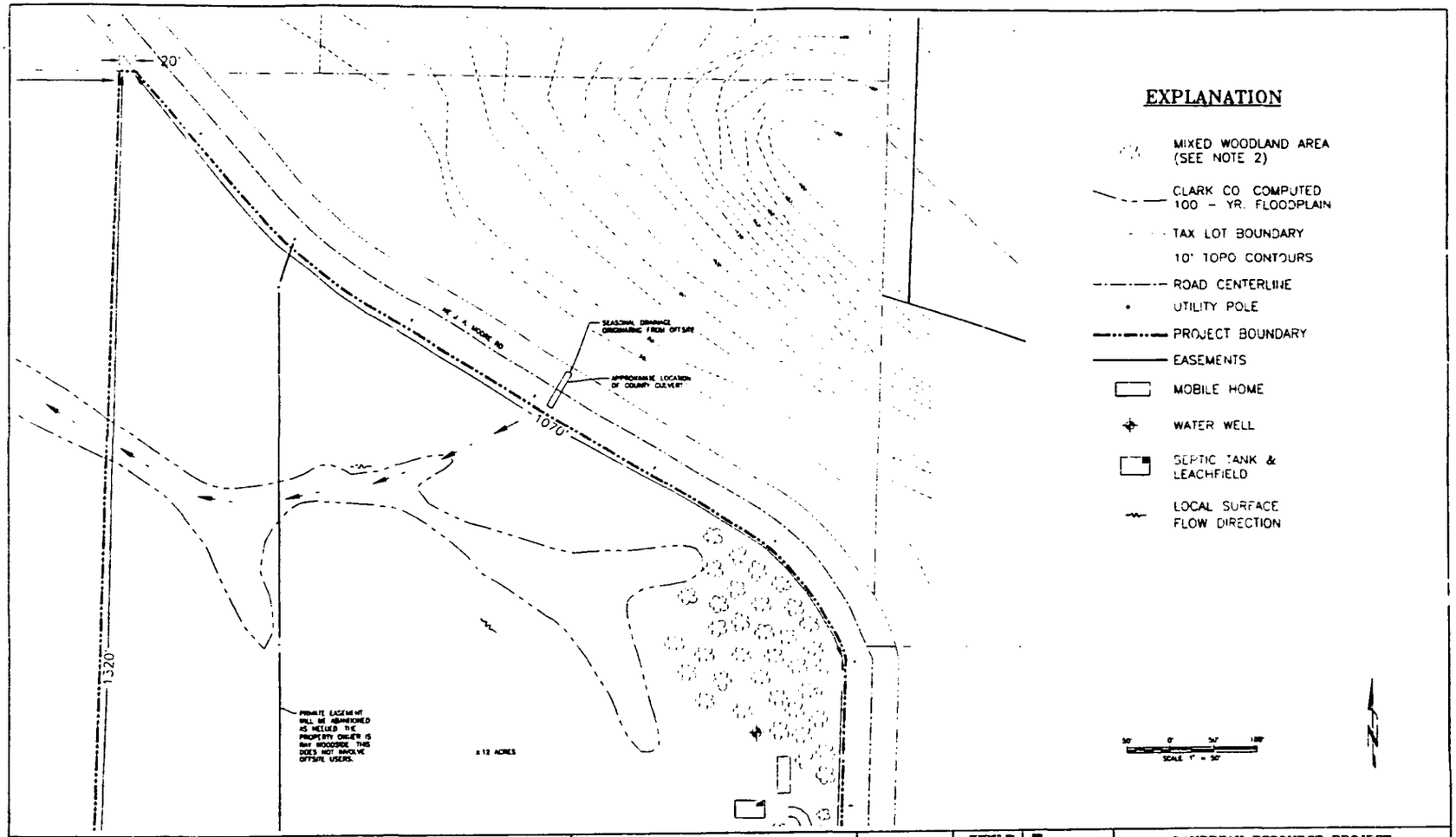
DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 226-7718 FAX (503) 226-7701

DESIGNED BY	RBL
DRAWN BY	RE
CHECKED BY	MBL
DATE	OCTOBER, 1996
SCALE	1" = 50'
PLOT FILE	DNA-258.PLP

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
EXISTING CONDITIONS PLAN (SOUTH HALF)

PROJECT NO 361-115
FILE G:\361\115\VRST-1.DWG

SHEET 2A



NO.	DATE	BY	REVISIONS
2	2/5/97	DM	CONVEYOR CORRIDOR, BUFFERS, SETBACKS, EASEMENTS, CULVERT AND FLOODPLAIN

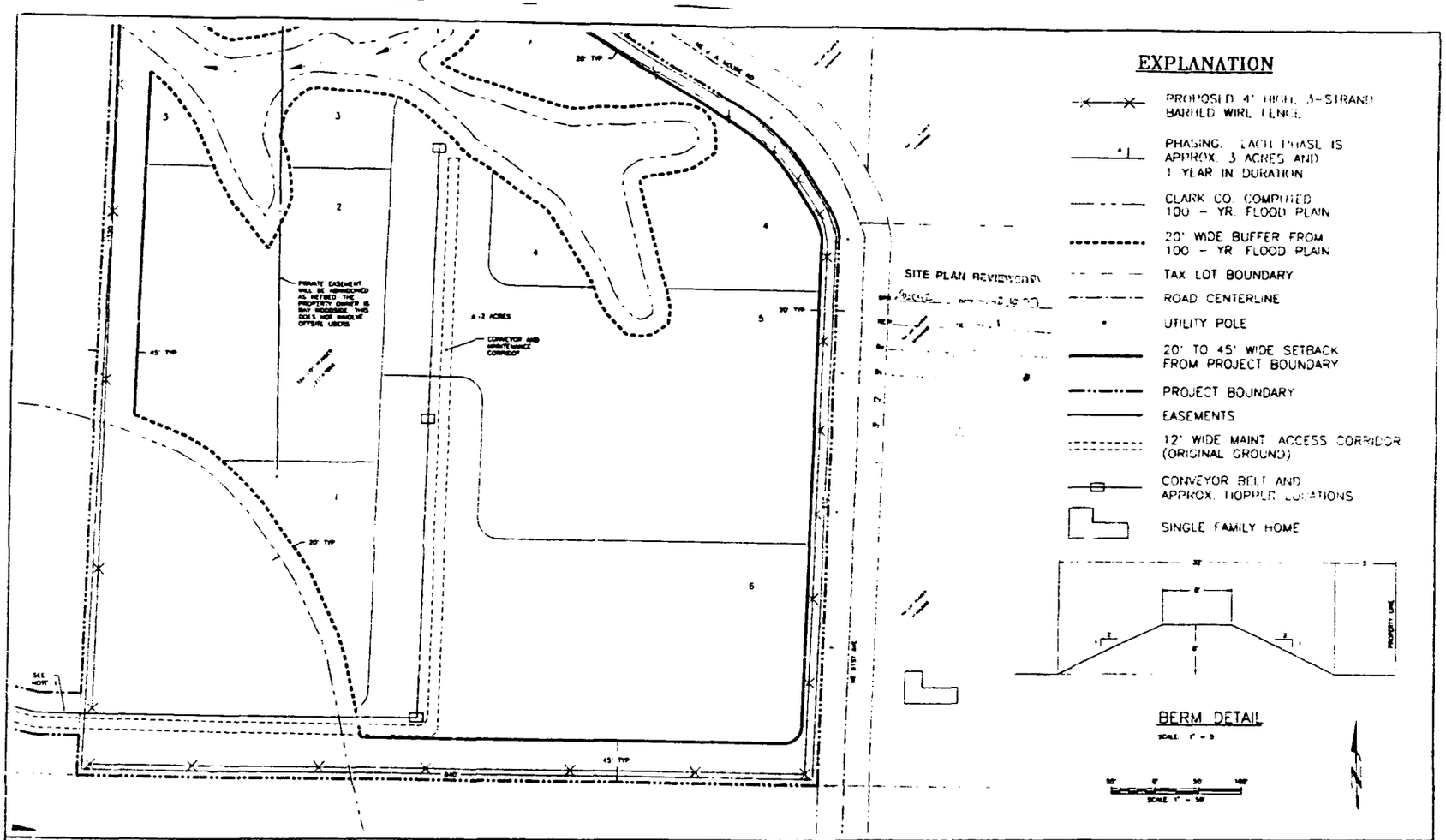
DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1204 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 228-7718 FAX (503) 228-7781

DESIGNED BY	RBL
DRAWN BY	RE
CHECKED BY	RBL
DATE: OCTOBER, 1996	
SCALE 1" = 50'	
PLOT FILE	[illegible]

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
EXISTING CONDITIONS PLAN (NORTH HALF)

PROJECT NO. 361-115
FILE G:\361\115\J-051-2.DWG

SHEET 2B



NO	DATE	BY	REVISIONS
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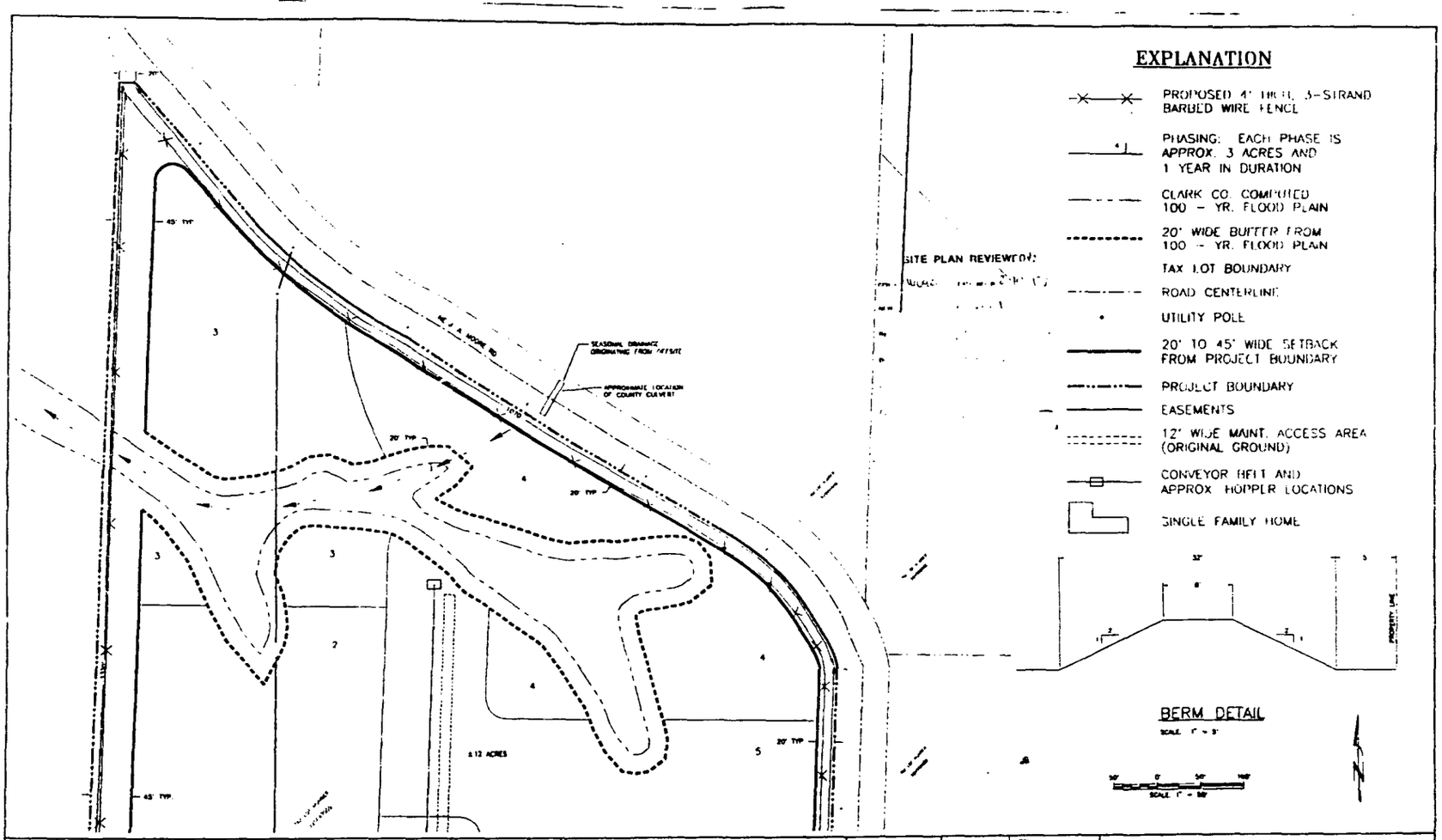
DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1701 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 226-7718 FAX (503) 226-7761

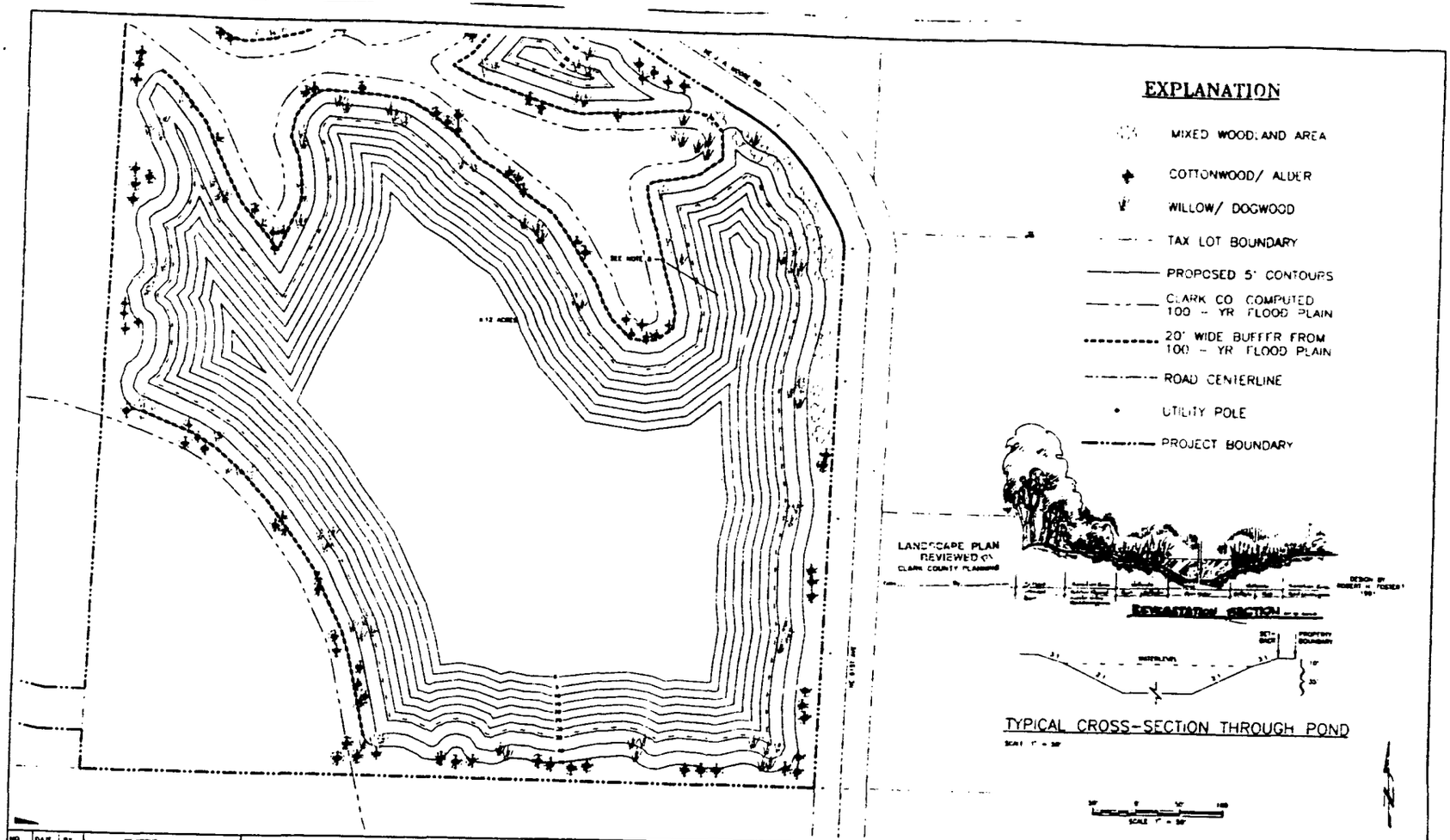
DESIGNED BY
DRAWN BY
CHECKED BY
DATE OCTOBER 1996
SCALE 1" = 50'
PLOT FILE CNA-256.PLP

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
SITE PLAN (SOUTH HALF)

PROJECT NO 361-115
FILE C:\361\115\PHASE-1.DWG

SHEET 3A


EXPLANATION
PROPOSED 4' HIGH, 3-STRAND BARBED WIRE FENCE
PHASING: EACH PHASE IS APPROX. 3 ACRES AND 1 YEAR IN DURATION
CLARK CO. COMPUTED 100 - YR. FLOOD PLAIN
20' WIDE BUFFER FROM 100 - YR. FLOOD PLAIN
TAX LOT BOUNDARY
ROAD CENTERLINE
UTILITY POLE
20' TO 45' WIDE SETBACK FROM PROJECT BOUNDARY
PROJECT BOUNDARY
EASEMENTS
12' WIDE MAINT. ACCESS AREA (ORIGINAL GROUND)
CONVEYOR BELT AND APPROX. HOPPER LOCATIONS
SINGLE FAMILY HOME
SITE PLAN REVIEW FOR:
SEASONAL DRAINAGE ORIGINATING FROM OFFSITE
APPROXIMATE LOCATION OF COUNTY CULVERT
45' TYP.
20' TYP.
±12 ACRES
BERM DETAIL
SCALE 1" = 5'
SCALE 1" = 50'
PROPERTY LINE
DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
SITE PLAN (NORTH HALF)
SHEET 3B



NO	DATE	BY	REVISIONS
2	2/5/97	DM	COMPLETE CORRIDOR, BUFFERS, SETBACKS, EASEMENTS, CULVERT AND FLOODPLAIN

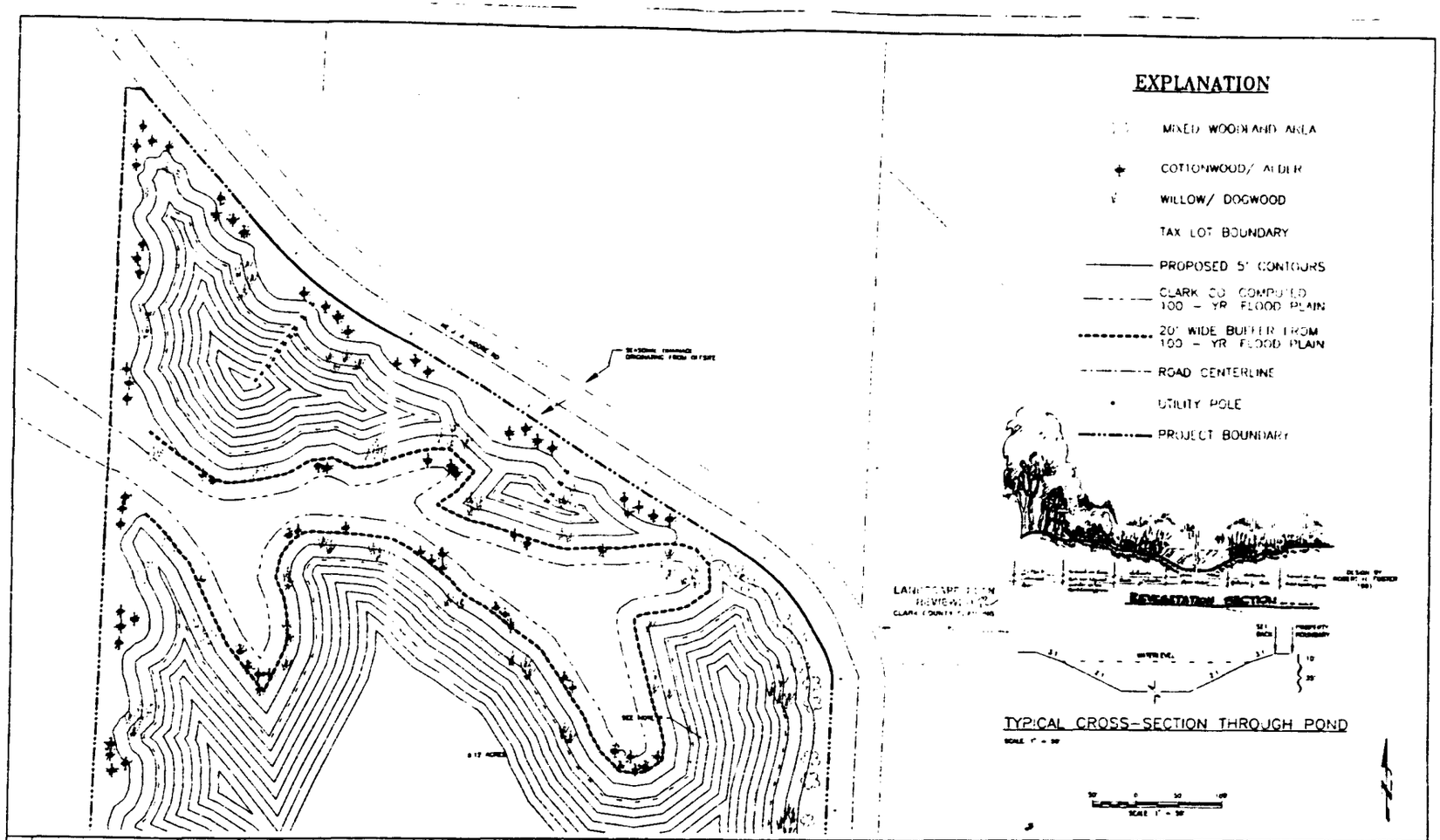
DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1301 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 238-7718 FAX (503) 238-7281

DESIGNED BY
DRAWN BY
CHECKED BY
DATE OCTOBER 1995
SCALE 1" = 50'
PLOT FILE SHA-256.PCP

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
LANDSCAPE PLAN (SOUTH HALF)

PROJECT NO. 361-113
FILE C:\361\113\LANDSC-1.DWG

SHEET 4A



NO	DATE	BY	REVISIONS
2	9/5/97	BM	CONVEYOR CORRIDOR BUFFERS SETBACKS EASEMENTS CULVERT AND FLOODPLAIN

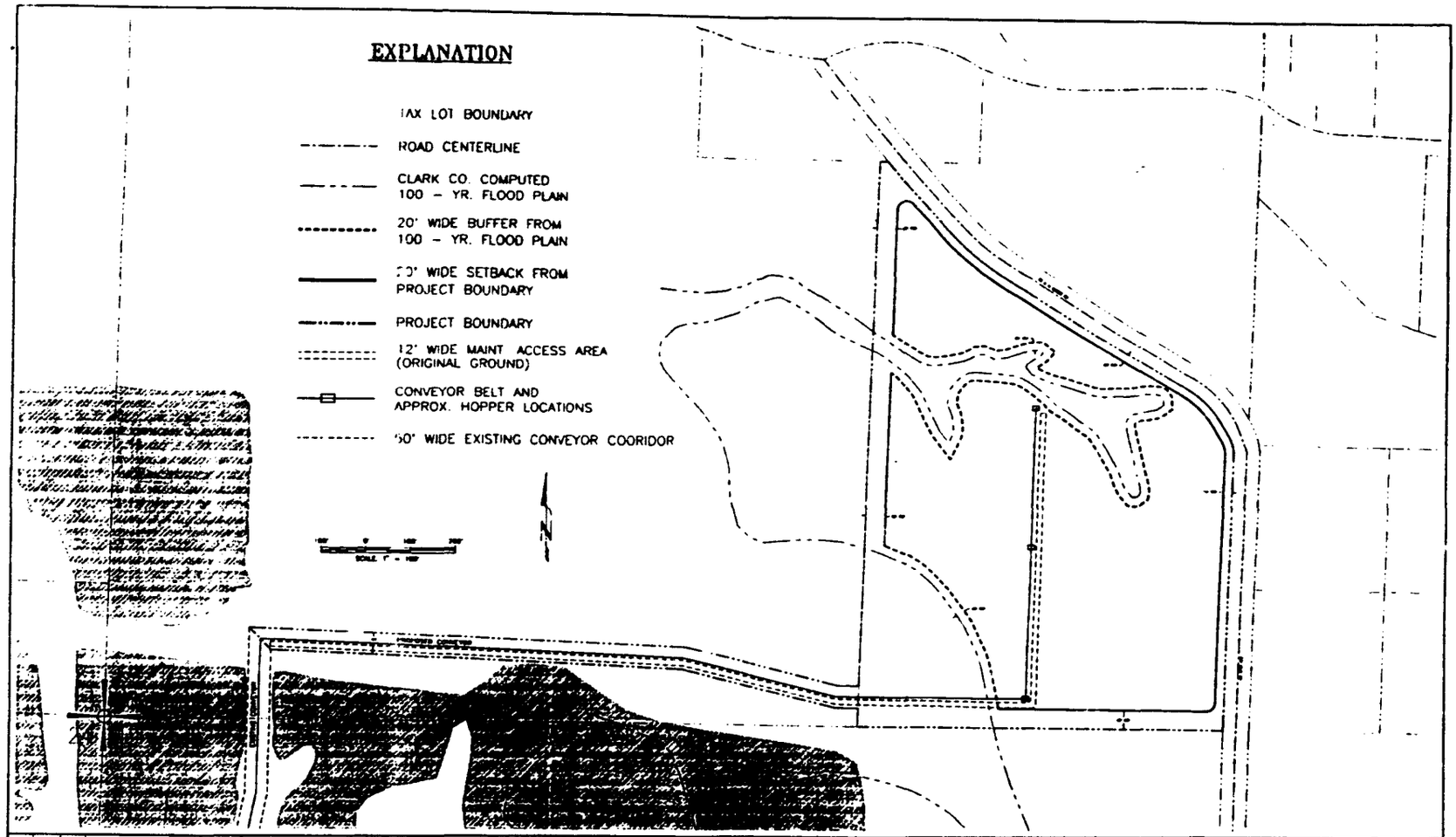
DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 220-7710 FAX (503) 220-7701

DESIGNED BY
DRAWN BY
CHECKED BY
DATE OCTOBER 1996
SCALE 1" = 50'
PLOT DATE

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
LANDSCAPE PLAN (NORTH HALF)

PROJECT No. 351-115
FILE C:\351\115\LANDSC 2.DWG

SHEET 4B



DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
CONVEYOR ROUTE

SHEET 5

David T. McDonald
Courtroom Lawyer
Admitted to Oregon and Washington State Bar
540 SW 3rd Ave., Suite 302 (503) 226-0188
Portland, OR 97204 Fax (503) 226-1136

EXHIBIT # 6

February 10, 1997

Land Use Hearings Examiner
1408 Franklin Street
PO Box 9810
Vancouver, Washington 98666-9810

RE: **Appeal of Determination By County Staff RE: Lack of Necessity for Shoreline Permit for SPR #96-092**

By Hand Delivery and by First Class Mail

Dear Hearings Examiner:

My name is David T. McDonald and I represent Friends of the East Fork, an aggrieved party. This letter is notify the County and the Hearings Examiner that Friends of the East Fork appeals the determination on SPR #96-092 by Clark County staff set forth in a letter dated January 29, 1997 to Robert B. Laird and John Dentler (a copy of which is attached and incorporated by this reference) that if

> no mining occurs in the 100 year regulatory floodplain, and the site is revised to reflect this, then a Shoreline Permit under County's Shoreline Master Program and Shoreline Ordinance is not required for the proposal. The Planning Director's determination is based on (a) no mining within the area of Shoreline Jurisdiction and (b) a determination that the conveyor equipment and the proposed placement of the conveyor does not constitute a "substantial development" under the Shoreline Management Act of 1971 (Ch. 90.58 RCW). Specifically, the use of equipment is not required to obtain a Shoreline Permit because it is not included in the definition of Development contained within RCW 90.58.030 (Shoreline Management Act of 1971)

The appeal is on the determination set forth in the attached letter and to title 18 of the Clark County Code. The reasons for the appeal are:

1. SPR 96-092, a 19 acre parcel, is an unlawful segmentation under the Shorelines Management Act (SMA) from a single project which affects a water of statewide significance, uplands, floodways and/or shorelands and therefore unlawfully creates a piecemeal review in an attempt to allow this portion of the project to proceed while the other portion(s) of the project await approval; and/or

2. SPR 96-092 will allow mining in lands under the jurisdiction of the SMA and the SHB and a shorelines permit must be required; and/or

3. The placement in the 100 year floodplain of the conveyor belt to move sand and gravel from the 19 acre parcel to an existing sand and aggregate processing site also located in the 100 year flood plain constitutes mining in the 100 year floodplain and, under Clark County Mineral Policy 4.5.8, should be banned outright; and/or

4. The placement and use of a conveyor belt constitutes "development" under RCW 90.58.030(3)(d) and has a total cost and/or fair market value that exceeds $2,500.00 and/or materially will interfere with the normal public use of the water, shorelands or shorelines of the state and thus must have shoreline substantial development permit (SSDP); and/or

5. Failure to require a shoreline permit violates the Clark County Shorelines Master Program.

A check in the amount of $340.00 is enclosed

Sincerely,

David T. McDonald

Enclosures
cc: Chair, FOEF
Rich Lowry (w/ enc.)
John L. Dentler (w/ enc.)

2. SPR 96-092 will allow mining in lands under the jurisdiction of the SMA and the SHB and a shorelines permit must be required; and/or

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5. Failure to require a shoreline permit violates the Clark County Shorelines Master Program.

A check in the amount of $340.00 is enclosed

Sincerely,

David T. McDonald

Enclosures
cc: Chair, FOEF
Rich Lowry (w/ enc.)
John L. Dentler (w/ enc.)

EXHIBIT # 7

RECEIVED

FEB 14 1997

Clark County
Community Development/Records

February 11, 1997

Monty K. Anderson, Senior Planner
Department of Community Development
1408 Franklin St., P.O. Box 9810
Vancouver, WA 98666-9810

RE: Determination on the necessity of a Shoreline Permit for SPR #96-092 (Daybreak Resource Project)

Dear Mr. Anderson:

This letter is part of the Friends Of The East Fork Lewis River response to the January 29th, 1997 letter regarding the Planning Director's determination on the requirement of a Shoreline Permit for the above referenced site plan application and to Title 18 (Zoning Ordinance). An appeal has been filed by Friends Of The East Fork Lewis River arguing that a Shoreline Permit is required.

Our analysis of the past and present situation indicates that critical parts of the hydrologic findings and conclusions in the recent information furnished to the Clark County Planning Director by Perkens Coie Law Partnership on behalf of Storedahl and Sons is flawed and the conclusions incorrect.

We raise the following points of contention:

1. The Official "Delineated 100-Year Flood plain"

The U.S. Corp. of Engineers official flood plain study and map include the entire area as being in the 100-year flood plain frequency.

2. The State of Washington Designation of the East Fork Lewis River

The State of Washington has officially identified the East Fork of the Lewis River as one of the rivers that has been destabilized, is at risk and needs further protection and rehabilitation. This information has been given to the Clark County Planning Group and is part of the official record. Past DNR reports on the hydrologic functioning of the river reach between Lewisville Park and Highway 5 also describe this destabilization that includes the series of past activities by man that have left stream banks unprotected and included encroachment of stream banks and riparian areas by gravel mining. This kind of activity has continued into the 1990's.

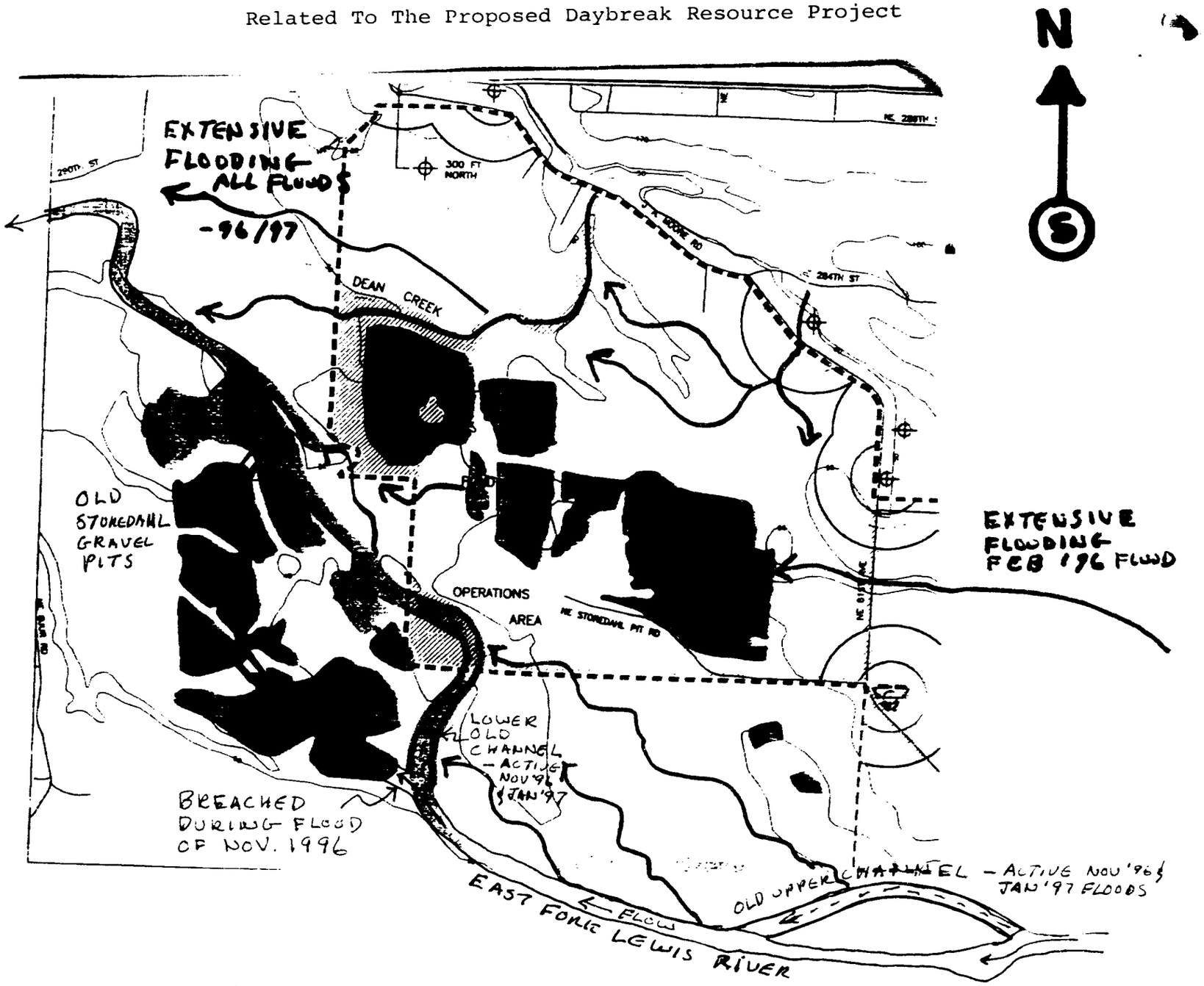
3. Impacts of the Flood of February 1996

3A. Flood Impacts in the proposed gravel mining area

The flooding that occurred primarily in February 1996 was exacerbated by the destabilized condition of the East Fork. There was significant flooding through the lower third of the proposed Daybreak Mine site. This came from flood overflow that crossed NE 269th St., flowed northwest

Illustration 1. Recent Flooding And River Channel Flows

Related To The Proposed Daybreak Resource Project



2-12-97 F.O.E Fk L.R.

and then west across NE 61st Ave. (Bennet Road), and west across the lower (south) third of the proposed new gravel mining area, and into Pond 1. These flows then crossed continued west into other ponds and into the East Fork of the Lewis River (see Illustration 1 and photos 1 - 4.).

These flows carried fines, sand and gravel material, as well as possible oil product pollutants that upon entering the main channel, further added to lowering the water quality and fish habitat quality of the East Fork. Much of this information has been documented and is part of the record submitted by Friends Of The East Fork to the Clark County Planning Director.

Extensive flooding also occurred over the upper or north half of the area through the overflow of Dean Creek and from a drainage adjacent to the northeast quarter of the proposed mining area. This area of flooding crosses the J. A. Moore Rd/NE 61st Ave. continuum. Flows run south and turn west through the middle of the proposed mining area and into the Dean Creek flood plain and continue west-northwest to the East Fork Lewis River (see Illustration 1. and photos 4 - 5). Again, documentation including photos and video tape of this situation are on record with the Clark County. .

Contrary to statements made by R2 Resource Consultants and West Consultants, Inc. in their January 21, 1997 and January 9, 1997 letters to Perkins Coie Lawfirm and the January 16, 1997 Perkins Coie letter to Monty Anderson, the signatures and patterns of hydrologic flows and erosion/sedimentation impacts of flooding in this area and reach of the river were obvious and very significant ---they continue to be so as evidenced by the impacts of the two lesser floods that occurred in late 1996 and recently in January of 1997 (see Illustration 1. and Photos 4, 5, and 6).

The point being emphasized is that the whole area under question is an active flood plain, it is not "backwater flooding", and it was again active during the two lesser floods that occurred within the last six months (November 1996 and January of 1997).

3B. Stream channel impacts

During the flood of February 1996 a section of the channel in the East Fork, just upstream from the old Storedahl gravel mining pits, shifted the main flow south because of the build up of large gravel and cobble. This caused a loss of previously utilized spawning area. The old channel is still active and the November 1996 and January 1997 flooding had substantial flows moving through the old channel as well as flow through the wooded area to the north that is directly south of the proposed mining area (See Illustration 1.)

Although the old channel has changed, it is active at flood stage and has reconfigured its hydrologic geometry and distribution of bed materials twice since the flood of January 1996. (See photos 8 - 12).

The section of stream channel that flows adjacent to the east end of the old south side Storedahl gravel mining pits was widened as much as 15 feet where it turned north and flowed directly at the current Storedahl and Sons gravel washing operation. The channel also became aggraded with large cobble material and lost much of its depth. This north flowing section flows straight and directly

into a vertical stream bank that is part of the Storedahl gravel washing and storage operation, then river makes a 90 degree turn westward (See photos 12 - 13).
During the flood of January 1996, 3 feet to as much of 8 feet of bank was eroded away along the north section of the channel adjacent to the Storedahl operation. A large bar of gravel and cobble material was also built up just below the point where the channel turned west along the south end of the current Storedahl gravel washing operation (See photo 13.).

The stream channel had continued to flow from just above the old pits and down past the Storedahl gravel washing area and on westward. All along the channel in this area there was evidence of sever bank erosion and channel aggradation. Analysis of channel cross-sections taken in the area indicated the ability of the channel to carry flood flows had been substantially reduced. Channel banks had lost most of their protective vegetation, were unstable, and subject to erosion due to the high width/depth ration of the channel cross-sections. Water continued to flow in this channel all summer and into October of 1996 and prior to the new flooding that occurred later in November of 1996.

4. Recent Flood Impacts

4A. New flood impacts on proposed gravel mining area

Heavy rainfall occurred in November of 1996. This resulted in sever flooding which included the East Fork of the Lewis River. The north half of the proposed gravel mining area was again subjected to flooding across J. A. Moore Rd/NE 61st Ave. from Deen Creek and the drainage to the east of Deen Creek. Then, in the later part of January 1997, more flooding from rainstorms occurred and covered parts of the same area. With both events there was considerable erosion and sedimentation. These areas in the north half of the proposed mining area continue to be active flood plains even at lower frequency events (See photos 4 - 6).

4B. Flooding Details

Second Flood - The November 1996 rainfall caused flood flows in both the new and the old channel above the abandoned old Storedahl gravel mining pits. Water flowed across the wooded area between the old channel and the south boundary of the current Storedahl operation on the north side of the East Fork. New erosion and sedimentation occurred, the old channel changed in distribution and composition of materials (sand, gravel, and mostly cobble).

The section of stream bank adjacent to the old Storedahl mining pits where the river makes a turn directly north ---was breached (See Illustration 1.). Part of the flood water flowed into the old ponds, flowed northwest into other ponds and then back downstream in the original several hundred yards below the current Storedahl gravel washing operation. Again, the original channel section, between the bend at the old south side pits and the current Storedahl operation, was severely eroded and there was considerable movement of cobble material in this section and the section adjacent to and below the current Storedahl operation. When the flood subsided, most of the river was flowing into the old ponds on the south side of the original channel and the old channel was aggraded with large amounts of cobble material.

Third Flood - In the later part of **January 1997** heavy rainfall caused a third flood to occur in the East Fork watershed. This flood also repeated the same pattern of flooding the north half of the proposed mining area. Deen Creek and the drainage to the east along J. A. Moore Rd./NE 61st Ave. were the sources of severe flooding, erosion and sedimentation (See photos 5 and 6 for location). Again, the road was impassable for cars and County road crews had to be called in to deal with it.

The old channel above the abandoned Storedahl mining pits was again flowing at flood level and water also flowed across the wooded area towards the south end of the current Storedahl operation. Because of the heavy buildup of cobble and other material, more water appeared to flow in the old channel than the previous flood. Examination of the old channel showed that over most of the section, previous sand and gravel bed materials had moved out and been replaced by a larger cobble mix. The north side of the old channel was degraded and a smaller sub-channel had been formed.

The existing channel section below the old upper channel showed sever bank erosion on both sides. The downstream right side had been eroded to a vertical bank and there was a considerable amount of new gravel and small cobble deposited in channels cut through the brush and trees as the flood overflow moved to the northwest and back into the old channel just above the current Storedahl operation (See photo 10.).

The channel section starting at the breach into the old Storedahl pits and on down to the stream bank at the current Storedahl gravel washing operation has changed considerably from the November 1996 flood situation. The breach where the channel enters the old pits has built up a large delta of cobble material. As the delta continues to build from loss of velocity as the water enters the old pits, the new channel is shifting to the right and is now wider and shallower than previous. This indicates the width/depth ratio is increasing and the ability to carry flood flow is being reduced. **As the delta continues to build, there is a possibility that the flow in the new channel could move away from the breach, back into the old channel.**

The old channel below the breach shows evidence of carrying high flows during the recent January 1997 flood (See photos 14 - 15.). New cross-sections indicate it has changed shape again. There are large trees and logs in the old channel that were not there after the second flood (See photo 13.). The west side of the channel shows additional erosion of 4 feet to 8 feet in places. The materials in the bed of the old channel have moved and changed composition. Both sides of the old channel have been down cut or aggraded. The section of the channel where it meets the stream bank at right angles to the Storedahl gravel washing operation shows new erosion and bank slumping (See photo 13.). The large delta of cobble material in the reach just below, has shifted around and new sub-channels down cut through it.

Hydrologic Evaluation Results

This hydrologic analysis and evaluation of the past three recent floods clearly indicates that the whole mining influenced area, including the proposed gravel mining site, (proposed Daybreak Resource Project) is now highly prone to flooding even at lower (less than 100-year or 1% chance/year) flood occurrence intervals.

Stream channel conditions have become more deteriorated and unstable. Existing as well as potential erosion and sedimentation levels are high. The flood plain risk for the area is increasing, not decreasing due to the continued decline in the capability of old and new channel reaches to carry flood flow. This situation and trend can be expected to continue as more urbanization occurs in the East Fork Lewis River watershed, more areas are "hard" roaded, and more acres of vegetation are converted to uses that have a less effective hydrologic function capability.

5. Fisheries Habitat and Population Factors

5A. Steelhead fisheries

Recognition by Federal and Washington State Fisheries Agencies of the value of the native steelhead fisheries in the East Fork of the Lewis River is a well established fact. Because of the decline in populations and habitat up and down the Pacific Northwest Coast and Northern California, the **National Marine Fisheries Service (NMFS)** is in the process of considering an Endangered Species Listing for Steelhead. If this should occur, many activities that could affect habitat, regardless if on Federal, State, County, Industrial/Commercial or Private/Homeowner lands in a watershed ---could be severely limited or banned because of their potential impact on fisheries.

The August 1996 Status Review of West Coast Steelhead from Washington, Idaho, Oregon and California specifically includes the East Fork of the Lewis River. To avoid the high impact on all land use activities from an **"Endangered Listing"** the DNR for the State of Washington is cooperating with NMFS to immediately develop and implement a **"Conservation Plan"** to reduce competition from hatcheries fish, to protect and improve the stream condition, fish habitat, riparian habitat, and water quality of all the streams listed and evaluated in the NMFS document (See attached NMFS document).

It is a documented and established fact that the last 30 years of gravel mining adjacent to and in some cases in the East Fork of the Lewis River between the Lewisville Park near Battleground and the Highway 5 bridge has been a major factor in the deterioration of fish habitat and destabilization of the river channel.

5B The critical need for protection

The January 17, 1997 and subsequent memos by the State of Washington DNR-Dept. of Fish and Wildlife Anadromous Fish Division-Columbia River extensively addresses the Lower Columbia Steelhead Conservation Plan development which specifically includes the East Fork Lewis River. The theme and focus of this accelerated action is to prevent a listing by dramatically reducing the risk of further impact on fisheries in both the short run and in the long term. This is to be accomplished through a wide range of actions that take effect immediately as well as those for the long-term (See attached Washington DNR document).

Contrary to documents furnished by Perkins Coie through the use of consultants ---the East Fork Lewis River is at high risk to additional damage to fisheries habitat and steelhead/anadromous populations because of the high potential of further erosion, sedimentation, and loss of habitat in and associated with the proposed area of mining activity.

To allow additional mining to occur within a zone that is already at high risk and is part of a very active flood plain would be totally inconsistent with current State and Federal rules and regulations and recent studies and evaluations. The potential for knowingly violating the "Clean Water Act" itself is cause for serious concern and a situation to be avoided.

Summary

The information and evaluation results presented in this document are part of a more intensive ongoing hydrologic analysis of the East Fork of the Lewis River. This paper along with other information recently submitted by Friends of the East Fork is intended to present up-to-date facts that should help make clear to the Clark County Planning board that a Shoreline Permit for SPR #96-092 (Daybreak Resource Project Area) is a requirement as part of the site plan application.

Richard Dyrland

Richard Dyrland
Supervisory Hydrologist
Board Member-Friends of the East Fork

Attachments:

Photos 1 -16
NMFS Document Cover Page
WA DNR Document Cover Page

CC

Washington DNR - Olympia
National Marine Fisheries Service - Portland Office
American Rivers - Seattle Office

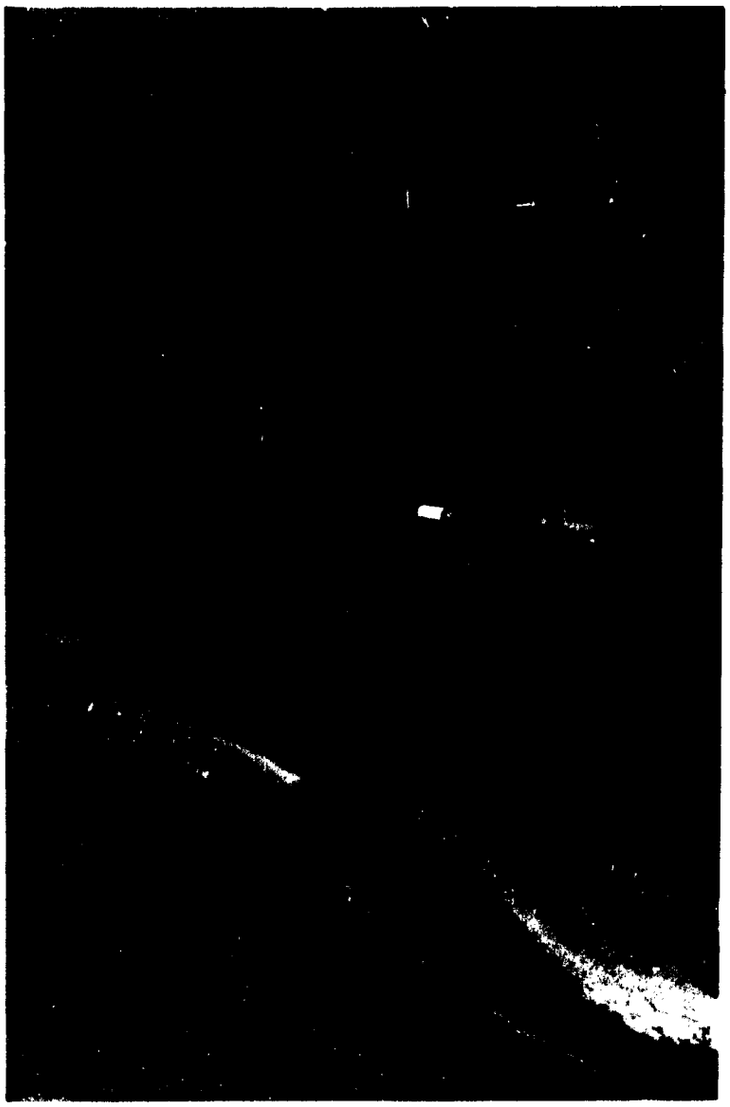


Photo 1. Looking northwest and downstream of proposed Daybreak Resource Project Area in upper right quarter of photo. Note erosion into the right side of the gravel pit from the February 1996 flood.

Photo 2. August 1996 view of current Storedahl sand and gravel washing operatiion and proposed Daybreak Resource Project area in upper right corner looking north. River bend at lower left corner is where breach into old gravel mining ponds occurred during November 1996 flood.

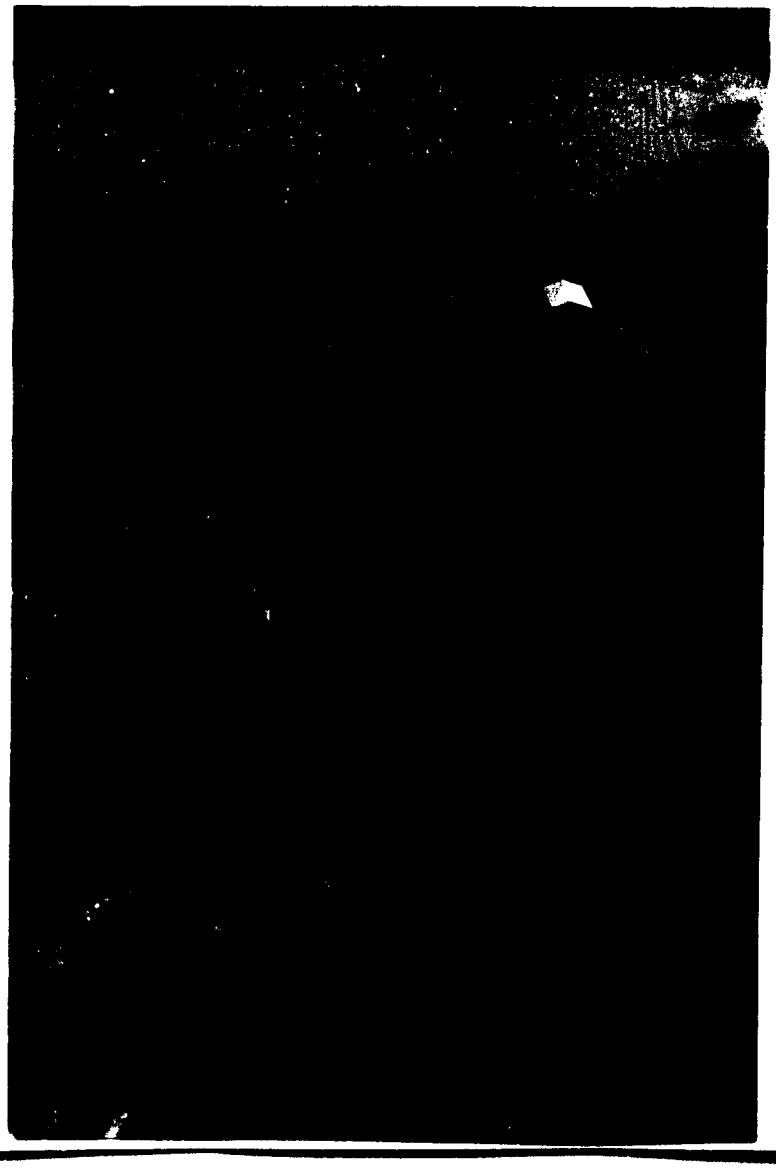


Photo 3. August 1996 closeup view of current Storedahl operation. Note that the East Fork Lewis River was flowing directly into the verticle stream bank and had extensive erosion during the February 1996 flood.

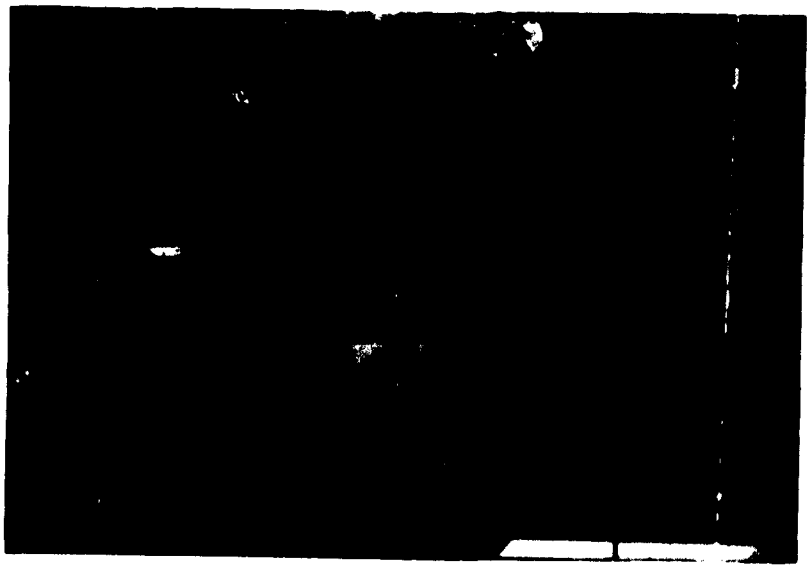


Photo 4. November 1996 Flood - View north of proposed Daybreak Resource Project area showing flood erosion across middle of area and erosion and sediment across J. A. Moore Road.

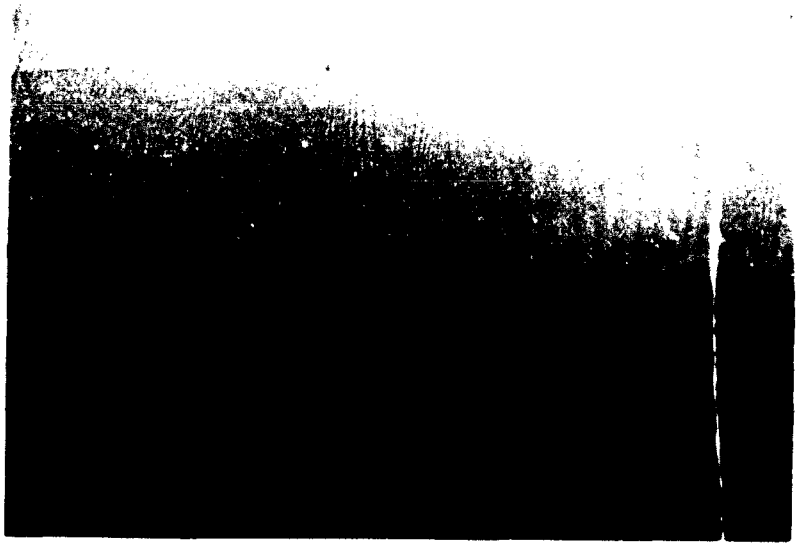


Photo 5. January 1997 - Looking south at flood flow across J. A. Moore Road onto proposed Daybreak Resource Project area

Photo 6. January 1997 Flood - Looking south east from J. A. Moore Raod to N. E. 61st Ave at flooding across proposed Daybreak Resource Project area.

Photo 7. November 1996 Flood - Flood flow occuring in both upper old channel and new channel above the old Storedahl gravel mining pits.

Photo 8. November 1996 Flood - Flooding showing where East Fork Lewis River breached into old Storedahl gravel mining ponds on the south side of the river. View is looking north into previous channel before breach occured.

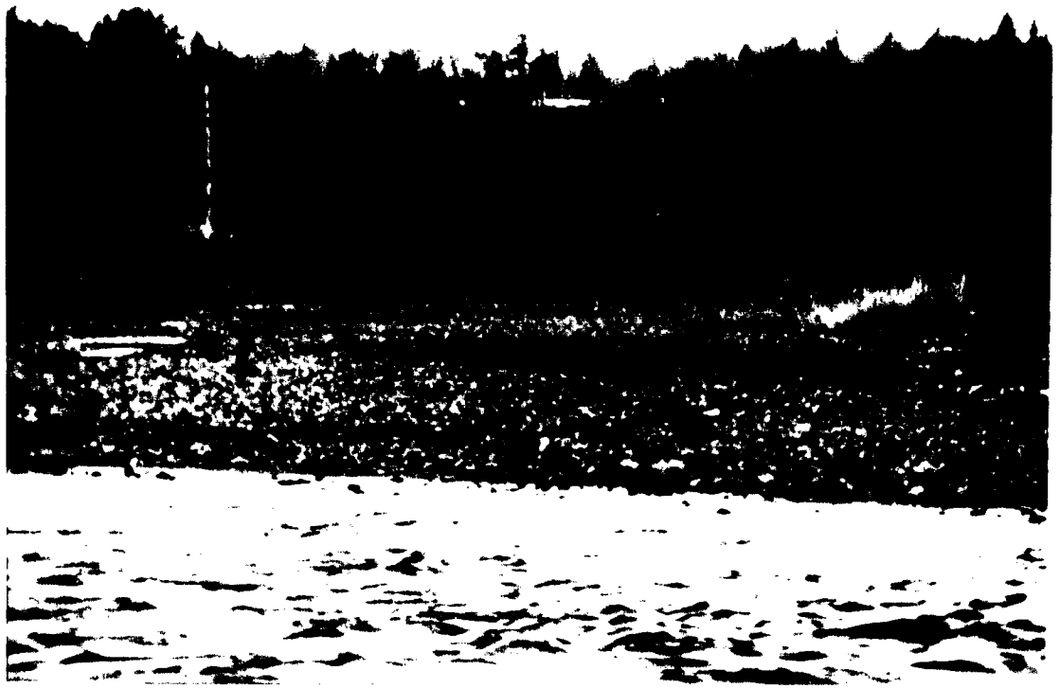


Photo 9. November 1996 Flood - Flooding looking north from breach and into previous river channel where it flowed into bank at the current Storedahl gravel washing operation

Photo 8. November 1996 Flood - Flooding showing where East Fork Lewis River breached into old Storedahl gravel mining ponds on the south side of the river. View is looking north into previous channel before breach occured.

Photo 9. November 1996 Flood - Flooding looking north from breach and into previous river channel where it flowed into bank at the current Storedahl gravel washing operation.

Photo 10. January 1997 Flood - View west looking downstream at highly eroded right bank of river above the breach point. High steep banks on left side of river were also eroded.

Photo 11 January 1997 Flood - Looking downstream just above breach point where flow entered into old Storedahl gravel mining ponds on south side of river

Photo 12. January 1997 Flood - View of flood flows in old channel just below breach point. Current Storedahl sand and gravel washing operation is at far end on bank where the river channel turns sharply to the west. Note the new debris in river channel from new flood flow.

Photo 13. After January 1997 Flood - Steep eroded bank at edge of current Storedahl sand and gravel washing operation where flood flow came down the old channel and then turned west. This location is also shown at the top of Photo 12.

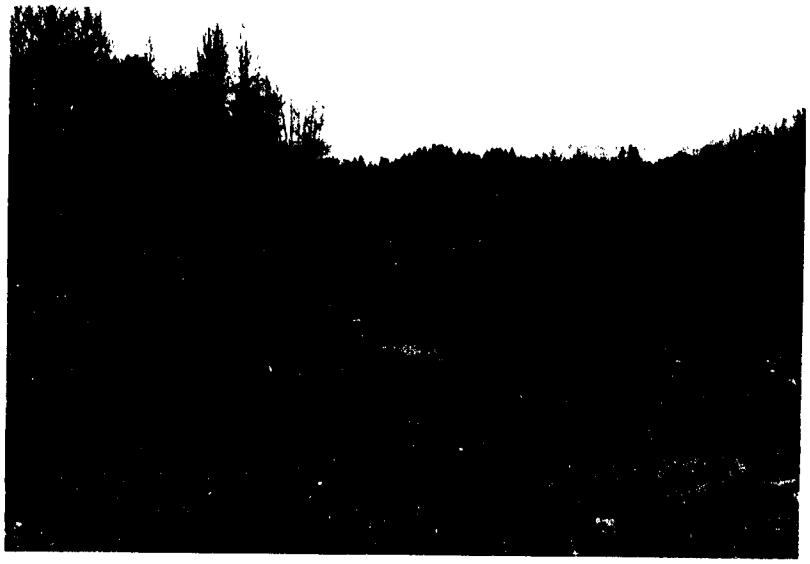


Photo 12. January 1997 Flood - View of flood flows in old channel just below breach point. Current Storedahl sand and gravel washing operation is at far end on bank where the river channel turns sharply to the west. Note the new debris in river channel from new flood flow.

Photo 13. After January 1997 Flood - Steep eroded bank at edge of current Storedahl sand and gravel washing operation where flood flow came down the old channel and then turned west. This location is also shown at the top of Photo 12.

Photo 14. Shortly after the January 1997 Flood - Looking upstream in old river channel from current Storedahl operation back toward the breach point. Note that channel shows evidence of very active flow during the flood.

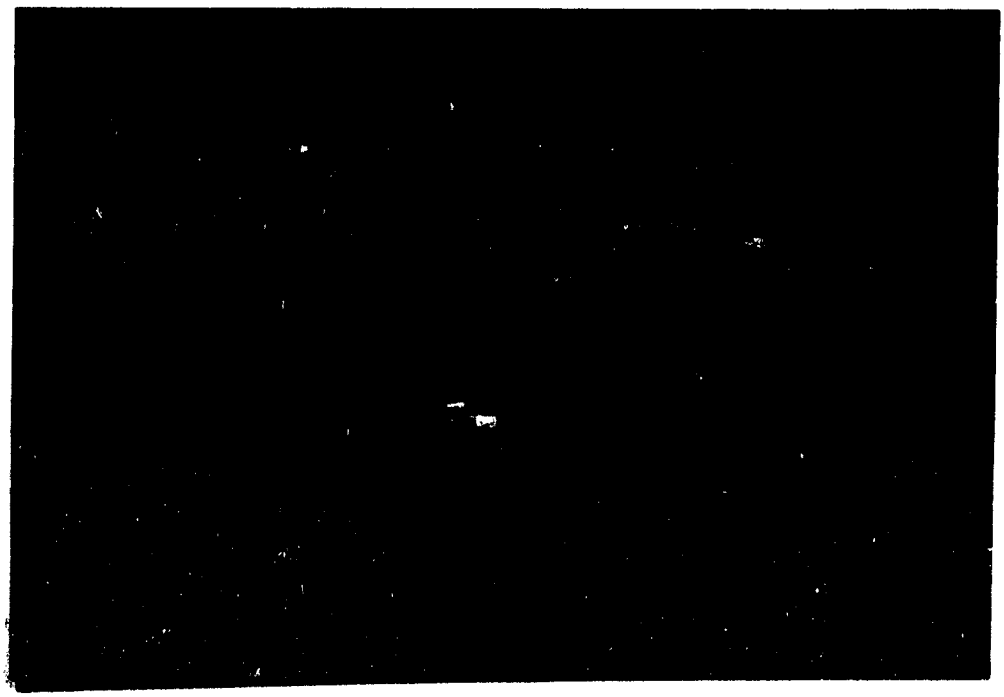


Photo 15. During The January 1997 Flood - View looking north east at current Storedahl operation. High flows in the old channel that runs past the Storedahl operation are visible in the right center of photo. Also note the delta at the top of the pond from the February 1996 flood.

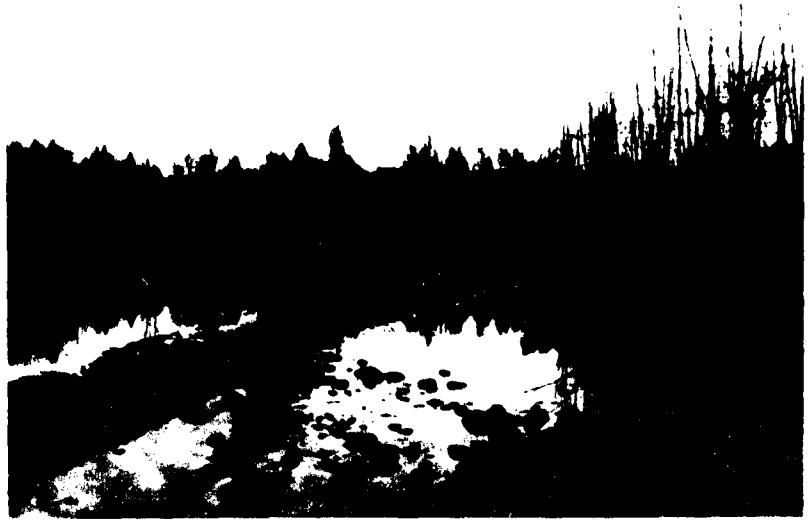


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Photo 15. During The January 1997 Flood - View looking north east at current Storedahl operation. High flows in the old channel that runs past the Storedahl operation are visible in the right center of photo. Also note the delta at the top of the pond from the February 1996 flood.

NOAA Technical Memorandum NMFS-NWFSC-27

Status Review of West Coast Steelhead from Washington, Idaho, Oregon, and California

August 1996

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

Table 13. Summary of estimated total run size and escapement, trends in total escapement, and proportion of hatchery fish in escapement for the Lower Columbia River steelhead evolutionarily significant unit, by major river basin, as in Table 10. Run types are winter (W) or summer (S).

River basin	Run type	Total run size	Total escapement	Natural escapement	Trend (%/yr)	Percent hatchery
Cowlitz River	W		100 - 1,000	90 - 950	-16.5 to +47.9	0 - 35
Kalama River	W	2,300	1,400	900	+0.1	32
	S	6,600	3,300	1,100	-1.2	66
Lewis River (East Fork)				90	-15.7	
Washougal River				100		
Wind River	S		600	300	-7.8	53
Sandy River	W				-0.4	> 30
	S				+3.4	
Lower Willamette River	W				+2.5	
	S				+9.3	
Clackamas River	W	1,300			-0.4	70
	S	3,500			+10.8	
Hood River	W	750			-7.3	> 40
	S	1,500			+4.2	80

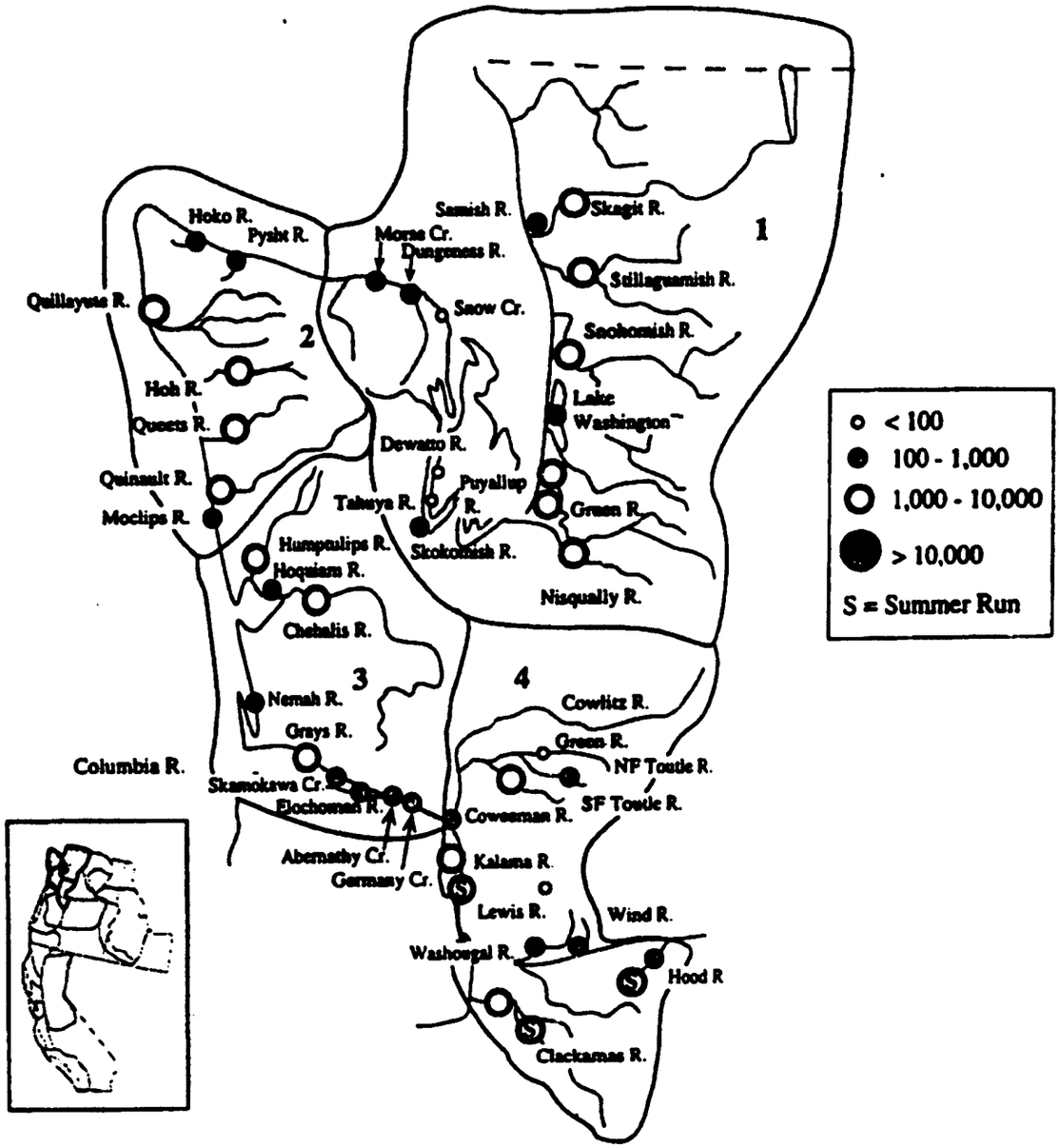

Figure 19. Recent total escapement for populations in steelhead ESUs 1-Puget Sound, 2-Olympic Peninsula, 3-Southwest Washington, and 4-Lower Columbia River. Where no total estimate is available, natural escapement is used. All data are for winter steelhead, except as noted (see Appendix E for details).

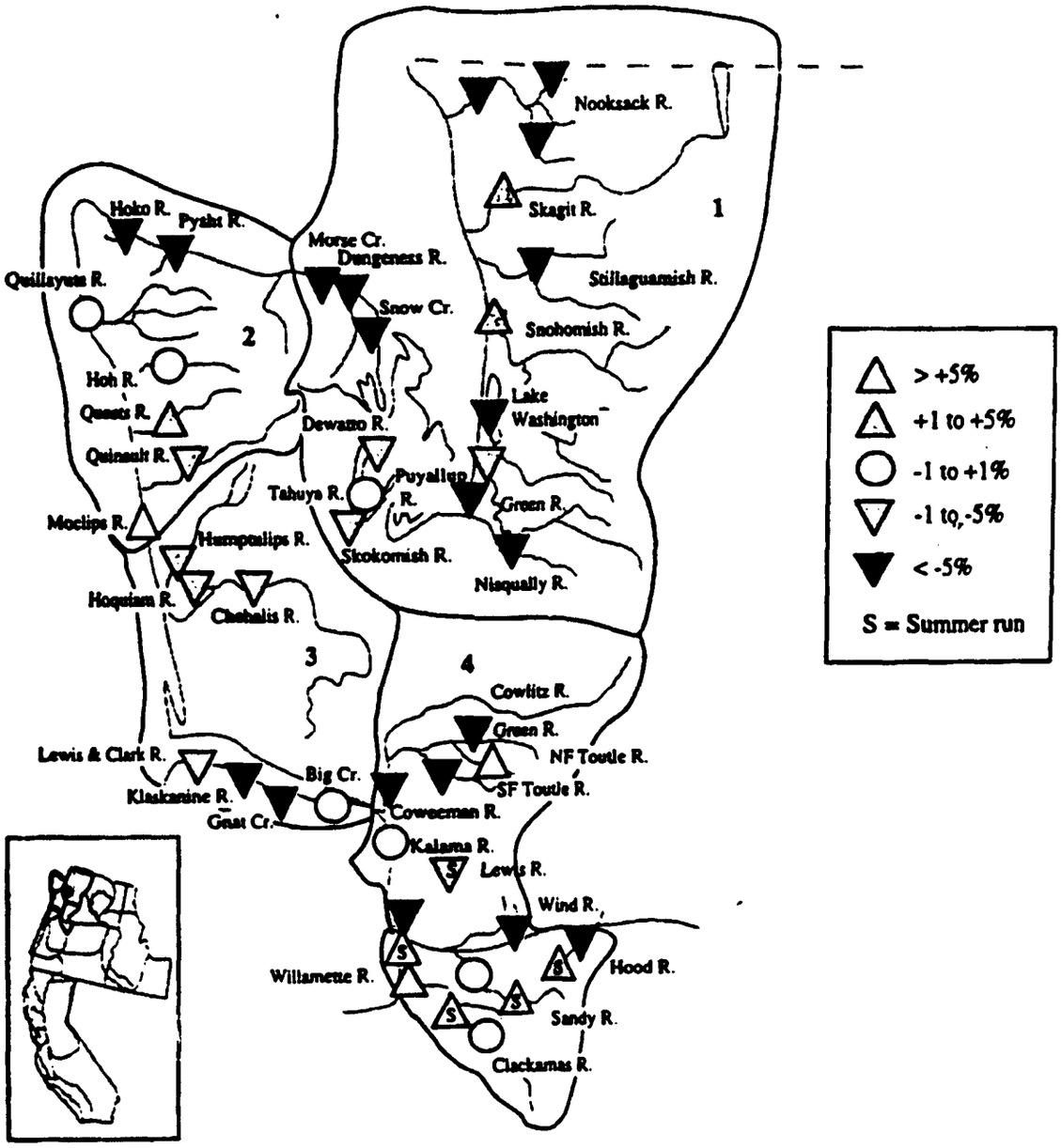

Figure 20. Trends (percent annual change) in total escapement for populations in steelhead ESUs 1-Puget Sound, 2-Olympic Peninsula, 3-Southwest Washington, and 4-Lower Columbia River. All data are for winter steelhead, except as noted (see Appendix E for details).

STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
5405 NE Hazel Dell Avenue • Vancouver, Washington 98663 • (360) 696-6211 FAX (360) 690-7238

January 28, 1997

Dear SW Washington Steelhead Angler,

As many of you are aware, the Washington Department of Fish and Wildlife recently conducted several meetings to discuss portions of our Steelhead Conservation Plan for Southwestern Washington. Our focus in this planning effort has remained harvest, hydroelectric, habitat, and hatcheries. Of immediate concern are returning hatchery winter steelhead with summer steelhead on the horizon. Concern stems from hatchery and wild fish interactions and their offspring. Protection of the wild genetic pool of steelhead is paramount in both State and Federal arenas.

Due to that fact that many were unable to attend this important meeting I am providing you copies of the materials that were used at the meeting. They include a summary of the meeting with notes from each listening post; listing post options by river system; and an option sheet for dispersal of winter steelhead hatchery fish.

We are currently carrying out a strategy to limit the hatchery and wild fish interactions by implementing a variety of these actions. Your ideas and recommendations are valued. We will continue to listen to your concerns and move forward on all fronts. Future considerations and meetings are planned.

If you have any questions regarding our planning effort and implementation please free to contact Steve Leider at 360-425-4794 Guy Norman at 360-576-6073 or myself at 360-690-7246.

Thank you for your concerns and support in this effort.

Sincerely,

Lee Van Tussenbrook
Regional Director

LVT:tm

Enclosures (3)

WASHINGTON DEPARTMENT OF
FISH AND WILDLIFE
JAN 21 1997
REGION 5
VANCOUVER OFFICE

Washington
Department of
FISH and
WILDLIFE

IMMEDIATE CONSERVATION ACTIONS FOR 1997 LOWER COLUMBIA RIVER WINTER STEELHEAD

RECEIVED
FEB 12 1997
CLARK COUNTY
Plan & Dev. Review

EXHIBIT # 8

February 11, 1997

Land use hearing Examiner / Planning Director
Department of Community Development
1408 Franklin Street / P.O. Box 9810
Vancouver, Washington 98668-9810

RE: Determination on the necessity of a Shoreline Permit for SPR # 96-092 (Daybreak Resource Project) by Applicant Storedahl / Woodside

Please accept this notice that we and area residents, as interested parties wish to appeal the planning directors determination that a shoreline permit is not neede for the placement of a conveyor belt to haul mined sand and gravel through the 100 year regulatory flood plain for the East Fork of the Lewis River and that mining in the land adjacent to the area does not require a permit / Title 18 zoning ordinance appeal

The legislative findings of RCW 90.58.020, state policy enunciated, details how "the shorelines of the state are amound the most valuable and fragile of its

Natural resources." "This Policy Contemplates Protecting against adverse Effects To The Public health, The land and its vegetation and Wildlife, and The waters of the State and their aquatic life".

Was This Policy Considered in The Planning directors determination? The Conveyor Will produce considerable pollutants ... (Noise, vibration, dust, lubricant spills) and generaly be aesthetically unpleasant This activity will disrupt wildlife and Can only be described as an elevated obstruction. This must be Considered. Your determination That This structure is equipment is flawed.

Clark Counties own definition of a structure — 18.104.715 is — "any piece of work artificially built up or Composed of parts Joined Together in Some definite manner."

A structure is an obstruction, This obstruction, in The 100 year regulatory flood Plain, will have a value greater Than The $1,000 Limit, in the County master program or The

2500 Limit referred to in the shoreline management ACTS definition for "Substantial development".

Are there exemptions for moveable obstructions. NO. A shoreline Permit is required. Are pilings, — necessary to stabilize this obstruction in the 100 year regulatory flood plain?

No matter what you call the conveyor, its presence violates the spirit of RCW 90.58. How quickly can this obstruction be removed if a flood event is imminent? How long will this be in place or static in one location?

Clearly, the public, floating down the river, to enjoy the wildlife and/or natural characteristics of the shoreline, rights will be effected. The associated pollution, disruption of wildlife, and the unique scenic and ecologically sensitive features of the shoreline environment will be ~~problem~~ altered.

IT is the order of this act to "preserve the natural character of the shoreline" A conveyor does not do this.

Requiring a shoreline permit will allow the applicant to explain how this will not degrade the shoreline or area.

Regarding mining directly adjacent to the 100 yr regulatory flood plain, please refer to RCW 90.58.340 "uses policies for land adjacent to shorelines, development of" — keeping in mind that RCW 90.58 lists development as removal of sand and gravel.

These areas are aquifer recharge areas. Critical filtration systems. Once mining to the adjacent flood plain elevation occurs, they will be mining in the flood plain. Hydric soils will be encountered and thus wetlands. Natural seeps, springs, ground water systems will be degraded. It is absurd to think that diggings adjacent to the floodplain will not impact the ground within the 100 year regulatory flood plain. The leaving of small

floodway fingers of Land surrounded by deep pits That breach The aquifer is NOT a reasonable interpretation of RCW 90.58.

Was The Department of Ecology NOTIFIED of This determination. They don't seem to be INCLUDED IN The CC: LIST? RCW 90.58 STATES THAT STATEWIDE INTEREST MUST be Considered over LOCAL INTEREST.

Sincerely,

Scott and Carol Rose

Scott and Carol Rose
27313 NE Bennett Rd
Battle Ground, Wa
98604

CLARK COUNTY
WASHINGTON

ARTHUR D. CURTIS
PROSECUTING ATTORNEY

CURT WYRICK
CHIEF DEPUTY

DENNIS M. HUNTER
CHIEF CRIMINAL DEPUTY

RICHARD S. LOWRY
CHIEF CIVIL DEPUTY

MARY K. YOUNG
ADMINISTRATOR

EXHIBIT # 9

RECEIVED
FEB 19 1997
CLARK COUNTY
Plan & Dev. Review

February 13, 1997

FACSIMILE TRANSMISSION: 1-503-226-1136

David T. McDonald
Cross & McDonald, P.C.
Attorney at Law
510 S.W. 3rd Avenue, Suite 302
Portland, OR 97204

RE: SPR #96-092 (Storedahl) Shoreline Appeal

Dear Dave:

This confirms our recent telephone conversation relating to your appeal of the planning director determination that a shoreline permit is not required for the above-referenced proposal. Specifically, I advised you that the Shoreline Management Review Committee (SMRC) had not met or made any decision on this matter since no shoreline permit application has been submitted for the referenced site plan proposal. Accordingly, the appropriate appeal avenue is provided by CCC 18.505.005 (Planning Director Determination Appeals) and not CCC 18.330.040 (SMRC Determinations).

Sincerely,

Richard S. Lowry
Chief Civil Deputy

RSL/jc
cc: Monte Anderson

CIVIL DIVISION • 604 W. EVERGREEN • P.O. BOX 5000 • VANCOUVER, WASHINGTON 98666-5000
(360) 699-2478 • SCAN 525-2261 • FAX (360) 699-2184

EXHIBIT # 10

David T. McDonald
Courtroom Lawyer
Admitted to Oregon and Washington State Bar
510 S.W. 3rd Ave., Suite 302 (503) 226-0188
Portland, OR 97204 Fax: (503) 226-1136

RECEIVED
FEB 19 1997
CLARK COUNTY
Plan & Dev. Review

RECEIVED
FEB 18 1997
Clark County
Community Dev/Records

February 13, 1997

Land Use Hearings Examiner
1408 Franklin Street
PO Box 9810
Vancouver, Washington 98666-9810

RE: **Appeal of Determination By County Staff RE: Lack of Necessity for Shoreline Permit for SPR #96-092**

By Hand Delivery and by First Class Mail

Dear Hearings Examiner:

On Monday, February 10, 1997, FOEF filed an appeal in the above referenced matter. By this Amended Notice, FOEF adds the additional grounds for the appeal as follows:

1. The County failed to follow its process for making a shoreline permit determination under CCC 18.33.040.

Thank you for your attention to this matter.

Sincerely,

David T. McDonald

cc: Chair, FOEF
Rich Lowry (w/enc.)
John L. Dentler (w/enc.)

David T. McDonald
Courtroom Lawyer
Admitted to Oregon and Washington State Bar
510 S.W. 3rd Ave., Suite 302 (503) 226-0155
Portland, OR 97204 Fax (503) 226-1156

EXHIBIT # 11

RECEIVED
FEB 13 1997
Board of Commissioners

February 13, 1997

Board of County Commissioners
1013 Franklin
Vancouver, WA 98660

RE: **Appeal of Determination By County Staff RE: Lack of Necessity for Shoreline Permit for SPR #96-092**

By Hand Delivery and by First Class Mail

Dear Commissioners:

My name is David T. McDonald and I represent Friends of the East Fork, an aggrieved party. This letter is notify the County and the BOCC that Friends of the East Fork appeals the determination on SPR #96-092 by Clark County staff set forth in a letter dated January 29, 1997 to Robert B. Laird and John Dentler (a copy of which is attached and incorporated by this reference) that if

> no mining occurs in the 100 year regulatory floodplain, and the site is revised to reflect this, then a Shoreline Permit under County's Shoreline Master Program and Shoreline Ordinance is not required for the proposal. The Planning Director's determination is based on (a) no mining within the area of Shoreline Jurisdiction and (b) a determination that the conveyor equipment and the proposed placement of the conveyor does not constitute a "substantial development" under the Shoreline Management Act of 1971 (Ch. 90.58 RCW). Specifically, the use of equipment is not required to obtain a Shoreline Permit because it is not included in the definition of Development contained within RCW 90.58.030 (Shoreline Management Act of 1971).

The appeal is on the determination set forth in the attached letter and to Title 18 of the Clark County Code. The reasons for the appeal are:

1. SPR 96-092, a 19 acre parcel, is an unlawful segmentation under the Shorelines Management Act (SMA) from a single project which affects a water of statewide significance, uplands, floodways and/or shorelands and therefore unlawfully creates a piecemeal review in an attempt to allow this portion of the project to proceed while the other portion(s) of the project await approval; and/or

2. SPR 96-092 will allow mining in lands under the jurisdiction of the SMA and the SHB and a shorelines permit must be required; and/or

3. The placement in the 100 year floodplain of the conveyor belt to move sand and gravel from the 19 acre parcel to an existing sand and aggregate processing site also located in the 100 year flood plain constitutes mining in the 100 year floodplain and, under Clark County Mineral Policy 4.5.8, should be banned outright; and/or

4. The placement and use of a conveyor belt constitutes "development" under RCW 90.58.030(3)(d) and has a total cost and/or fair market value that exceeds $2,500.00 and/or materially will interfere with the normal public use of the water, shorelands or shorelines of the state and thus must have shoreline substantial development permit (SSDP); and/or

5. Failure to require a shoreline permit violates the Clark County Shorelines Master Program; and/or

6. The County failed to follow its process for making a shoreline permit determination under CCC 18.33.040.

FOEF has also appealed this decision to the Land Use Hearings Examiner as required by the language in the Planning Director's determination set forth in the above-mentioned letter of January 29, 1997 (copies of the Notice of Appeal and Amended Notice of Appeal are enclosed). I have spoken with County Counsel and he is preparing a letter opinion on the appropriate forum.

Thank you for your attention to this matter.

Sincerely,

David T. McDonald

Enclosures
cc: Chair, FOEF (with encs.)
Rich Lowry (with encs.)
John L. Dentler (with encs.)

EXHIBIT # 12

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Land Use Hearings Examiner will conduct a public hearing on **Thursday, May 8, 1997** at 7:00 p.m. in the Emergency Services Training Room, 710 West 13th Street, Vancouver, Washington, in accordance with the rules of procedure adopted by the review authority pursuant to *Clark County Code Chapter 18.504*, to consider the following appeal. This appeal has been filed in accordance with *CCC Section 18.600*. ***Comments may be submitted upto the day of hearing.***

Application: APL 97004 (Daybreak Resource)
Submittal Date: 2-10-97 Technically Complete: 2-18-97

Request: Appeal of a letter, dated January 29, 1997, from Monty Anderson, Senior Planner, to Robert B. Laird and John Dentler determining a Shoreline Permit is not required for SPR96092 the Daybreak Resource Project.

Location: Property is located South of NE J A Moore Rd and West of NE 61 Av. Tax lot 107 (225047) in the Southwest quarter of Section 18, Township 4 North, Range 2 East of the Willamette Meridian.

Appellant: Friends of the East Fork
Appellant Address: c/o David T McDonald, 510 SW 3 Av #302, Portland, OR 97204
Appellant Telephone Contact: David McDonald, 503-226-0188

HEARINGS EXAMINER: Larry Epstein

For more information regarding this land use case, please contact Clark County Planning staff: Melissa Remick, 699-2375, extension 4097.

This notice is intended to inform potentially interested parties about the hearing and invite testimony, oral or by written statement, at the hearing. Information about this appeal may be examined at Clark County Community Development, located at 1408 Franklin Street in Vancouver between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

A staff report will be available for inspection at least seven working days before the hearing.

Any interested party may appeal the Hearings Examiner's decision within the time period and manner prescribed in *Clark County Code 18.600.100*. The appeal must be filed with the Board of County Commissioners within 15 working days from the date of the written notice of decision, and is subject to a $25.00 filing fee.

The Emergency Services Training Room is wheelchair accessible. If you need special assistance to participate in this hearing, please contact Michelle Eisenbise at Clark County Community Development, 699-2375, ext. 4075, or Vicki Miller TDD 737-6057.

SPR #96-092 (Daybreak Resource Project)
Posting date 10/30/96

J. L. STOREDAHL & SONS, INC.
2233 TALLEY WAY
KELSO WA 98629

RAYMOND & MERRY WOODSIDE
5015 NE JA MOORE ROAD
LA CENTER, WA 98629

J. L. STOREDAHL & SONS, INC.
VIRGLE BARNETT
2233 TALLEY WAY
KELSO WA 98629

FIRE DISTRICT #11
21609 NE 72ND AVENUE
BATTLE GROUND WA 98604

FRIENDS OF THE EAST FORK
LOIS MILLER
11207 NE 266TH
BATTLE GROUND WA 98604

JON WAGNER
CITY OF VANCOUVER
PLANNING

CARLA SOWDER
SW WA HEALTH DISTRICT

CLARK COUNTY NEIGHBORS
C/O LYNN CARMAN
11104 NW 33RD AVENUE
VANCOUVER, WA 98685

CLARK PUBLIC UTLITIES
ATTN: BONNIE SANT
PO BOX 8900
VANCOUVER, WA 98668

HAZEL DELL SEWER DISTRICT
9514 NE STUTZ ROAD
VANCOUVER, WA 98665

NORTHWEST NATURAL GAS
1400 COLUMBIA ST
VANCOUVER, WA 98660

SW AIR POLLUTION CONTROL
1308 NE 134TH ST
VANCOUVER, WA 98685

COLUMBIAN
JEFF MIZE
PO BOX 180
VANCOUVER, WA 98666

DEPT OF TRANSPORTATION
STEVEN JACOBSEN
PO BOX 1709
VANCOUVER, WA 98668

CTRAN
EUNICE LOVI
PO BOX 2529
VANCOUVER, WA 98668

DEPT OF TRANSPORTATION
MARY LEGRY
PO BOX 1709
VANCOUVER, WA 98660

DEPARTMENT OF FISHERIES
ATTN. KEN MOHORIC
PO BOX 460
BATTLE GROUND, WA 98604

DEPARTMENT OF WILDLIFE
BRUCE CRAWFORD
5405 NE HAZEL DELL AVENUE
VANCOUVER, WA 98665

AIRPORT MANAGERS ASSOC.
DALE DETOUR
15314 SE 28TH WAY
VANCOUVER, WA 98684

ELIZABETH HADLEY
EOC OF CLARK COUNTY
10621 NE COXLEY DRIVE #207
VANCOUVER, WA 98662

224944000
WOODSIDE STUART C ET AL CONT
5015 NE J A MOORE RD
LACENTER, WA 98629

224947000
BECKER DARRYL CONT
21516 NE 152ND AVE
BATTLE GROUND, WA 98604

224960000
HART HAROLD & JUDITH
6106 NE 284TH ST
BATTLE GROUND, WA 98604

225005000
WOODSIDE S C & VIRGINIA ETAL
5015 NE J A MOORE RD
LACENTER, WA 98629

225016000
HANGER JOHN & KAREN
5704 J A MOORE RD
BATTLE GROUND, WA 98604

224973000
HANGER JOHN & KAREN
5704 NE J A MOORE RD
BATTLE GROUND, WA 98604

121293010
LUSCHER RUDOLPH J CONT
6121 NE 284TH ST
BATTLE GROUND, WA 98604

224988000
HANSEN JAMES L TRST
28219 NE 63RD CT
BATTLE GROUND, WA 98604

225047000
WOODSIDE STUART C ET AL CONT
5015 NE J A MOORE RD
LACENTER, WA 98629

225050000
HANGER JOHN & KAREN CONT
5704 NE J A MOORE RD
LACENTER, WA 98629

224965000
CRAWFORD LEEROY
28011 NE 61ST AVE
BATTLE GROUND, WA 98604

224966000
CRAWFORD LEEROY
28011 NE 61ST AVE
BATTLE GROUND, WA 98604

I certify that this is a true and accurate copy of the records of the Department of Assessment & GIS of Clark County as of: September 20, 1996

Ben Gassaway by Linda Franklin

Ben Gassaway
Clark County Assessor

Linda Franklin
Chief Deputy Assessor

FRIENDS OF THE EAST FORK
LOIS J. MILLER
11207 NE 266TH
BATTLE GROUND, WA 98604

FIRE DISTRICT #11
21609 NE 72ND AVENUE
BATTLE GROUND, WA 98604

224953000
DORCHEUS DALE J
28001 NE 61ST AVE
BATTLE GROUND, WA 98604

224948000
DORCHEUS DALE J
28001 NE 61ST AVE
BATTLE GROUND, WA 98604

225167000
WOODSIDE STUART C ETAL CONT
5015 NE J A MOORE RD
LACENTER, WA 98629

225169000
WOODSIDE S C & VIRGINIA ETAL
5015 NE J A MOORE RD
LACENTER, WA 98629

EXHIBIT # 13

CERTIFICATION OF POSTING / Mailing

Clark County Planning File: APL #97-004 (Daybreak Resource)

Hearing Date: May 8, 1997

A. Posted On: April 23, 1997

This is to certify that I, WELDON MATTSON conspicuously posted in three places, a request for comments for the above referenced application and hearing date, at the following locations:

(Identify nearest street, intersection or address of adjacent property sign was posted.)

1. CORNER N.E. BENNET RD. & N.E. 61st. AVE. ON THE SOUTH SIDE N.E. BENNET RD.
2. Entry Corner N.E. J.A. MOOR RD. & N.E. 61st AVE.
3. Corner N.E. 284th. St. & N.E. J.A. MOORE RD. ON THE NORTH SIDE N.E. 284th St.

Signature [signature]

B. I, **Debra LaZier**, do hereby certify that on **February 1997,** I deposited in the United States Post Office at Vancouver, Washington separate, sealed envelopes each of which contained a true and correct copy of the Notice of Hearing to be heard before the LAND USE HEARING EXAMINER.

Signature: Debra LaZier

State of Washington
County of Clark
A and B were both subscribed and sworn before me, this 24th day of April, 1997.

DIANA ALLEN NOTARY PUBLIC STATE OF WASHINGTON

Diana Allen
Diana Allen

Title: Notary

My commission expires 12-1-99

Please return to: Michelle Eisenbise

EXHIBIT # 14

Chapter 173-14 WAC
PERMITS FOR DEVELOPMENTS ON SHORELINES OF THE STATE

WAC

173-14-010	Authority.
173-14-020	Purpose.
173-14-030	Definitions.
173-14-040	Developments exempt from substantial development permit requirement.
173-14-050	Application of the permit system to substantial development undertaken prior to the act.
173-14-055	Nonconforming development standards.
173-14-060	Time requirements of permit.
173-14-062	Applicability of permit system to federal agencies.
173-14-064	Revisions to permits.
173-14-070	Notice required.
173-14-080	Public hearings.
173-14-090	Filing with department and attorney general.
173-14-100	Review criteria for substantial development permits.
173-14-110	Application for substantial development, conditional use, or variance permit.
173-14-115	Letter of exemption
173-14-120	Permits for substantial development, conditional use, or variance
173-14-130	Department review of conditional use and variance permits.
173-14-140	Review criteria for conditional use permits
173-14-150	Review criteria for variance permits.
173-14-155	Minimum standards for conditional use and variance permits.
173-14-170	Requests for review.
173-14-174	Certification of requests for review.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-14-160	Department of ecology review. [Order DE 76-17, § 173-14-160, filed 7/27/76; Order DE 75-22, § 173-14-160, filed 10/16/75.] Repealed by 78-07-001 (Order DE 78-7), filed 6/14/78. Statutory Authority: RCW 90.58.200.
173-14-180	Regulatory orders by local government or the department. [Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-180, filed 5/23/86. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-027 (Order DE 80-42), § 173-14-180, filed 2/2/81. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-180, filed 6/14/78; Order DE 76-17, § 173-14-180, filed 7/27/76; Order DE 75-22, § 173-14-180, filed 10/16/75.] Repealed by 87-16-101 (Order DE 87-09), filed 8/5/87. Statutory Authority: RCW 90.58.200.
173-14-190	Hearings on regulatory orders. [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-190, filed 6/14/78; Order DE 75-22, § 173-14-190, filed 10/16/75.] Repealed by 81-04-027 (Order DE 80-42), filed 2/2/81. Statutory Authority: Chapters 90.22 and 90.54 RCW.

WAC 173-14-010 Authority. This regulation is adopted pursuant to RCW 90.58.140(3) and 90.58.200, the Shoreline Management Act of 1971. [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-010, filed 6/14/78; Order DE 75-22, § 173-14-010, filed 10/16/75; Order 71-18, § 173-14-010, filed 12/16/71.]

WAC 173-14-020 Purpose. RCW 90.58.140(3) requires local governments to establish a program, consistent with rules adopted by the department of ecology, for the administration and enforcement of the permit system for shoreline management established therein. The purpose of this regulation is to establish basic rules for the permit system in harmony with the spirit of RCW 90.58.140(3).

This administrative regulation is drafted to also reflect RCW 90.58.050 which provides that the intent of the Shoreline Management Act is to establish a cooperative program between local government and the state. According to this provision, local government shall have the primary responsibility for initiating and administering the regulatory program of shoreline management, whereas the department shall act primarily in a supportive and review capacity with primary emphasis on insuring compliance with the policies and provisions of the Shoreline Management Act. [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-020, filed 6/14/78; Order DE 75-22, § 173-14-020, filed 10/16/75; Order 71-18, § 173-14-020, filed 12/16/71.]

WAC 173-14-030 Definitions. The following definitions shall apply:

(1) "Act" means chapter 286, Laws of 1971 ex. sess., chapter 90.58 RCW, the Shoreline Management Act of 1971, as amended;

(2) "Applicable master program" means the master program approved or adopted by the department pursuant to RCW 90.58.090 or 90.58.190 prior to issuance of the permit by local government;

(3) "Average grade level" means the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under the proposed building or structure: *Provided*, That in the case of structures to be built over water, average grade level shall be the elevation of ordinary high water.

Calculation of the average grade level shall be made by averaging the elevations at the center of all exterior walls of the proposed building or structure;

(4) "Conditional use" means a use, development, or substantial development which is classified as a conditional use or is not classified within the applicable master program;

(5) "Department" means the department of ecology.

(6) "Exempt" developments are those set forth in WAC 173-14-040 which do not meet the definition of substantial development under RCW 90.58.030 (3)(e);

(7) "Fair market value" of a development is the expected price at which the development can be sold to a willing buyer. For developments which involve nonstructural operations such as dredging, drilling, dumping, or filling, the fair market value is the expected cost of hiring a contractor to perform the operation or where no such value can be calculated, the total of labor, equipment use, transportation, and other costs incurred for the duration of the permitted project;

(8) "Final order" includes the approval or disapproval of a permit, or a letter of exemption as set forth in WAC 173-14-115;

(9) "Height" is measured from average grade level to the highest point of a structure: *Provided*, That television antennas, chimneys, and similar appurtenances shall not be used in calculating height, except where it obstructs the view of a substantial number of residences on areas adjoining such shorelines, or the applicable master program provides otherwise: *Provided further*, That temporary construction equipment is excluded in this calculation;

(10) "Local government" means any county, incorporated city, or town which contains within its boundaries any lands or waters subject to this chapter;

(11) "Natural or existing topography" means the topography of the lot, parcel, or tract of real property immediately prior to any site preparation or grading, including excavation or filling;

(12) "Party of record" includes all persons who have notified local government of their desire to receive a copy of the final order on a permit under WAC 173-14-070;

(13) "Permit" means any substantial development, variance, conditional use permit, or revision authorized under chapter 90.58 RCW;

(14) "Public interest" means the interest shared by the citizens of the state or community at large in the affairs of government, or some interest by which their rights or liabilities are affected such as an effect on public property or on health, safety, or general welfare resulting from a use or development;

(15) "Structure" means a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels;

(16) "Transmit" means to send from one person or place to another by mail or hand delivery. The date of transmittal for mailed items is the date that the department's final order is certified for mailing or, for hand-delivered items, is the date of receipt at the destination; and

(17) "Variance" is a means to grant relief from the specific bulk, dimensional or performance standards set forth in the applicable master program and not a means to vary a use of a shoreline;

(18) "Vessel" includes ships, boats, barges, or any other floating craft which are designed and used for navigation and do not interfere with the normal public use of the water.

(19) The definitions and concepts set forth in RCW 90.58.030 also apply as used herein. [Statutory Authority: RCW 90.58.120 and 90.58.200. 88-19-004 (Order DE 88-23), § 173-14-030, filed 9/8/88. Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-030, filed 5/23/86. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-030, filed 6/14/78; Order DE 76-17, § 173-14-030, filed 7/27/76; Order DE 75-22, § 173-14-030, filed 10/16/75; Order 71-18, § 173-14-030, filed 12/16/71.]

WAC 173-14-040 Developments exempt from substantial development permit requirement. (1) The following developments shall not require substantial development permits:

(a) Any development of which the total cost or fair market value, whichever is higher, does not exceed two thousand five hundred dollars, if such development does not materially interfere with the normal public use of the water or shorelines of the state.

(b) Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "Normal repair" means to restore a development to a state comparable to its original condition within a reasonable period after decay or partial destruction except where repair involves total replacement which is not common practice or causes substantial adverse effects to the shoreline resource or environment;

(c) Construction of the normal protective bulkhead common to single-family residences. A "normal protective" bulkhead is constructed at or near the ordinary high water mark to protect a single family residence and is for protecting land from erosion, not for the purpose of creating land. Where an existing bulkhead is being replaced, it shall be constructed no further waterward of the existing bulkhead than is necessary for construction of new footings;

(d) Emergency construction necessary to protect property from damage by the elements. An "emergency" is an unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with this chapter;

(e) Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities on wetlands, construction of a barn or similar agricultural structure, and the construction and maintenance of irrigation structures including but not limited to head gates, pumping facilities, and irrigation channels: *Provided*, That a feedlot of any size, all processing plants, other activities of a commercial nature, alteration of the contour of the wetlands by leveling or filling other than that which results from normal cultivation, shall not be considered normal or necessary farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being used

for feeding livestock hay, grain, silage, or other livestock feed, but shall not include land for growing crops or vegetation for livestock feeding and/or grazing, nor shall it include normal livestock wintering operations;

(f) Construction or modification of navigational aids such as channel markers and anchor buoys;

(g) Construction on wetlands by an owner, lessee or contract purchaser of a single-family residence for his own use or for the use of his family, which residence does not exceed a height of thirty-five feet above average grade level and which meets all requirements of the state agency or local government having jurisdiction thereof, other than requirements imposed pursuant to this chapter. "Single-family residence" means a detached dwelling designed for and occupied by one family including those structures and developments within a contiguous ownership which are a normal appurtenance. An "appurtenance" is necessarily connected to the use and enjoyment of a single-family residence and is located landward of the perimeter of a marsh, bog, or swamp. On a state-wide basis, normal appurtenances include a garage; deck; driveway; utilities; fences; and grading which does not exceed two hundred fifty cubic yards (except to construct a conventional drainfield). Local circumstances may dictate additional interpretations of normal appurtenances which shall be set forth and regulated within the applicable master program. Construction authorized under this exemption shall be located landward of the ordinary high water mark;

(h) Construction of a dock, designed for pleasure craft only, for the private noncommercial use of the owners, lessee, or contract purchaser of a single-family residence, for which the cost or fair market value, whichever is higher, does not exceed two thousand five hundred dollars.

(i) Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored ground water from the irrigation of lands;

(j) The marking of property lines or corners on state owned lands, when such marking does not significantly interfere with normal public use of the surface of the water;

(k) Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on the effective date of the 1975 amendatory act which were created, developed or utilized primarily as a part of an agricultural drainage or diking system; and

(l) Any project with a certification from the governor pursuant to chapter 80.50 RCW.

(2) Exemptions shall be construed narrowly.

(3) Exempted developments authorized by local government shall be consistent with the policies and provisions of the act and the applicable master program. [Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-040, filed 5/23/86. Statutory Authority: RCW 90.58.030, 90.58.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-040, filed 4/15/85. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-040, filed 6/14/78; Order DE 76-17, § 173-14-040, filed 7/27/76; Order DE 75-28, § 173-14-040, filed 12/4/75; Order DE 75-22, § 173-14-040, filed 10/16/75; Order 71-18, § 173-14-040, filed 12/16/71.]

WAC 173-14-050 Application of the permit system to substantial development undertaken prior to the act. Substantial development undertaken on the shorelines of the state prior to the effective date of the act shall not require a permit except under the following circumstances:

(1) Where the activity was unlawful prior to the effective date of the act.

(2) Where there has been an unreasonable period of dormancy in the project between its inception and the effective date of the act.

(3) Where the development is not completed within two years after the effective date of the act. In determining the running of the two-year period hereof, those periods of time after June 1, 1971, shall not be included during which a development was not actually pursued by construction and the pendency of litigation reasonably related thereto made it reasonable not to so pursue.

(4) Where substantial development occurred prior to the effective date of the act on a shoreline and continued on to a different lake, river or tributary after the effective date, a permit shall be required for the development undertaken after the effective date.

Substantial development undertaken prior to the effective date of the act shall not continue without a permit into other phases that were not part of the plan being followed at the time construction commenced. [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-050, filed 6/14/78; Order 73-23, § 173-14-050, filed 10/23/73; Order 71-18, § 173-14-050, filed 12/16/71.]

WAC 173-14-055 Nonconforming development standards. Where nonconforming development standards do not exist in the applicable master program, the following definitions and standards shall apply:

(1) "Nonconforming development" means a shoreline use or structure which was lawfully constructed or established prior to the effective date of the act or the applicable master program, or amendments thereto, but which does not conform to present regulations or standards of the program or policies of the act;

(2) Nonconforming development may be continued provided that it is not enlarged, intensified, increased, or altered in any way which increases its nonconformity;

(3) A nonconforming development which is moved any distance must be brought into conformance with the applicable master program and the act;

(4) If a nonconforming development is damaged to an extent not exceeding seventy-five percent replacement cost of the original structure, it may be reconstructed to those configurations existing immediately prior to the time the structure was damaged, so long as restoration is completed within one year of the date of damage;

(5) If a nonconforming use is discontinued for twelve consecutive months or for twelve months during any two-year period, any subsequent use shall be conforming. It shall not be necessary to show that the owner of the property intends to abandon such nonconforming use in order for the nonconforming rights to expire;

(6) A nonconforming use shall not be changed to another nonconforming use, regardless of the conforming or nonconforming status of the building or structure in which it is housed; and

(7) An undeveloped lot, tract, parcel, site, or division which was established prior to the effective date of the act or the applicable master program but which does not conform to the present lot size or density standards may be developed so long as such development conforms to other requirements of the applicable master program and the act. [Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-14-055, filed 8/5/87. Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-055, filed 5/23/86.]

WAC 173-14-060 Time requirements of permit. The following time requirements shall apply to all permits:

(1) Substantial progress toward completion of a permitted activity shall be undertaken within two years after the approval of the permit by local government. Substantial progress shall include all of the following, where applicable: The making of contracts; signing of notice to proceed; completion of grading and excavation; and the laying of major utilities; or, where no construction is involved, commencement of the activity: *Provided*, That local government may authorize a single extension before the end of the time limit, with prior notice to parties of record and the department, for up to one year based on reasonable factors.

(2) Permit authorization shall terminate within five years after the approval of the permit by local government: *Provided*, That local government may authorize a single extension before the end of the time limit, with prior notice to parties of record and the department, for up to one year based on reasonable factors.

(3) The running of a permit time period shall not include the time during which an activity was not actually pursued due to the pendency of reasonably related administrative appeals or litigation.

(4) Local government may issue permits with a fixed termination date of less than five years.

(5) When permit approval is based on conditions, such conditions shall be satisfied prior to occupancy or use of a structure or prior to commencement of a nonstructural activity: *Provided*, That an alternative compliance limit may be specified in the permit.

(6) Revisions to permits under WAC 173-14-064 may be authorized after original permit authorization has expired under subsection (2) of this section: *Provided*, That this procedure shall not be used to extend the original permit time requirements. [Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-14-060, filed 8/5/87; 80-04-027 (Order DE 80-9), § 173-14-060, filed 3/18/80; 78-07-011 (Order DE 78-7), § 173-14-060, filed 6/14/78; Order DE 75-22, § 173-14-060, filed 10/16/75; Order 71-18, § 173-14-060, filed 12/16/71.]

WAC 173-14-062 Applicability of permit system to federal agencies. The permit system shall be applied in the following manner to federal agencies on lands meeting the criteria of the Shoreline Management Act and the department for shorelines of the state.

(1) Federal agencies shall not be required to obtain permits for developments undertaken by the federal government on lands owned in fee by the federal government, unless the federal government grants or reserves to the state or local government, substantial jurisdiction over activities on those lands.

(2) The permit system shall apply to nonfederal activities constituting developments undertaken on lands subject to nonfederal ownership, lease or easement, even though such lands may fall within the external boundaries of a federal ownership.

(3) The permit system shall apply to developments undertaken on lands not federally owned but under lease, easement, license, or other similar federal property rights short of fee ownership, to the federal government.

(4) Federal agency actions shall be consistent with the approved Washington state coastal zone management program subject to certain limitations set forth in the Federal Coastal Zone Management Act, 16 U.S.C. 1451 et seq. and regulations adopted pursuant thereto. [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-062, filed 6/14/78; Order DE 75-22, § 173-14-062, filed 10/16/75.]

WAC 173-14-064 Revisions to permits. When an applicant seeks to revise a permit, local government shall request from the applicant detailed plans and text describing the proposed changes in the permit.

(1) If local government determines that the proposed changes are within the scope and intent of the original permit, local government may approve a revision.

(2) "Within the scope and intent of the original permit" means all of the following:

(a) No additional over water construction is involved except that pier, dock, or float construction may be increased by five hundred square feet or ten percent from the provisions of the original permit, whichever is less;

(b) Ground area coverage and height of each structure may be increased a maximum of ten percent from the provisions of the original permit;

(c) Additional separate structures may not exceed a total of two hundred fifty square feet;

(d) The revised permit does not authorize development to exceed height, lot coverage, setback, or any other requirements of the applicable master program except as authorized under the original permit;

(e) Additional landscaping is consistent with conditions (if any) attached to the original permit and with the applicable master program;

(f) The use authorized pursuant to the original permit is not changed; and

(g) No substantial adverse environmental impact will be caused by the project revision.

(3) If the sum of the revision and any previously approved revisions under WAC 173-14-064 violate the provisions in WAC 173-14-064(2) above, local government shall require that the applicant apply for a new permit in the manner provided for herein.

(4) Within eight days of the date of final local government action, the revision including the revised site plan, text and the final ruling on consistency with this section shall be filed with the department and the attorney general. In addition, local government shall notify parties of record of their action.

(5) If the revision to the original permit involves a conditional use or variance which was conditioned by the department, local government shall submit the revision to the department for the department's approval, approval with conditions, or denial. The revision shall indicate that it is being submitted under the requirements of this subsection. The department shall render and transmit to local government and the applicant its final decision within fifteen days of the date of the department's receipt of the submittal from local government. Local government shall notify parties of record of the department's final decision.

(6) The revised permit is effective immediately upon final action by local government or, when appropriate under WAC 173-14-064(5), by the department.

(7) Appeals shall be in accordance with RCW 90.58.180 and shall be filed within thirty days from the date of receipt of the local government's action by the department or, when appropriate under WAC 173-14-064(5), the date the department's final decision is transmitted to local government and the applicant. Appeals shall be based only upon contentions of noncompliance with the provisions of WAC 173-14-064(2) above. Construction undertaken pursuant to that portion of a revised permit not authorized under the original permit is at the applicant's own risk until the expiration of the appeals deadline. If an appeal is successful in proving that a revision is not within the scope and intent of the original permit, the decision shall have no bearing on the original permit. [Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-064, filed 5/23/86. Statutory Authority: RCW 90.58.030, 90.58.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-064, filed 4/15/85. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-064, filed 6/14/78; Order DE 76-17, § 173-14-064, filed 7/27/76; Order DE 75-22, § 173-14-064, filed 10/16/75.]

WAC 173-14-070 Notice required. Upon receipt of a proper application for a shoreline management substantial development, conditional use, or variance permit, local government shall insure that notices thereof are published at least once a week on the same day of the week for two consecutive weeks in a newspaper of general circulation within the area in which the development is proposed. In addition, local government shall insure that additional notice of such application is given by at least one of the following methods:

(1) Mailing of the notice to the latest recorded real property owners as shown by the records of the county assessor within at least three hundred feet of the boundary of the property upon which the substantial development is proposed,

(2) Posting of the notice in a conspicuous manner on the property upon which the project is to be constructed or,

(3) Any other manner deemed appropriate by local authorities to accomplish the objectives of reasonable notice to adjacent landowners and the public.

An affidavit that the notice has been properly published, and/or as applicable, posted or deposited in the U.S. mail pursuant to this section shall be affixed to the application. All such notices shall include a statement that within thirty days of the final newspaper publication, any interested person may submit his written views upon the application to the appropriate local government or notify the local government of his desire to receive a copy of the action taken upon the application. All persons who notify the appropriate local government of their desire to receive a copy of the final order shall be notified in a timely manner of the action taken upon the application. If a hearing is to be held on an application, notices of such a hearing shall include a statement that any person may submit oral or written comments on an application at such hearing.

All notices of applications for shoreline management substantial development, conditional use, or variance permits shall contain, as a minimum, the information called for in the following form:

NOTICE OF APPLICATION FOR
SHORELINE MANAGEMENT
SUBSTANTIAL DEVELOPMENT, CONDITIONAL USE, OR
VARIANCE PERMIT (use appropriate)

Notice is hereby given that____(state full name)____ who is____(describe relationship to property, such as owner, purchaser, lessee, etc.)____ of the below-described property has filed an application for a substantial development, conditional use, or variance permit (use appropriate) for the development of____(describe development, including uses)____ located at ____(give street address, if known, otherwise give distance and direction to nearest town)____ within ____ (quarter section) of section ____ of township ____ N., Range ____ W.M., in____(city or town)____ ____(county)____ Washington. Said development is proposed to be within (name of water area) and/or its associated wetlands. Any person desiring to express his views or to be notified of the action taken on this application should notify____(name of local government official)____ in writing of his interest within thirty days of the final date of publication of the notice which is____(date)____.

Written comments must be received by ____(date)____.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-070, filed 6/14/78; Order DE 76-17, § 173-14-070, filed 7/27/76; Order DE 75-22, § 173-14-070, filed 10/16/75; Order 71-18, § 173-14-070, filed 12/16/71.]

WAC 173-14-080 Public hearings. Local governments may establish a mandatory or optional public hearing procedure to precede the issuance or denial of substantial development, conditional use, or variance permits in order to allow interested persons to present their views. [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-080, filed 6/14/78; Order DE 75-22, § 173-14-080, filed 10/16/75; Order 71-18, § 173-14-080, filed 12/16/71.]

WAC 173-14-090 Filing with department and attorney general. A final action by local government on an application for a permit, whether it be an approval or denial, or a revision shall be filed with the department and attorney general. A "final action" is that order or ruling, whether it be an approval or denial, which is established after local administrative appeals related to the permit have lapsed. When a substantial development permit and a conditional use or variance permit are required for a development, the filing of local government's rulings on the permits shall be made concurrently.

Copies of the original application, affidavit of public notice, site plan, vicinity map, permit, and final order shall be filed with the department and attorney general within eight days of the local government final action on a permit. Where applicable, local government shall also file the applicable documents required by chapter 43-.21C RCW, the State Environmental Policy Act, or in lieu thereof, a statement summarizing the actions and dates of such actions taken under chapter 43.21C RCW.

Filing is not complete until the required documents have been received by the department and by the attorney general. This same rule shall apply to conditional uses, variances, rescissions and revisions of permits. If the filing is determined by the department to be incomplete, the department will identify the deficiencies and so notify local government and the applicant in writing. If the requested materials are not received by the department within thirty days of notification, the permit will be returned to local government for completion and resubmittal.

"Date of filing" of a local government final action involving approval or denial of a substantial development permit, or involving a denial of a variance or conditional use permit, is the date of actual receipt of a completed filing by the department. With regard to a permit for a conditional use or variance approved by local government, and such permits which also involve concurrent filing by local government of a substantial development permit, the "date of filing" means the date the department's final order on the variance or conditional use permit is transmitted to local government and the applicant. The department shall in all circumstances notify in writing the local government and the applicant of the "date of filing." [Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-090, filed 5/23/86. Statutory Authority: RCW 90.58.030, 90.58-.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-090, filed 4/15/85. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-090, filed 6/14/78; Order DE 76-17, § 173-14-090, filed 7/27/76; Order DE 75-22, § 173-14-090, filed 10/16/75; Order 71-18, § 173-14-090, filed 12/16/71.]

WAC 173-14-100 Review criteria for substantial development permits. * (1) Prior to the effective date of an applicable master program, a substantial development permit shall be granted only when the development proposed is consistent with:

(a) The policies and procedures of the act;

(b) The guidelines and regulations of the department; and,

(c) So far as can be ascertained, the master program being developed for the area.

(2) After the adoption or approval, as appropriate, by the department of an applicable master program, a substantial development permit shall be granted only when the development proposed is consistent with:

(a) The policies and procedures of the act;

(b) The provisions of this regulation; and,

(c) The applicable master program adopted or approved for the area.

* The State Environmental Policy Act, chapter 43-.21C RCW, has been determined to be applicable to government permit programs. See WAC 461-08-175, rules of practice and procedures of the shoreline hearings board. Also see State Environmental Policy Act guidelines.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-100, filed 6/14/78; Order DE 75-22, § 173-14-100, filed 10/16/75; Order 71-18, § 173-14-100, filed 12/16/71.]

WAC 173-14-110 Application for substantial development, conditional use, or variance permit. Applications for a substantial development, conditional use, or variance permit shall contain, as a minimum, the information called for in the following form. Such forms shall be supplied by local government.

APPLICATION FOR SUBSTANTIAL DEVELOPMENT, CONDITIONAL USE, OR VARIANCE PERMIT

TO THE APPLICANT: This is an application for a substantial development, conditional use, or variance permit as authorized by the Shoreline Management Act of 1971. It is suggested that you check with appropriate local, state, or federal officials to determine whether your project falls within any other permit systems.

1. Name of applicant .....
2. Mailing address .....

3. Relation of applicant to property:

Owner .....

Purchaser .....

Lessee .....

Other .....

4. Name and address of owner, if other than applicant

.....

.....

5. General location of proposed project (please list section to the nearest quarter section, township, and range)

.....

6. Name of water area and/or wetlands within which development is proposed

.....

7. Current use of the property with existing improvements

.....

.....

8. Proposed use of property (Please be specific) .....

.....

.....

9. (To be completed by local official.) Nature of the existing shoreline. (Describe type of shoreline, such as marine, stream, lake, lagoon, marsh, bog, swamp, flood plain, floodway, delta; type of beach, such as accretion, erosion, high bank, low bank, or dike; material such as sand, gravel, mud, clay, rock, riprap; and extent and type of bulkheading, if any:)

.....

.....

.....

.....

10. (To be completed by local official.) In the event that any of the proposed buildings or structures will exceed a height of thirty-five feet above the average grade level, indicate the approximate location of and number of residential units, existing and potential, that will have an obstructed view.

11. (To be completed by local official.) If the application involves a conditional use or variance, set forth in full that portion of the master program which provides that the proposed use may be a conditional use, or, in the case of a variance, from which the variance is being sought.

PROJECT DIAGRAMS: Draw all site plans and maps to scale, clearly indicating scale on lower right-hand corner and attach them to the application.

(a) *SITE PLAN:* Include on plan:

(1) Site boundary.

(2) Property dimensions in vicinity of project.

(3) Ordinary high-water mark.

(4) Typical cross section or sections showing:

(i) Existing ground elevations.

(ii) Proposed ground elevation.

(iii) Height of existing structures.

(iv) Height of proposed structures.

(5) Where appropriate, proposed land contours using five-foot intervals in water area and ten foot intervals on areas landward of ordinary high-water mark, if development involves grading, cutting, filling, or other alteration of land contours.

(6) Show dimensions and locations of existing structures which will be maintained.

(7) Show dimensions and locations of proposed structures.

(8) Identify source, composition, and volume of fill material.

(9) Identify composition and volume of any extracted materials, and identify proposed disposal area.

(10) Location of proposed utilities, such as sewer, septic tanks and drainfields, water, gas, electricity.

(11) If the development proposes septic tanks, does proposed development comply with local health and state regulations?

(12) Shoreline designation according to master program.

(13) Show which areas are shorelines and which are shorelines of state-wide significance.

(b) *VICINITY MAP.*

(1) Indicate site location using natural points of reference (roads, state highways, prominent land marks, etc.).

(2) If the development involves the removal of any soils by dredging or otherwise, please identify the proposed disposal site on the map. If the disposal site is beyond the confines of the vicinity map, provide another vicinity map showing the precise location of the disposal site and its distance to the nearest city or town.

(3) Give a brief narrative description of the general nature of the improvements and land use within one thousand feet in all directions from development site (i.e., residential to the north, commercial to the south, etc.) [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-110, filed 6/14/78; Order DE 76-17, § 173-14-110, filed 7/27/76; Order DE 75-22, § 173-14-110, filed 10/16/75; Order 71-18, § 173-14-110, filed 12/16/71.]

WAC 173-14-115 Letter of exemption. Whenever a development falls within the exemptions stated in WAC 173-14-040 and the development is subject to a U.S. Corps of Engineers section 10 permit under the River and Harbors Act of 1899, or a section 404 permit under the Federal Water Pollution Control Act of 1972, the local government shall prepare a letter addressed to the applicant and the department, exempting the development from the substantial development permit requirements of chapter 90.58 RCW. This exemption shall be

in substantially the following form. Such forms will be supplied by local government.

EXEMPTION FROM SHORELINE MANAGEMENT ACT SUBSTANTIAL DEVELOPMENT PERMIT REQUIREMENT

To: .....
(name and address of the applicant)

The proposal by (name of applicant) to undertake the the following development (please be specific)

.....

upon the following property (please list legal description, i.e., section to the nearest quarter section)

.....

.....

within (name of water area) and/or its associated wetlands is exempt from the requirement of a substantial development permit because the development

.....
(Identify exemptions as outlined in WAC 173-14-040)

.....
(Corps Public Notice Number)

The proposed development is consistent or inconsistent with:

CHECK ONE

CONSISTENT	INCONSISTENT	
☐	☐	Policies of the Shoreline Management Act.
☐	☐	The guidelines of the Department of Ecology where no master program has been finally approved or adopted by the department.
☐	☐	The master program.

..... (Date) ..... (Signature of Authorized Local Governmental Official)

[Statutory Authority: RCW 90.58.030, 90.58.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-115, filed 4/15/85. Statutory Authority: RCW 90.58-.200. 78-07-011 (Order DE 78-7), § 173-14-115, filed 6/14/78; Order DE 76-17, § 173-14-115, filed 7/27/76; Order DE 75-22, § 173-14-115, filed 10/16/75.]

WAC 173-14-120 Permits for substantial development, conditional use, or variance. Each permit for a substantial development, conditional use or variance, issued by local government shall contain a provision that construction pursuant to the permit shall not begin and is not authorized until thirty days from the date of filing as defined in RCW 90.58.140(6) and WAC 173-14-090; or until all review proceedings initiated within thirty days from the date of such filing have been terminated; except as provided in RCW 90.58.140 (5)(a)(b)(c).

Permits for substantial development, conditional use, or variance shall be in substantially the following form. Such forms will be supplied by local government.

SHORELINE MANAGEMENT ACT OF 1971
PERMIT FOR SHORELINE MANAGEMENT SUBSTANTIAL DEVELOPMENT, CONDITIONAL USE, OR VARIANCE

NOTE – THIS PAGE FOR LOCAL GOVERNMENT USE ONLY

(Consecutive but beginning with No. 1)

Application No. .....

Administering Agency ..... (city or county)

Date received .....

Approved ..... Denied .....

Date .....

Type of Action(s)

☐ Substantial Development Permit
☐ Conditional Use Permit
☐ Variance Permit

Pursuant to chapter 90.58 RCW, a permit is hereby granted/denied to:

.....
(name of applicant)

.....
(address)

.....

.....

to undertake the following development: (Please be specific) .....

.....

.....

upon the following property (please list the legal description, i.e., section to the nearest quarter section, township, range):

.....

.....

Within (name of water area) and/or its associated wetlands.

The project will (be/not be) within shorelines of state-wide significance (RCW 90.58.030). The project will be located within a (environment) designation. The following

master program provisions are applicable to this development (state the master program section or page number): If a conditional use or variance, also identify the portion of the master program which provides that the proposed use may be a conditional use, or that portion of the master program being varied.

Development pursuant to this permit shall be undertaken pursuant to the following terms and conditions:

This permit is granted pursuant to the Shoreline Management Act of 1971 and nothing in this permit shall excuse the applicant from compliance with any other federal, state or local statutes, ordinances or regulations applicable to this project, but not inconsistent with the Shoreline Management Act (chapter 90.58 RCW).

This permit may be rescinded pursuant to RCW 90.58.140(8) in the event the permittee fails to comply with the terms or conditions hereof.

CONSTRUCTION PURSUANT TO THIS PERMIT WILL NOT BEGIN OR IS NOT AUTHORIZED UNTIL THIRTY DAYS FROM THE DATE OF FILING AS DEFINED IN RCW 90.58.140(6) AND WAC 173-14-090, OR UNTIL ALL REVIEW PROCEEDINGS INITIATED WITHIN THIRTY DAYS FROM THE DATE OF SUCH FILING HAVE TERMINATED; EXCEPT AS PROVIDED IN RCW 90.58.140 (5)(a)(b)(c).

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(Date) (Signature of Authorized Local Government Official)

THIS SECTION FOR DEPARTMENT USE ONLY IN REGARD TO A CONDITIONAL USE OR VARIANCE PERMIT.

Date received by the department ----------

Approved ---------- Denied ----------

This conditional use/variance permit is approved/denied by the department pursuant to chapter 90.58 RCW.

Development shall be undertaken pursuant to the following additional terms and conditions:

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(Date) (Signature of Authorized Department Official)

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-120, filed 6/14/78; Order DE 76-17, § 173-14-120, filed 7/27/76; Order DE 75-22, § 173-14-120, filed 10/16/75; Order 71-18, § 173-14-120, filed 12/16/71.]

WAC 173-14-130 Department review of conditional use and variance permits. After local government approval of a conditional use or variance permit, local government shall submit the permit to the department for the department's approval, approval with conditions, or denial. When the department intends to conditionally approve a conditional use or a variance permit, the department shall notify the local government of its intention and the nature of the conditions prior to rendering its final decision. The department shall render and transmit to local government and the applicant its final decision approving, approving with conditions, or disapproving the permit within thirty days of the date of submittal by local government pursuant to WAC 173-14-090. Local government shall notify those interested persons having requested notification from local government pursuant to WAC 173-14-070 of the departments final decision. [Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-130, filed 5/23/86. Statutory Authority: RCW 90.58.030, 90.58-.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-130, filed 4/15/85. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-130, filed 6/14/78; Order DE 76-17, § 173-14-130, filed 7/27/76; Order DE 75-22, § 173-14-130, filed 10/16/75.]

WAC 173-14-140 Review criteria for conditional use permits. The purpose of a conditional use permit is to allow greater flexibility in varying the application of the use regulations of the master program in a manner consistent with the policies of RCW 90.58.020: *Provided*, That conditional use permits should also be granted in a circumstance where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020. In authorizing a conditional use, special conditions may be attached to the permit by local government or the department to prevent undesirable effects of the proposed use.

(1) Uses which are classified or set forth in the applicable master program as conditional uses may be authorized provided the applicant can demonstrate all of the following:

(a) That the proposed use is consistent with the policies of RCW 90.58.020 and the policies of the master program;

(b) That the proposed use will not interfere with the normal public use of public shorelines;

(c) That the proposed use of the site and design of the project is compatible with other permitted uses within the area;

(d) That the proposed use will cause no unreasonably adverse effects to the shoreline environment in which it is to be located; and

(e) That the public interest suffers no substantial detrimental effect.

(2) Other uses which are not classified or set forth in the applicable master program may be authorized as conditional uses provided the applicant can demonstrate, in addition to the criteria set forth in WAC 173-14-140(1) above, that extraordinary circumstances preclude

reasonable use of the property in a manner consistent with the use regulations of the master program.

(3) Uses which are specifically prohibited by the master program may not be authorized.

(4) In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment. [Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-140, filed 5/23/86. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-027 (Order DE 80-42), § 173-14-140, filed 2/2/81. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-140, filed 6/14/78; Order DE 75-22, § 173-14-140, filed 10/16/75.]

WAC 173-14-150 Review criteria for variance permits. The purpose of a variance permit is strictly limited to granting relief from specific bulk, dimensional or performance standards set forth in the applicable master program where there are extraordinary or unique circumstances relating to the property such that the strict implementation of the master program will impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020.

(1) Variance permits should be granted in a circumstance where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020. In all instances extraordinary circumstances shall be shown and the public interest shall suffer no substantial detrimental effect.

(2) Variance permits for development that will be located landward of the ordinary high water mark (OHWM), as defined in RCW 90.58.030 (2)(b), except within those areas designated by the department as marshes, bogs, or swamps pursuant to chapter 173-22 WAC, may be authorized provided the applicant can demonstrate all of the following:

(a) That the strict application of the bulk, dimensional or performance standards set forth in the applicable master program precludes or significantly interferes with a reasonable use of the property not otherwise prohibited by the master program;

(b) That the hardship described in WAC 173-14-150 (2)(a) above is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of the master program, and not, for example, from deed restrictions or the applicant's own actions;

(c) That the design of the project is compatible with other permitted activities in the area and will not cause adverse effects to adjacent properties or the shoreline environment;

(d) That the requested variance does not constitute a grant of special privilege not enjoyed by the other properties in the area, and is the minimum necessary to afford relief; and

(e) That the public interest will suffer no substantial detrimental effect.

(3) Variance permits for development that will be located either waterward of the ordinary high water mark (OHWM), as defined in RCW 90.58.030 (2)(b), or within marshes, bogs, or swamps as designated by the department under chapter 173-22 WAC, may be authorized provided the applicant can demonstrate all of the following:

(a) That the strict application of the bulk, dimensional or performance standards set forth in the applicable master program precludes a reasonable use of the property not otherwise prohibited by the master program;

(b) That the proposal is consistent with the criteria established under (2)(b) through (e) of this section; and

(c) That the public rights of navigation and use of the shorelines will not be adversely affected.

(4) In the granting of all variance permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example if variances were granted to other developments in the area where similar circumstances exist the total of the variances shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

(5) Requests for varying the use to which a shoreline area is to be put are not requests for variances, but rather requests for conditional uses. Such requests shall be evaluated using the criteria set forth in WAC 173-14-140. [Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-150, filed 5/23/86. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-027 (Order DE 80-42), § 173-14-150, filed 2/2/81. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-150, filed 6/14/78; Order DE 76-17, § 173-14-150, filed 7/27/76; Order DE 75-22, § 173-14-150, filed 10/16/75.]

WAC 173-14-155 *Minimum standards for conditional use and variance permits.* Pursuant to RCW 90.58.100(5) and 90.58.140(3), the criteria contained in WAC 173-14-140 and 173-14-150 for shoreline conditional use and variance permits shall constitute the minimum criteria for review of these permits by local government and the department. Local government and the department may, in addition, apply the more restrictive criteria where it exists in approved and adopted master programs. [Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-027 (Order DE 80-42), § 173-14-155, filed 2/2/81.]

WAC 173-14-170 *Requests for review.* All requests for review of any final permit decisions under chapter 90.58 RCW and chapter 173-14 WAC are governed by the procedures established in RCW 90.58.180 and chapter 461-08 WAC, the rules of practice and procedure of the shorelines hearings board. [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-170, filed 6/14/78; Order DE 75-22, § 173-14-170, filed 10/16/75.]

WAC 173-14-174 Certification of requests for review. All requests for review filed with the department pursuant to RCW 90.58.180(1) must contain the items required by WAC 461-08-055. Such requests shall be filed with the department within thirty days of the date of filing as defined in RCW 90.58.140(6) and WAC 173-14-090. The department will certify the request for review to the shorelines hearings board within thirty days of receipt of same if it appears the request has set forth valid reasons to seek review. Failure of the department to provide such certification does not preclude the requestor from obtaining certification from the attorney general or from obtaining a review in the superior court under any right to review otherwise available. [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-174, filed 6/14/78.]

EXHIBIT # 15

RECEIVED
JAN 17 1996
CLARK COUNTY
Plan & Dev. Review

Chapter 90.58 RCW

SHORELINE MANAGEMENT ACT OF 1971

Sections

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90.58.030 Definitions and concepts.
90.58.040 Program applicable to shorelines of the state.
90.58.050 Program as cooperative between local government and state—Responsibilities differentiated.
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RCW 90.58.010 Short title. This chapter shall be known and may be cited as the "Shoreline Management Act of 1971". [1971 ex.s. c 286 § 1.]

RCW 90.58.020 Legislative findings—State policy enunciated—Use preference. The legislature finds that the shorelines of the state are among the most valuable and fragile of its natural resources and that there is great concern throughout the state relating to their utilization, protection, restoration, and preservation. In addition it finds that ever increasing pressures of additional uses are being placed on the shorelines necessitating increased coordination in the management and development of the shorelines of the state. The legislature further finds that much of the shorelines of the state and the uplands adjacent thereto are in private ownership; that unrestricted construction on the privately owned or publicly owned shorelines of the state is not in the best public interest; and therefore, coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights consistent

with the public interest. There is, therefor, a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines.

It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses. This policy is designed to insure the development of these shorelines in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest. This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto.

The legislature declares that the interest of all of the people shall be paramount in the management of shorelines of state-wide significance. The department, in adopting guidelines for shorelines of state-wide significance, and local government, in developing master programs for shorelines of state-wide significance, shall give preference to uses in the following order of preference which:

(1) Recognize and protect the state-wide interest over local interest;

(2) Preserve the natural character of the shoreline;

(3) Result in long term over short term benefit;

(4) Protect the resources and ecology of the shoreline;

(5) Increase public access to publicly owned areas of the shorelines;

(6) Increase recreational opportunities for the public in the shoreline;

(7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

In the implementation of this policy the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally. To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline. Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state. Alterations of the natural condition of the shorelines and shorelands of the state shall be recognized by the department. Shorelines and shorelands of the state shall be appropriately classified and these classifications shall be revised when circumstances warrant regardless of whether the change in circumstances occurs through man-made causes or natural causes. Any areas resulting from alterations of the natural condition of the shorelines and shorelands of the state no longer meeting the definition of "shorelines of the state" shall not be subject to the provisions of chapter 90.58 RCW.

Permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water. [995 c 347 § 301; 1992 c 105 § 1; 1982 1st ex.s. c 13 § 1; 971 ex.s. c 286 § 2.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

RCW 90.58.030 Definitions and concepts. As used in this chapter, unless the context otherwise requires, the following definitions and concepts apply:

(1) Administration:

(a) "Department" means the department of ecology;

(b) "Director" means the director of the department of ecology;

(c) "Local government" means any county, incorporated city, or town which contains within its boundaries any lands or waters subject to this chapter;

(d) "Person" means an individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, or agency of the state or local governmental unit however designated;

(e) "Hearing board" means the shoreline hearings board established by this chapter.

(2) Geographical:

(a) "Extreme low tide" means the lowest line on the land reached by a receding tide;

(b) "Ordinary high water mark" on all lakes, streams, and tidal water is that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the department: PROVIDED, That in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining salt water shall be the line of mean higher high tide and the ordinary high water mark adjoining fresh water shall be the line of mean high water;

(c) "Shorelines of the state" are the total of all "shorelines" and "shorelines of state-wide significance" within the state;

(d) "Shorelines" means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of state-wide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes;

(e) "Shorelines of state-wide significance" means the following shorelines of the state:

(i) The area between the ordinary high water mark and the western boundary of the state from Cape Disappointment

on the south to Cape Flattery on the north, including harbors, bays, estuaries, and inlets;

(ii) Those areas of Puget Sound and adjacent salt waters and the Strait of Juan de Fuca between the ordinary high water mark and the line of extreme low tide as follows:

(A) Nisqually Delta—from DeWolf Bight to Tatsolo Point,

(B) Birch Bay—from Point Whitehorn to Birch Point,

(C) Hood Canal—from Tala Point to Foulweather Bluff,

(D) Skagit Bay and adjacent area—from Brown Point to Yokeko Point, and

(E) Padilla Bay—from March Point to William Point;

(iii) Those areas of Puget Sound and the Strait of Juan de Fuca and adjacent salt waters north to the Canadian line and lying seaward from the line of extreme low tide;

(iv) Those lakes, whether natural, artificial, or a combination thereof, with a surface acreage of one thousand acres or more measured at the ordinary high water mark;

(v) Those natural rivers or segments thereof as follows:

(A) Any west of the crest of the Cascade range downstream of a point where the mean annual flow is measured at one thousand cubic feet per second or more,

(B) Any east of the crest of the Cascade range downstream of a point where the annual flow is measured at two hundred cubic feet per second or more, or those portions of rivers east of the crest of the Cascade range downstream from the first three hundred square miles of drainage area, whichever is longer;

(vi) Those shorelands associated with (i), (ii), (iv), and (v) of this subsection (2)(e);

(f) "Shorelands" or "shoreland areas" means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the department of ecology. Any county or city may determine that portion of a one-hundred-year-flood plain to be included in its master program as long as such portion includes, as a minimum, the floodway and the adjacent land extending landward two hundred feet therefrom;

(g) "Floodway" means those portions of the area of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under normal condition, by changes in surface soil conditions or changes in types or quality of vegetative ground cover condition. The floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state;

(h) "Wetlands" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands.

(3) Procedural terms:

(a) "Guidelines" means those standards adopted to implement the policy of this chapter for regulation of use of the shorelines of the state prior to adoption of master programs. Such standards shall also provide criteria to local governments and the department in developing master programs;

(b) "Master program" shall mean the comprehensive use plan for a described area, and the use regulations together with maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies enunciated in RCW 90.58.020;

(c) "State master program" is the cumulative total of all master programs approved or adopted by the department of ecology;

(d) "Development" means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level;

(e) "Substantial development" shall mean any development of which the total cost or fair market value exceeds two thousand five hundred dollars, or any development which materially interferes with the normal public use of the water or shorelines of the state; except that the following shall not be considered substantial developments for the purpose of this chapter:

(i) Normal maintenance or repair of existing structures or developments, including damage by accident, fire, or elements;

(ii) Construction of the normal protective bulkhead common to single family residences;

(iii) Emergency construction necessary to protect property from damage by the elements;

(iv) Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities on shorelands, and the construction and maintenance of irrigation structures including but not limited to head gates, pumping facilities, and irrigation channels. A feedlot of any size, all processing plants, other activities of a commercial nature, alteration of the contour of the shorelands by leveling or filling other than that which results from normal cultivation, shall not be considered normal or necessary farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being used for feeding livestock hay, grain, silage, or other livestock feed, but shall not include land for growing crops or vegetation for livestock feeding and/or

grazing, nor shall it include normal livestock wintering operations;

(v) Construction or modification of navigational aids such as channel markers and anchor buoys;

(vi) Construction on shorelands by an owner, lessee, or contract purchaser of a single family residence for his own use or for the use of his family, which residence does not exceed a height of thirty-five feet above average grade level and which meets all requirements of the state agency or local government having jurisdiction thereof, other than requirements imposed pursuant to this chapter;

(vii) Construction of a dock, including a community dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee, or contract purchaser of single and multiple family residences, the cost of which does not exceed two thousand five hundred dollars;

(viii) Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored ground water for the irrigation of lands;

(ix) The marking of property lines or corners on state owned lands, when such marking does not significantly interfere with normal public use of the surface of the water;

(x) Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on September 8, 1975, which were created, developed, or utilized primarily as a part of an agricultural drainage or diking system;

(xi) Site exploration and investigation activities that are prerequisite to preparation of an application for development authorization under this chapter, if:

(A) The activity does not interfere with the normal public use of the surface waters;

(B) The activity will have no significant adverse impact on the environment including, but not limited to, fish, wildlife, fish or wildlife habitat, water quality, and aesthetic values;

(C) The activity does not involve the installation of a structure, and upon completion of the activity the vegetation and land configuration of the site are restored to conditions existing before the activity;

(D) A private entity seeking development authorization under this section first posts a performance bond or provides other evidence of financial responsibility to the local jurisdiction to ensure that the site is restored to preexisting conditions; and

(E) The activity is not subject to the permit requirements of RCW 90.58.550;

(xii) The process of removing or controlling an aquatic noxious weed, as defined in RCW 17.26.020, through the use of an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the department of agriculture or the department jointly with other state agencies under chapter 43.21C RCW. [1995 c 382 § 10; 1995 c 255 § 5; 1995 c 237 § 1; 1987 c 474 § 1; 1986 c 292 § 1; 1982 1st ex.s. c 13 § 2; 1980 c 2 § 3; 1979 ex.s. c 84 § 3; 1975 1st ex.s. c 182 § 1; 1973 1st ex.s. c 203 § 1; 1971 ex.s. c 286 § 3.]

Reviser's note: This section was amended by 1995 c 237 § 1, 1995 c 255 § 5, and by 1995 c 382 § 10, each without reference to the other. All amendments are incorporated in the publication of this section pursuant to RCW 1.12.025(2). For rule of construction, see RCW 1.12.025(1).

Severability—Effective date—1995 c 255: See RCW 17.26.900 and 17.26.901.

Severability—1986 c 292: "If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected." [1986 c 292 § 5.]

Intent—1980 c 2; 1979 ex.s. c 84: "The legislature finds that high tides and hurricane force winds on February 13, 1979, caused conditions resulting in the catastrophic destruction of the Hood Canal bridge on state route 104, a state highway on the federal-aid system; and, as a consequence, the state of Washington has sustained a sudden and complete failure of a major segment of highway system with a disastrous impact on transportation services between the counties of Washington's Olympic peninsula and the remainder of the state. The governor has by proclamation found that these conditions constitute an emergency. To minimize the economic loss and hardship to residents of the Puget Sound and Olympic peninsula regions, it is the intent of 1979 ex.s. c 84 to authorize the department of transportation to undertake immediately all necessary actions to restore interim transportation services across Hood Canal and Puget Sound and upon the Kitsap and Olympic peninsulas and to design and reconstruct a permanent bridge at the site of the original Hood Canal bridge. The department of transportation is directed to proceed with such actions in an environmentally responsible manner that would meet the substantive objectives of the state environmental policy act and the shorelines management act, and shall consult with the department of ecology in the planning process. The exemptions from the state environmental policy act and the shorelines management act contained in RCW 43.21C.032 and 90.58.030 are intended to approve and ratify the timely actions of the department of transportation taken and to be taken to restore interim transportation services and to reconstruct a permanent Hood Canal bridge without procedural delays." [1980 c 2 § 1; 1979 ex.s. c 84 § 1.]

RCW 90.58.040 Program applicable to shorelines of the state. The shoreline management program of this chapter shall apply to the shorelines of the state as defined in this chapter. [1971 ex.s. c 286 § 4.]

RCW 90.58.050 Program as cooperative between local government and state—Responsibilities differentiated. This chapter establishes a cooperative program of shoreline management between local government and the state. Local government shall have the primary responsibility for initiating the planning required by this chapter and administering the regulatory program consistent with the policy and provisions of this chapter. The department shall act primarily in a supportive and review capacity with an emphasis on providing assistance to local government and on insuring compliance with the policy and provisions of this chapter. [1995 c 347 § 303; 1971 ex.s. c 286 § 5.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

RCW 90.58.060 Review and adoption of guidelines—Public hearings, notice of—Amendments. (1) The department shall periodically review and adopt guidelines consistent with RCW 90.58.020, containing the elements specified in RCW 90.58.100 for:

(a) Development of master programs for regulation of the uses of shorelines; and

(b) Development of master programs for regulation of the uses of shorelines of state-wide significance.

(2) Before adopting or amending guidelines under this section, the department shall provide an opportunity for public review and comment as follows:

(a) The department shall mail copies of the proposal to all cities, counties, and federally recognized Indian tribes, and to any other person who has requested a copy, and shall publish the proposed guidelines in the Washington state register. Comments shall be submitted in writing to the department within sixty days from the date the proposal has been published in the register.

(b) The department shall hold at least four public hearings on the proposal in different locations throughout the state to provide a reasonable opportunity for residents in all parts of the state to present statements and views on the proposed guidelines. Notice of the hearings shall be published at least once in each of the three weeks immediately preceding the hearing in one or more newspapers of general circulation in each county of the state. If an amendment to the guidelines addresses an issue limited to one geographic area, the number and location of hearings may be adjusted consistent with the intent of this subsection to assure all parties a reasonable opportunity to comment on the proposed amendment. The department shall accept written comments on the proposal during the sixty-day public comment period and for seven days after the final public hearing.

(c) At the conclusion of the public comment period, the department shall review the comments received and modify the proposal consistent with the provisions of this chapter. The proposal shall then be published for adoption pursuant to the provisions of chapter 34.05 RCW.

(3) The department may propose amendments to the guidelines not more than once each year. At least once every five years the department shall conduct a review of the guidelines pursuant to the procedures outlined in subsection (2) of this section. [1995 c 347 § 304; 1971 ex.s. c 286 § 6.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

RCW 90.58.070 Local governments to submit letters of intent—Department to act upon failure of local government. (1) Local governments are directed with regard to shorelines of the state in their various jurisdictions to submit to the director of the department, within six months from June 1, 1971, letters stating that they propose to complete an inventory and develop master programs for these shorelines as provided for in RCW 90.58.080.

(2) If any local government fails to submit a letter as provided in subsection (1) of this section, or fails to adopt a master program for the shorelines of the state within its jurisdiction in accordance with the time schedule provided in this chapter, the department shall carry out the requirements of RCW 90.58.080 and adopt a master program for the shorelines of the state within the jurisdiction of the local government. [1971 ex.s. c 286 § 7.]

RCW 90.58.080 Timetable for local governments to develop or amend master programs. Local governments shall develop or amend, within twenty-four months after the adoption of guidelines as provided in RCW 90.58.060, a master program for regulation of uses of the shorelines of the state consistent with the required elements of the guidelines adopted by the department. [1995 c 347 § 305; 1974 ex.s. c 61 § 1; 1971 ex.s. c 286 § 8.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

RCW 90.58.090 Approval of master program or segments or amendments thereof, when—Procedure—Departmental alternatives when shorelines of state-wide significance—Later adoption of master program supersedes departmental program. (1) A master program, segment of a master program, or an amendment to a master program shall become effective when approved by the department. Within the time period provided in RCW 90.58.080, each local government shall have submitted a master program, either totally or by segments, for all shorelines of the state within its jurisdiction to the department for review and approval.

(2) Upon receipt of a proposed master program or amendment, the department shall:

(a) Provide notice to and opportunity for written comment by all interested parties of record as a part of the local government review process for the proposal and to all persons, groups, and agencies that have requested in writing notice of proposed master programs or amendments generally or for a specific area, subject matter, or issue. The comment period shall be at least thirty days, unless the department determines that the level of complexity or controversy involved supports a shorter period;

(b) In the department's discretion, conduct a public hearing during the thirty-day comment period in the jurisdiction proposing the master program or amendment;

(c) Within fifteen days after the close of public comment, request the local government to review the issues identified by the public, interested parties, groups, and agencies and provide a written response as to how the proposal addresses the identified issues;

(d) Within thirty days after receipt of the local government response pursuant to (c) of this subsection, make written findings and conclusions regarding the consistency of the proposal with the policy of RCW 90.58.020 and the applicable guidelines, provide a response to the issues identified in (c) of this subsection, and either approve the proposal as submitted, recommend specific changes necessary to make the proposal approvable, or deny approval of the proposal in those instances where no alteration of the proposal appears likely to be consistent with the policy of RCW 90.58.020 and the applicable guidelines. The written findings and conclusions shall be provided to the local government, all interested persons, parties, groups, and agencies of record on the proposal;

(e) If the department recommends changes to the proposed master program or amendment, within thirty days after the department mails the written findings and conclusions to the local government, the local government may:

(i) Agree to the proposed changes. The receipt by the department of the written notice of agreement constitutes final action by the department approving the amendment; or

(ii) Submit an alternative proposal. If, in the opinion of the department, the alternative is consistent with the purpose and intent of the changes originally submitted by the department and with this chapter it shall approve the changes and provide written notice to all recipients of the written findings and conclusions. If the department determines the proposal is not consistent with the purpose and intent of the

changes proposed by the department, the department may resubmit the proposal for public and agency review pursuant to this section or reject the proposal.

(3) The department shall approve the segment of a master program relating to shorelines unless it determines that the submitted segments are not consistent with the policy of RCW 90.58.020 and the applicable guidelines.

(4) The department shall approve those segments of the master program relating to shorelines of state-wide significance only after determining the program provides the optimum implementation of the policy of this chapter to satisfy the state-wide interest. If the department does not approve a segment of a local government master program relating to a shoreline of state-wide significance, the department may develop and by rule adopt an alternative to the local government's proposal.

(5) In the event a local government has not complied with the requirements of RCW 90.58.070 it may thereafter upon written notice to the department elect to adopt a master program for the shorelines within its jurisdiction, in which event it shall comply with the provisions established by this chapter for the adoption of a master program for such shorelines.

Upon approval of such master program by the department it shall supersede such master program as may have been adopted by the department for such shorelines.

(6) A master program or amendment to a master program takes effect when and in such form as approved or adopted by the department. The department shall maintain a record of each master program, the action taken on any proposal for adoption or amendment of the master program, and any appeal of the department's action. The department's approved document of record constitutes the official master program. [1995 c 347 § 306; 1971 ex.s. c 286 § 9.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

RCW 90.58.100 Programs as constituting use regulations—Duties when preparing programs and amendments thereto—Program contents. (1) The master programs provided for in this chapter, when adopted or approved by the department shall constitute use regulations for the various shorelines of the state. In preparing the master programs, and any amendments thereto, the department and local governments shall to the extent feasible:

(a) Utilize a systematic interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts;

(b) Consult with and obtain the comments of any federal, state, regional, or local agency having any special expertise with respect to any environmental impact;

(c) Consider all plans, studies, surveys, inventories, and systems of classification made or being made by federal, state, regional, or local agencies, by private individuals, or by organizations dealing with pertinent shorelines of the state;

(d) Conduct or support such further research, studies, surveys, and interviews as are deemed necessary;

(e) Utilize all available information regarding hydrology, geography, topography, ecology, economics, and other pertinent data;

(f) Employ, when feasible, all appropriate, modern scientific data processing and computer techniques to store, index, analyze, and manage the information gathered.

(2) The master programs shall include, when appropriate, the following:

(a) An economic development element for the location and design of industries, transportation facilities, port facilities, tourist facilities, commerce and other developments that are particularly dependent on their location on or use of the shorelines of the state;

(b) A public access element making provision for public access to publicly owned areas;

(c) A recreational element for the preservation and enlargement of recreational opportunities, including but not limited to parks, tidelands, beaches, and recreational areas;

(d) A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the shoreline use element;

(e) A use element which considers the proposed general distribution and general location and extent of the use on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land;

(f) A conservation element for the preservation of natural resources, including but not limited to scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection;

(g) An historic, cultural, scientific, and education element for the protection and restoration of buildings, sites, and areas having historic, cultural, scientific, or educational values;

(h) An element that gives consideration to the state-wide interest in the prevention and minimization of flood damages; and

(i) Any other element deemed appropriate or necessary to effectuate the policy of this chapter.

(3) The master programs shall include such map or maps, descriptive text, diagrams and charts, or other descriptive material as are necessary to provide for ease of understanding.

(4) Master programs will reflect that state-owned shorelines of the state are particularly adapted to providing wilderness beaches, ecological study areas, and other recreational activities for the public and will give appropriate special consideration to same.

(5) Each master program shall contain provisions to allow for the varying of the application of use regulations of the program, including provisions for permits for conditional uses and variances, to insure that strict implementation of a program will not create unnecessary hardships or thwart the policy enumerated in RCW 90.58.020. Any such varying shall be allowed only if extraordinary circumstances are shown and the public interest suffers no substantial detrimental effect. The concept of this subsection shall be incorporated in the rules adopted by the department relating to establishment of a permit system as provided in RCW 90.58.140(3).

(6) Each master program shall contain standards governing the protection of single family residences and

appurtenant structures against damage or loss due to shoreline erosion. The standards shall govern the issuance of substantial development permits for shoreline protection, including structural methods such as construction of bulkheads, and nonstructural methods of protection. The standards shall provide for methods which achieve effective and timely protection against loss or damage to single family residences and appurtenant structures due to shoreline erosion. The standards shall provide a preference for permit issuance for measures to protect single family residences occupied prior to January 1, 1992, where the proposed measure is designed to minimize harm to the shoreline natural environment. [1995 c 347 § 307; 1992 c 105 § 2; 1991 c 322 § 32; 1971 ex.s. c 286 § 10.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

Findings—Intent—1991 c 322: See note following RCW 86.12.200.

RCW 90.58.110 Development of program within two or more adjacent local government jurisdictions—Development of program in segments, when. (1) Whenever it shall appear to the director that a master program should be developed for a region of the shorelines of the state which includes lands and waters located in two or more adjacent local government jurisdictions, the director shall designate such region and notify the appropriate units of local government thereof. It shall be the duty of the notified units to develop cooperatively an inventory and master program in accordance with and within the time provided in RCW 90.58.080.

(2) At the discretion of the department, a local government master program may be adopted in segments applicable to particular areas so that immediate attention may be given to those areas of the shorelines of the state in most need of a use regulation. [1971 ex.s. c 286 § 11.]

RCW 90.58.120 Adoption of rules, programs, etc., subject to RCW 34.05.310 through 34.05.395—Public hearings, notice of—Public inspection after approval or adoption. All rules, regulations, designations, and guidelines, issued by the department, and master programs and amendments adopted by the department pursuant to RCW 90.58.070(2) or 90.58.090(4) shall be adopted or approved in accordance with the provisions of RCW 34.05.310 through 34.05.395 insofar as such provisions are not inconsistent with the provisions of this chapter. In addition:

(1) Prior to the adoption by the department of a master program, or portion thereof pursuant to RCW 90.58.070(2) or 90.58.090(4), at least one public hearing shall be held in each county affected by a program or portion thereof for the purpose of obtaining the views and comments of the public. Notice of each such hearing shall be published at least once in each of the three weeks immediately preceding the hearing in one or more newspapers of general circulation in the county in which the hearing is to be held.

(2) All guidelines, regulations, designations, or master programs adopted or approved under this chapter shall be available for public inspection at the office of the department or the appropriate county and city. The terms "adopt" and "approve" for purposes of this section, shall include modifications and rescission of guidelines. [1995 c 347 § 308; 1989 c 175 § 182; 1975 1st ex.s. c 182 § 2; 1971 ex.s. c 286 § 12.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

Effective date—1989 c 175: See note following RCW 34.05.010.

RCW 90.58.130 Involvement of all persons and entities having interest, means. To insure that all persons and entities having an interest in the guidelines and master programs developed under this chapter are provided with a full opportunity for involvement in both their development and implementation, the department and local governments shall:

(1) Make reasonable efforts to inform the people of the state about the shoreline management program of this chapter and in the performance of the responsibilities provided in this chapter, shall not only invite but actively encourage participation by all persons and private groups and entities showing an interest in shoreline management programs of this chapter; and

(2) Invite and encourage participation by all agencies of federal, state, and local government, including municipal and public corporations, having interests or responsibilities relating to the shorelines of the state. State and local agencies are directed to participate fully to insure that their interests are fully considered by the department and local governments. [1971 ex.s. c 286 § 13.]

RCW 90.58.140 Development permits—Grounds for granting—Administration by local government, conditions—Applications—Notices—Rescission—Approval when permit for variance or conditional use. (1) A development shall not be undertaken on the shorelines of the state unless it is consistent with the policy of this chapter and, after adoption or approval, as appropriate, the applicable guidelines, rules, or master program.

(2) A substantial development shall not be undertaken on shorelines of the state without first obtaining a permit from the government entity having administrative jurisdiction under this chapter.

A permit shall be granted:

(a) From June 1, 1971, until such time as an applicable master program has become effective, only when the development proposed is consistent with: (i) The policy of RCW 90.58.020; and (ii) after their adoption, the guidelines and rules of the department; and (iii) so far as can be ascertained, the master program being developed for the area;

(b) After adoption or approval, as appropriate, by the department of an applicable master program, only when the development proposed is consistent with the applicable master program and this chapter.

(3) The local government shall establish a program, consistent with rules adopted by the department, for the administration and enforcement of the permit system provided in this section. The administration of the system so established shall be performed exclusively by the local government.

(4) Except as otherwise specifically provided in subsection (11) of this section, the local government shall require notification of the public of all applications for permits

governed by any permit system established pursuant to subsection (3) of this section by ensuring that notice of the application is given by at least one of the following methods:

(a) Mailing of the notice to the latest recorded real property owners as shown by the records of the county assessor within at least three hundred feet of the boundary of the property upon which the substantial development is proposed;

(b) Posting of the notice in a conspicuous manner on the property upon which the project is to be constructed; or

(c) Any other manner deemed appropriate by local authorities to accomplish the objectives of reasonable notice to adjacent landowners and the public.

The notices shall include a statement that any person desiring to submit written comments concerning an application, or desiring to receive notification of the final decision concerning an application as expeditiously as possible after the issuance of the decision, may submit the comments or requests for decisions to the local government within thirty days of the last date the notice is to be published pursuant to this subsection. The local government shall forward, in a timely manner following the issuance of a decision, a copy of the decision to each person who submits a request for the decision.

If a hearing is to be held on an application, notices of such a hearing shall include a statement that any person may submit oral or written comments on an application at the hearing.

(5) The system shall include provisions to assure that construction pursuant to a permit will not begin or be authorized until twenty-one days from the date the permit decision was filed as provided in subsection (6) of this section; or until all review proceedings are terminated if the proceedings were initiated within twenty-one days from the date of filing as defined in subsection (6) of this section except as follows:

(a) In the case of any permit issued to the state of Washington, department of transportation, for the construction and modification of SR 90 (I-90) on or adjacent to Lake Washington, the construction may begin after thirty days from the date of filing, and the permits are valid until December 31, 1995;

(b) Construction may be commenced no sooner than thirty days after the date of the appeal of the board's decision is filed if a permit is granted by the local government and (i) the granting of the permit is appealed to the shorelines hearings board within twenty-one days of the date of filing, (ii) the hearings board approves the granting of the permit by the local government or approves a portion of the substantial development for which the local government issued the permit, and (iii) an appeal for judicial review of the hearings board decision is filed pursuant to chapter 34.05 RCW. The appellant may request, within ten days of the filing of the appeal with the court, a hearing before the court to determine whether construction pursuant to the permit approved by the hearings board or to a revised permit issued pursuant to the order of the hearings board should not commence. If, at the conclusion of the hearing, the court finds that construction pursuant to such a permit would involve a significant, irreversible damaging of the environment, the court shall prohibit the permittee from commencing the construction pursuant to the approved or revised permit until all review proceedings are final. Construction pursuant to a permit revised at the direction of the hearing board may begin only on that portion of the substantial development for which the local government had originally issued the permit, and construction pursuant to such a revised permit on other portions of the substantial development may not begin until after all review proceedings are terminated. In such a hearing before the court, the burden of proving whether the construction may involve significant irreversible damage to the environment and demonstrating whether such construction would or would not be appropriate is on the appellant;

(c) If the permit is for a substantial development meeting the requirements of subsection (11) of this section, construction pursuant to that permit may not begin or be authorized until twenty-one days from the date the permit decision was filed as provided in subsection (6) of this section.

If a permittee begins construction pursuant to subsections (a), (b), or (c) of this subsection, the construction is begun at the permittee's own risk. If, as a result of judicial review, the courts order the removal of any portion of the construction or the restoration of any portion of the environment involved or require the alteration of any portion of a substantial development constructed pursuant to a permit, the permittee is barred from recovering damages or costs involved in adhering to such requirements from the local government that granted the permit, the hearings board, or any appellant or intervener.

(6) Any decision on an application for a permit under the authority of this section, whether it is an approval or a denial, shall, concurrently with the transmittal of the ruling to the applicant, be filed with the department and the attorney general. With regard to a permit other than a permit governed by subsection (10) of this section, "date of filing" as used herein means the date of actual receipt by the department. With regard to a permit for a variance or a conditional use, "date of filing" means the date a decision of the department rendered on the permit pursuant to subsection (10) of this section is transmitted by the department to the local government. The department shall notify in writing the local government and the applicant of the date of filing.

(7) Applicants for permits under this section have the burden of proving that a proposed substantial development is consistent with the criteria that must be met before a permit is granted. In any review of the granting or denial of an application for a permit as provided in RCW 90.58.180 (1) and (2), the person requesting the review has the burden of proof.

(8) Any permit may, after a hearing with adequate notice to the permittee and the public, be rescinded by the issuing authority upon the finding that a permittee has not complied with conditions of a permit. If the department is of the opinion that noncompliance exists, the department shall provide written notice to the local government and the permittee. If the department is of the opinion that the noncompliance continues to exist thirty days after the date of the notice, and the local government has taken no action to rescind the permit, the department may petition the hearings board for a rescission of the permit upon written notice of the petition to the local government and the permittee if the request by the department is made to the hearings board

within fifteen days of the termination of the thirty-day notice to the local government.

(9) The holder of a certification from the governor pursuant to chapter 80.50 RCW shall not be required to obtain a permit under this section.

(10) Any permit for a variance or a conditional use by local government under approved master programs must be submitted to the department for its approval or disapproval.

(11)(a) An application for a substantial development permit for a limited utility extension or for the construction of a bulkhead or other measures to protect a single family residence and its appurtenant structures from shoreline erosion shall be subject to the following procedures:

(i) The public comment period under subsection (4) of this section shall be twenty days. The notice provided under subsection (4) of this section shall state the manner in which the public may obtain a copy of the local government decision on the application no later than two days following its issuance;

(ii) The local government shall issue its decision to grant or deny the permit within twenty-one days of the last day of the comment period specified in (i) of this subsection; and

(iii) If there is an appeal of the decision to grant or deny the permit to the local government legislative authority, the appeal shall be finally determined by the legislative authority within thirty days.

(b) For purposes of this section, a limited utility extension means the extension of a utility service that:

(i) Is categorically exempt under chapter 43.21C RCW for one or more of the following: Natural gas, electricity, telephone, water, or sewer;

(ii) Will serve an existing use in compliance with this chapter; and

(iii) Will not extend more than twenty-five hundred linear feet within the shorelines of the state. [1995 c 347 § 309; 1992 c 105 § 3; 1990 c 201 § 2; 1988 c 22 § 1; 1984 c 7 § 386; 1977 ex.s. c 358 § 1; 1975-'76 2nd ex.s. c 51 § 1; 1975 1st ex.s. c 182 § 3; 1973 2nd ex.s. c 19 § 1; 1971 ex.s. c 286 § 14.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

Finding—Intent—1990 c 201: "The legislature finds that delays in substantial development permit review for the extension of vital utility services to existing and lawful uses within the shorelines of the state have caused hardship upon existing residents without serving any of the purposes and policies of the shoreline management act. It is the intent of this act to provide a more expeditious permit review process for that limited category of utility extension activities only, while fully preserving safeguards of public review and appeal rights regarding permit applications and decisions." [1990 c 201 § 1.] "This act" consists of the 1990 c 201 amendments to RCW 90.58.140.

Severability—1984 c 7: See note following RCW 47.01.141.

RCW 90.58.147 Substantial development permit—Exemption for projects to improve fish or wildlife habitat or fish passage. A public or private project that is designed to improve fish or wildlife habitat or fish passage shall be exempt from the substantial development permit requirements of this chapter when all of the following apply:

(1) The project has been approved by the department of fish and wildlife;

(2) The project has received hydraulic project approval by the department of fish and wildlife pursuant to chapter 75.20 RCW; and

(3) The local government has determined that the project is substantially consistent with the local shoreline master program. The local government shall make such determination in a timely manner and provide it by letter to the project proponent. [1995 c 333 § 1.]

RCW 90.58.150 Selective commercial timber cutting, when. With respect to timber situated within two hundred feet abutting landward of the ordinary high water mark within shorelines of state-wide significance, the department or local government shall allow only selective commercial timber cutting, so that no more than thirty percent of the merchantable trees may be harvested in any ten year period of time: PROVIDED, That other timber harvesting methods may be permitted in those limited instances where the topography, soil conditions or silviculture practices necessary for regeneration render selective logging ecologically detrimental: PROVIDED FURTHER, That clear cutting of timber which is solely incidental to the preparation of land for other uses authorized by this chapter may be permitted. [1971 ex.s. c 286 § 15.]

RCW 90.58.160 Prohibition against surface drilling for oil or gas, where. Surface drilling for oil or gas is prohibited in the waters of Puget Sound north to the Canadian boundary and the Strait of Juan de Fuca seaward from the ordinary high water mark and on all lands within one thousand feet landward from said mark. [1971 ex.s. c 286 § 16.]

RCW 90.58.170 Shorelines hearings board—Established—Members—Chairman—Quorum for decision—Expenses of members. A shorelines hearings board sitting as a quasi judicial body is hereby established within the environmental hearings office under RCW 43.21B.005. The shorelines hearings board shall be made up of six members: Three members shall be members of the pollution control hearings board; two members, one appointed by the association of Washington cities and one appointed by the association of county commissioners, both to serve at the pleasure of the associations; and the commissioner of public lands or his or her designee. The chairman of the pollution control hearings board shall be the chairman of the shorelines hearings board. Except as provided in RCW 90.58.185, a decision must be agreed to by at least four members of the board to be final. The members of the shorelines board shall receive the compensation, travel, and subsistence expenses as provided in RCW 43.03.050 and 43.03.060. [1994 c 253 § 1; 1988 c 128 § 76; 1979 ex.s. c 47 § 6; 1971 ex.s. c 286 § 17.]

Intent—1979 ex.s. c 47: See note following RCW 43.21B.005.

RCW 90.58.175 Rules and regulations. The shorelines hearings board may adopt rules and regulations governing the administrative practice and procedure in and before the board. [1973 1st ex.s. c 203 § 3.]

RCW 90.58.180 Appeals from granting, denying, or rescinding permits—Board to act—Local government appeals to board—Grounds for declaring rule, regulation, or guideline invalid—Appeals to court. (1) Any person aggrieved by the granting, denying, or rescinding of a permit on shorelines of the state pursuant to RCW 90.58.140 may seek review from the shorelines hearings board by filing a petition for review within twenty-one days of the date of filing as defined in RCW 90.58.140(6).

Within seven days of the filing of any petition for review with the board as provided in this section pertaining to a final decision of a local government, the petitioner shall serve copies of the petition on the department and the office of the attorney general. The department and the attorney general may intervene to protect the public interest and insure that the provisions of this chapter are complied with at any time within fifteen days from the date of the receipt by the department or the attorney general of a copy of the petition for review filed pursuant to this section. The shorelines hearings board shall schedule review proceedings on the petition for review without regard as to whether the period for the department or the attorney general to intervene has or has not expired.

(2) The department or the attorney general may obtain review of any final decision granting a permit, or granting or denying an application for a permit issued by a local government by filing a written petition with the shorelines hearings board and the appropriate local government within twenty-one days from the date the final decision was filed as provided in RCW 90.58.140(6).

(3) The review proceedings authorized in subsections (1) and (2) of this section are subject to the provisions of chapter 34.05 RCW pertaining to procedures in adjudicative proceedings. Judicial review of such proceedings of the shorelines hearings board is governed by chapter 34.05 RCW. The board shall issue its decision on the appeal authorized under subsections (1) and (2) of this section within one hundred eighty days after the date the petition is filed with the board or a petition to intervene is filed by the department or the attorney general, whichever is later. The time period may be extended by the board for a period of thirty days upon a showing of good cause or may be waived by the parties.

(4) Any person may appeal any rules, regulations, or guidelines adopted or approved by the department within thirty days of the date of the adoption or approval. The board shall make a final decision within sixty days following the hearing held thereon.

(5) The board shall find the rule, regulation, or guideline to be valid and enter a final decision to that effect unless it determines that the rule, regulation, or guideline:

(a) Is clearly erroneous in light of the policy of this chapter; or

(b) Constitutes an implementation of this chapter in violation of constitutional or statutory provisions; or

(c) Is arbitrary and capricious; or

(d) Was developed without fully considering and evaluating all material submitted to the department during public review and comment; or

(e) Was not adopted in accordance with required procedures.

(6) If the board makes a determination under subsection (5) (a) through (e) of this section, it shall enter a final decision declaring the rule, regulation, or guideline invalid, remanding the rule, regulation, or guideline to the department with a statement of the reasons in support of the determination, and directing the department to adopt, after a thorough consultation with the affected local government and any other interested party, a new rule, regulation, or guideline consistent with the board's decision.

(7) A decision of the board on the validity of a rule, regulation, or guideline shall be subject to review in superior court, if authorized pursuant to chapter 34.05 RCW. A petition for review of the decision of the shorelines hearings board on a rule, regulation, or guideline shall be filed within thirty days after the date of final decision by the shorelines hearings board. [1995 c 347 § 310; 1994 c 253 § 3; 1989 c 175 § 183; 1986 c 292 § 2; 1975-'76 2nd ex.s. c 51 § 2; 1975 1st ex.s. c 182 § 4; 1973 1st ex.s. c 203 § 2; 1971 ex.s. c 286 § 18.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

Effective date—1989 c 175: See note following RCW 34.05.010.

Severability—1986 c 292: See note following RCW 90.58.030.

Appeal under this chapter also subject of appeal under state environmental policy act: RCW 43.21C.075.

RCW 90.58.185 Appeals involving single family residences—Composition of board—Rules to expedite appeals. (1) In the case of an appeal involving a single family residence or appurtenance to a single family residence, including a dock or pier designed to serve a single family residence, the request for review may be heard by a panel of three board members, at least one and not more than two of whom shall be members of the pollution control hearings board. Two members of the three must agree to issue a final decision of the board.

(2) The board shall define by rule alternative processes to expedite appeals. These alternatives may include: Mediation, upon agreement of all parties; submission of testimony by affidavit; or other forms that may lead to less formal and faster resolution of appeals. [1994 c 253 § 2.]

RCW 90.58.190 Appeal of department's decision to adopt or amend a master program. (1) The appeal of the department's decision to adopt a master program or amendment pursuant to RCW 90.58.070(2) or 90.58.090(4) is governed by RCW 34.05.510 through 34.05.598.

(2)(a) The department's decision to approve, reject, or modify a proposed master program or amendment adopted by a local government planning under RCW 36.70A.040 shall be appealed to the growth management hearings board with jurisdiction over the local government. The appeal shall be initiated by filing a petition as provided in RCW 36.70A.250 through 36.70A.320.

(b) If the appeal to the growth management hearings board concerns shorelines, the growth management hearings board shall review the proposed master program or amendment for compliance with the requirements of this chapter and chapter 36.70A RCW, the policy of RCW 90.58.020 and the applicable guidelines, and chapter 43.21C RCW as it

relates to the adoption of master programs and amendments under chapter 90.58 RCW.

(c) If the appeal to the growth management hearings board concerns a shoreline of state-wide significance, the board shall uphold the decision by the department unless the board, by clear and convincing evidence, determines that the decision of the department is inconsistent with the policy of RCW 90.58.020 and the applicable guidelines.

(d) The appellant has the burden of proof in all appeals to the growth management hearings board under this subsection.

(e) Any party aggrieved by a final decision of a growth management hearings board under this subsection may appeal the decision to superior court as provided in RCW 36.70A.300.

(3)(a) The department's decision to approve, reject, or modify a proposed master program or master program amendment by a local government not planning under RCW 36.70A.040 shall be appealed to the shorelines hearings board by filing a petition within thirty days of the date of the department's written notice to the local government of the department's decision to approve, reject, or modify a proposed master program or master program amendment as provided in RCW 90.58.090(2).

(b) In an appeal relating to shorelines, the shorelines hearings board shall review the proposed master program or master program amendment and, after full consideration of the presentations of the local government and the department, shall determine the validity of the local government's master program or amendment in light of the policy of RCW 90.58.020 and the applicable guidelines.

(c) In an appeal relating to shorelines of state-wide significance, the shorelines hearings board shall uphold the decision by the department unless the board determines, by clear and convincing evidence that the decision of the department is inconsistent with the policy of RCW 90.58.020 and the applicable guidelines.

(d) Review by the shorelines hearings board shall be considered an adjudicative proceeding under chapter 34.05 RCW, the Administrative Procedure Act. The aggrieved local government shall have the burden of proof in all such reviews.

(e) Whenever possible, the review by the shorelines hearings board shall be heard within the county where the land subject to the proposed master program or master program amendment is primarily located. The department and any local government aggrieved by a final decision of the hearings board may appeal the decision to superior court as provided in chapter 34.05 RCW.

(4) A master program amendment shall become effective after the approval of the department or after the decision of the shorelines hearings board to uphold the master program or master program amendment, provided that the board may remand the master program or master program adjustment to the local government or the department for modification prior to the final adoption of the master program or master program amendment. [1995 c 347 § 311; 1989 c 175 § 184; 1986 c 292 § 3; 1971 ex.s. c 286 § 19.]

Finding—Severability—Part headings and table of contents not law—1995 c 347: See notes following RCW 36.70A.470.

Effective date—1989 c 175: See note following RCW 34.05.010.

Severability—1986 c 292: See note following RCW 90.58.030.

RCW 90.58.195 Shoreline master plan review—Local governments with coastal waters or coastal shorelines. (1) The department of ecology, in cooperation with other state agencies and coastal local governments, shall prepare and adopt ocean use guidelines and policies to be used in reviewing, and where appropriate, amending, shoreline master programs of local governments with coastal waters or coastal shorelines within their boundaries. These guidelines shall be finalized by April 1, 1990.

(2) After the department of ecology has adopted the guidelines required in subsection (1) of this section, counties, cities, and towns with coastal waters or coastal shorelines shall review their shoreline master programs to ensure that the programs conform with RCW 43.143.010 and 43.143.030 and with the department of ecology's ocean use guidelines. Amended master programs shall be submitted to the department of ecology for its approval under RCW 90.58.090 by June 30, 1991. [1989 1st ex.s. c 2 § 13.]

RCW 90.58.200 Rules and regulations. The department and local governments are authorized to adopt such rules as are necessary and appropriate to carry out the provisions of this chapter. [1971 ex.s. c 286 § 20.]

RCW 90.58.210 Court actions to insure against conflicting uses and to enforce—Civil penalty—Review. (1) Except as provided in RCW 43.05.060 through 43.05.080 and 43.05.150, the attorney general or the attorney for the local government shall bring such injunctive, declaratory, or other actions as are necessary to insure that no uses are made of the shorelines of the state in conflict with the provisions and programs of this chapter, and to otherwise enforce the provisions of this chapter.

(2) Any person who shall fail to conform to the terms of a permit issued under this chapter or who shall undertake development on the shorelines of the state without first obtaining any permit required under this chapter shall also be subject to a civil penalty not to exceed one thousand dollars for each violation. Each permit violation or each day of continued development without a required permit shall constitute a separate violation.

(3) The penalty provided for in this section shall be imposed by a notice in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the same from the department or local government, describing the violation with reasonable particularity and ordering the act or acts constituting the violation or violations to cease and desist or, in appropriate cases, requiring necessary corrective action to be taken within a specific and reasonable time.

(4) Within thirty days after the notice is received, the person incurring the penalty may apply in writing to the department for remission or mitigation of such penalty. Upon receipt of the application, the department or local government may remit or mitigate the penalty upon whatever terms the department or local government in its discretion deems proper. Any penalty imposed pursuant to this section by the department shall be subject to review by the shorelines hearings board. Any penalty imposed pursuant to this section by local government shall be subject to review by the local government legislative authority. Any penalty jointly

imposed by the department and local government shall be appealed to the shorelines hearings board. [1995 c 403 § 637; 1986 c 292 § 4; 1971 ex.s. c 286 § 21.]

Findings—Short title—Intent—1995 c 403: See note following RCW 34.05.328.

Part headings not law—Severability—1995 c 403: See RCW 43.05.903 and 43.05.904.

Severability—1986 c 292: See note following RCW 90.58.030.

RCW 90.58.220 General penalty. In addition to incurring civil liability under RCW 90.58.210, any person found to have wilfully engaged in activities on the shorelines of the state in violation of the provisions of this chapter or any of the master programs, rules, or regulations adopted pursuant thereto shall be guilty of a gross misdemeanor, and shall be punished by a fine of not less than twenty-five nor more than one thousand dollars or by imprisonment in the county jail for not more than ninety days, or by both such fine and imprisonment: PROVIDED, That the fine for the third and all subsequent violations in any five-year period shall be not less than five hundred nor more than ten thousand dollars: PROVIDED FURTHER, That fines for violations of RCW 90.58.550, or any rule adopted thereunder, shall be determined under RCW 90.58.560. [1983 c 138 § 3; 1971 ex.s. c 286 § 22.]

RCW 90.58.230 Violators liable for damages resulting from violation—Attorney's fees and costs. Any person subject to the regulatory program of this chapter who violates any provision of this chapter or permit issued pursuant thereto shall be liable for all damage to public or private property arising from such violation, including the cost of restoring the affected area to its condition prior to violation. The attorney general or local government attorney shall bring suit for damages under this section on behalf of the state or local governments. Private persons shall have the right to bring suit for damages under this section on their own behalf and on the behalf of all persons similarly situated. If liability has been established for the cost of restoring an area affected by a violation the court shall make provision to assure that restoration will be accomplished within a reasonable time at the expense of the violator. In addition to such relief, including money damages, the court in its discretion may award attorney's fees and costs of the suit to the prevailing party. [1971 ex.s. c 286 § 23.]

RCW 90.58.240 Additional authority granted department and local governments. In addition to any other powers granted hereunder, the department and local governments may:

(1) Acquire lands and easements within shorelines of the state by purchase, lease, or gift, either alone or in concert with other governmental entities, when necessary to achieve implementation of master programs adopted hereunder;

(2) Accept grants, contributions, and appropriations from any agency, public or private, or individual for the purposes of this chapter;

(3) Appoint advisory committees to assist in carrying out the purposes of this chapter;

(4) Contract for professional or technical services required by it which cannot be performed by its employees. [1972 ex.s. c 53 § 1; 1971 ex.s. c 286 § 24.]

RCW 90.58.250 Department to cooperate with local governments—Grants for development of master programs. The department is directed to cooperate fully with local governments in discharging their responsibilities under this chapter. Funds shall be available for distribution to local governments on the basis of applications for preparation of master programs. Such applications shall be submitted in accordance with regulations developed by the department. The department is authorized to make and administer grants within appropriations authorized by the legislature to any local government within the state for the purpose of developing a master shorelines program.

No grant shall be made in an amount in excess of the recipient's contribution to the estimated cost of such program. [1971 ex.s. c 286 § 25.]

RCW 90.58.260 State to represent its interest before federal agencies, interstate agencies and courts. The state, through the department of ecology and the attorney general, shall represent its interest before water resource regulation management, development, and use agencies of the United States, including among others, the federal power commission, environmental protection agency, corps of engineers, department of the interior, department of agriculture and the atomic energy commission, before interstate agencies and the courts with regard to activities c uses of shorelines of the state and the program of this chapter. Where federal or interstate agency plans, activities, or procedures conflict with state policies, all reasonable steps available shall be taken by the state to preserve the integrity of its policies. [1971 ex.s. c 286 § 26.]

RCW 90.58.270 Nonapplication to certain structures, docks, developments, etc., placed in navigable waters—Nonapplication to certain rights of action, authority. (1) Nothing in this statute shall constitute authority for requiring or ordering the removal of any structures, improvements, docks, fills, or developments placed in navigable waters prior to December 4, 1969, and the consent and authorization of the state of Washington to the impairment of public rights of navigation, and corollary rights incidental thereto, caused by the retention and maintenance of said structures, improvements, docks, fills or developments are hereby granted: PROVIDED, That the consent herein given shall not relate to any structures, improvements, docks, fills, or developments placed on tidelands, shorelands, or beds underlying said waters which are in trespass or in violation of state statutes.

(2) Nothing in this section shall be construed as altering or abridging any private right of action, other than a private right which is based upon the impairment of public rights consented to in subsection (1) hereof.

(3) Nothing in this section shall be construed as alteri or abridging the authority of the state or local governmen. to suppress or abate nuisances or to abate pollution.

(4) Subsection (1) of this section shall apply to any case pending in the courts of this state on June 1, 1971 relating

to the removal of structures, improvements, docks, fills, or developments based on the impairment of public navigational rights. [1971 ex.s. c 286 § 27.]

RCW 90.58.280 Application to all state agencies, counties, public and municipal corporations. The provisions of this chapter shall be applicable to all agencies of state government, counties, and public and municipal corporations and to all shorelines of the state owned or administered by them. [1971 ex.s. c 286 § 28.]

RCW 90.58.290 Restrictions as affecting fair market value of property. The restrictions imposed by this chapter shall be considered by the county assessor in establishing the fair market value of the property. [1971 ex.s. c 286 § 29.]

RCW 90.58.300 Department as regulating state agency—Special authority. The department of ecology is designated the state agency responsible for the program of regulation of the shorelines of the state, including coastal shorelines and the shorelines of the inner tidal waters of the state, and is authorized to cooperate with the federal government and sister states and to receive benefits of any statutes of the United States whenever enacted which relate to the programs of this chapter. [1971 ex.s. c 286 § 30.]

RCW 90.58.310 Designation of shorelines of state-wide significance by legislature—Recommendation by director, procedure. Additional shorelines of the state shall be designated shorelines of state-wide significance only by affirmative action of the legislature.

The director of the department may, however, from time to time, recommend to the legislature areas of the shorelines of the state which have state-wide significance relating to special economic, ecological, educational, developmental, recreational, or aesthetic values to be designated as shorelines of state-wide significance.

Prior to making any such recommendation the director shall hold a public hearing in the county or counties where the shoreline under consideration is located. It shall be the duty of the county commissioners of each county where such a hearing is conducted to submit their views with regard to a proposed designation to the director at such date as the director determines but in no event shall the date be later than sixty days after the public hearing in the county. [1971 ex.s. c 286 § 31.]

RCW 90.58.320 Height limitation respecting permits. No permit shall be issued pursuant to this chapter for any new or expanded building or structure of more than thirty-five feet above average grade level on shorelines of the state that will obstruct the view of a substantial number of residences on areas adjoining such shorelines except where a master program does not prohibit the same and then only when overriding considerations of the public interest will be served. [1971 ex.s. c 286 § 32.]

RCW 90.58.330 Study of shorelines of cities and towns submitted to legislature—Scope. The department of ecology, the attorney general, and the harbor line commission are directed as a matter of high priority to undertake jointly a study of the locations, uses and activities, both proposed and existing, relating to the shorelines of the cities, and towns of the state and submit a report which shall include but not be limited to the following:

(1) Events leading to the establishment of the various harbor lines pertaining to cities of the state;

(2) The location of all such harbor lines;

(3) The authority for establishment and criteria used in location of the same;

(4) Present activities and uses made within harbors and their relationship to harbor lines;

(5) Legal aspects pertaining to any uncertainty and ...consistency; and

(6) The relationship of federal, state and local governments to regulation of uses and activities pertaining to the area of study.

The report shall be submitted to the legislature not later than December 1, 1972. [1971 ex.s. c 286 § 33.]

RCW 90.58.340 Use policies for land adjacent to shorelines, development of. All state agencies, counties, and public and municipal corporations shall review administrative and management policies, regulations, plans, and ordinances relative to lands under their respective jurisdictions adjacent to the shorelines of the state so as the [to] achieve a use policy on said land consistent with the policy of this chapter, the guidelines, and the master programs for the shorelines of the state. The department may develop recommendations for land use control for such lands. Local governments shall, in developing use regulations for such areas, take into consideration any recommendations developed by the department as well as any other state agencies or units of local government. [1971 ex.s. c 286 § 34.]

RCW 90.58.350 Nonapplication to treaty rights. Nothing in this chapter shall affect any rights established by treaty to which the United States is a party. [1971 ex.s. c 286 § 35.]

RCW 90.58.355 Hazardous substance remedial actions—Procedural requirements not applicable. The procedural requirements of this chapter shall not apply to any person conducting a remedial action at a facility pursuant to a consent decree, order, or agreed order issued pursuant to chapter 70.105D RCW, or to the department of ecology when it conducts a remedial action under chapter 70.105D RCW. The department of ecology shall ensure compliance with the substantive requirements of this chapter through the consent decree, order, or agreed order issued pursuant to chapter 70.105D RCW, or during the department-conducted remedial action, through the procedures developed by the department pursuant to RCW 70.105D.090. [1994 c 257 § 20.]

Severability—1994 c 257: See note following RCW 36.70A.270.

RCW 90.58.360 Existing requirements for permits, certificates, etc., not obviated. Nothing in this chapter shall obviate any requirement to obtain any permit, certificate,

license, or approval from any state agency or local government. [1971 ex.s. c 286 § 36.]

RCW 90.58.370 Processing of permits or authorizations for emergency water withdrawal and facilities to be expedited. All state and local agencies with authority under this chapter to issue permits or other authorizations in connection with emergency water withdrawals and facilities authorized under RCW 43.83B.410 shall expedite the processing of such permits or authorizations in keeping with the emergency nature of such requests and shall provide a decision to the applicant within fifteen calendar days of the date of application. [1989 c 171 § 11; 1987 c 343 § 5.]

Severability—1989 c 171: See note following RCW 43.83B.400.

Severability—1987 c 343: See note following RCW 43.83B.300.

RCW 90.58.380 Adoption of wetland manual. The department by rule shall adopt a manual for the delineation of wetlands under this chapter that implements and is consistent with the 1987 manual in use on January 1, 1995, by the United States army corps of engineers and the United States environmental protection agency. If the corps of engineers and the environmental protection agency adopt changes to or a different manual, the department shall consider those changes and may adopt rules implementing those changes. [1995 c 382 § 11.]

RCW 90.58.515 Watershed restoration projects—Exemption. Watershed restoration projects as defined in RCW 89.08.460 are exempt from the requirement to obtain a substantial development permit. Local government shall review the projects for consistency with the locally adopted shoreline master program in an expeditious manner and shall issue its decision along with any conditions within forty-five days of receiving a complete consolidated application form from the applicant. No fee may be charged for accepting and processing applications for watershed restoration projects as used in this section. [1995 c 378 § 16.]

RCW 90.58.550 Oil or natural gas exploration in marine waters—Definitions—Application for permit—Requirements—Review—Enforcement. (1) Within this section the following definitions apply:

(a) "Exploration activity" means reconnaissance or survey work related to gathering information about geologic features and formations underlying or adjacent to marine waters;

(b) "Marine waters" include the waters of Puget Sound north to the Canadian border, the waters of the Strait of Juan de Fuca, the waters between the western boundary of the state and the ordinary high water mark, and related bays and estuaries;

(c) "Vessel" includes ships, boats, barges, or any other floating craft.

(2) A person desiring to perform oil or natural gas exploration activities by vessel located on or within marine waters of the state shall first obtain a permit from the department of ecology. The department may approve an application for a permit only if it determines that the proposed activity will not:

(a) Interfere materially with the normal public uses of the marine waters of the state;

(b) Interfere with activities authorized by a permit issued under RCW 90.58.140(2);

(c) Injure the marine biota, beds, or tidelands of the waters;

(d) Violate water quality standards established by the department; or

(e) Create a public nuisance.

(3) Decisions on an application under subsection (2) of this section are subject to review only by the pollution control hearings board under chapter 43.21B RCW.

(4) This section does not apply to activities conducted by an agency of the United States or the state of Washington.

(5) This section does not lessen, reduce, or modify RCW 90.58.160.

(6) The department may adopt rules necessary to implement this section.

(7) The attorney general shall enforce this section. [1983 c 138 § 1.]

Ocean resources management act: Chapter 43.143 RCW.

Transport of petroleum products or hazardous substances: Chapter 88.40 RCW.

RCW 90.58.560 Oil or natural gas exploration—Violations of RCW 90.58.550—Penalty—Appeal. (1) Except as provided in RCW 43.05.060 through 43.05.080 and 43.05.150, a person who violates RCW 90.58.550, or any rule adopted thereunder, is subject to a penalty in a amount of up to five thousand dollars a day for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation. Every act of commission or omission which procures, aids or abets in the violation shall be considered a violation under the provisions of this section and subject to the penalty provided for in this section.

(2) The penalty shall be imposed by a notice in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the penalty from the director or the director's representative describing such violation with reasonable particularity. The director or the director's representative may, upon written application therefor received within fifteen days after notice imposing any penalty is received by the person incurring the penalty, and when deemed to carry out the purposes of this chapter, remit or mitigate any penalty provided for in this section upon such terms as he or she deems proper, and shall have authority to ascertain the facts upon all such applications in such manner and under such regulations as he or she may deem proper.

(3) Any person incurring any penalty under this section may appeal the penalty to the hearings board as provided for in chapter 43.21B RCW. Such appeals shall be filed within thirty days of receipt of notice imposing any penalty unless an application for remission or mitigation is made to the department. When an application for remission or mitigation is made, such appeals shall be filed within thirty days of receipt of notice from the director or the director's representative setting forth the disposition of the application. Any

penalty imposed under this section shall become due and payable thirty days after receipt of a notice imposing the same unless application for remission or mitigation is made or an appeal is filed. When an application for remission or mitigation is made, any penalty incurred hereunder shall become due and payable thirty days after receipt of notice setting forth the disposition of the application unless an appeal is filed from such disposition. Whenever an appeal of any penalty incurred under this section is filed, the penalty shall become due and payable only upon completion of all review proceedings and the issuance of a final order confirming the penalty in whole or in part.

(4) If the amount of any penalty is not paid to the department within thirty days after it becomes due and payable, the attorney general, upon the request of the director, shall bring an action in the name of the state of Washington in the superior court of Thurston county or of any county in which such violator may do business, to recover such penalty. In all such actions the procedure and rules of evidence shall be the same as an ordinary civil action except as otherwise in this chapter provided. All penalties recovered under this section shall be paid into the state treasury and credited to the general fund. [1995 c 403 § 638; 1983 c 138 § 2.]

Findings—Short title—Intent—1995 c 403: See note following RCW 34.05.328.

Part headings not law—Severability—1995 c 403: See RCW 43.05.903 and 43.05.904.

RCW 90.58.570 Consultation before responding to federal coastal zone management certificates. The department of ecology shall consult with affected state agencies, local governments, Indian tribes, and the public prior to responding to federal coastal zone management consistency certifications for uses and activities occurring on the federal outer continental shelf. [1989 1st ex.s. c 2 § 15.]

Severability—1989 1st ex.s. c 2: See RCW 43.143.902.

RCW 90.58.600 Conformance with chapter 43.97 RCW required. With respect to the National Scenic Area, as defined in the Columbia [River] Gorge National Scenic Area Act, P.L. 99-663, the exercise of any power or authority by a local government or the department of ecology pursuant to this chapter shall be subject to and in conformity with the requirements of chapter 43.97 RCW, including the management plan regulations and ordinances adopted by the Columbia River Gorge commission pursuant to the Compact. [1987 c 499 § 10.]

RCW 90.58.900 Liberal construction—1971 ex.s. c 286. This chapter is exempted from the rule of strict construction, and it shall be liberally construed to give full effect to the objectives and purposes for which it was enacted. [1971 ex.s. c 286 § 37.]

RCW 90.58.910 Severability—1971 ex.s. c 286. If any provision of this chapter, or its application to any person or legal entity or circumstances, is held invalid, the remainder of the act, or the application of the provision to other persons or legal entities or circumstances, shall not be affected. [1971 ex.s. c 286 § 40.]

RCW 90.58.911 Severability—1983 c 138. If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected. [1983 c 138 § 4.]

RCW 90.58.920 Effective date—1971 ex.s. c 286. This chapter is necessary for the immediate preservation of the public peace, health and safety, the support of the state government, and its existing institutions. This 1971 act shall take effect on June 1, 1971. The director of ecology is authorized to immediately take such steps as are necessary to insure that this 1971 act is implemented on its effective date. [1971 ex.s. c 286 § 41.]

RCW 90.58.930 Referendum to the people—1971 ex.s. c 286—Determining if act continues in force and effect. This 1971 act constitutes an alternative to Initiative 43. The secretary of state is directed to place this 1971 act on the ballot in conjunction with Initiative 43 at the next ensuing regular election.

This 1971 act shall continue in force and effect until the secretary of state certifies the election results on this 1971 act. If affirmatively approved at the ensuing regular general election, the act shall continue in effect thereafter. [1971 ex.s. c 286 § 42.]

Reviser's note: Chapter 90.58 RCW [1971 ex.s. c 286] was approved and validated at the 1972 general election as Alternative Measure 43B.

T. Irving
Mary - Michelle
Brian -

EXHIBIT # 16

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

April 18, 1997

RECEIVED

APR 2 1 1997

Clark County
Community Dev/Records

Mr. Michael V. Butts
Clark County Community
Development Department
P.O. Box 9810
Vancouver, WA 98666-9810

Dear Mr. Butts:

RE: SPR #96-092/MDNS for Daybreak Resource Project

Thank you for the opportunity to comment on the MDNS issued for the Storedahl and Sons Daybreak Resource Project on the East Fork of the Lewis River. I have the following comments and concerns.

1. The Sepa checklist was incomplete and inadequate. The only attached site plan was titled "Structures/Operational Plan" Fig. 4. A vicinity map is lacking, as is any information on where the 100 year floodplain is located, the location of the proposed conveyor system, the location of the "offsite" processing plant, and information about where material mined from this proposed site will be stockpiled.

2. It is clear that this site was once, and perhaps still is, part of a larger proposal to mine over 300 acres, much of which is contained within the 100 year floodplain of the Lewis River. Given the fact that there is apparently a draft EIS in process, it is not clear what the basis is for segregating this portion of the proposal out and considering it as a separate proposal. This appears to be a piecemeal approach to allow surface mining to occur within proximity to the East Fork of the Lewis River without the appropriate environmental analysis of the overall impacts to the river system. It also conveniently appears to remove the requirement for a shoreline permit.

3. The Department of Ecology disagrees with the County's determination that a shoreline permit will not be required for this proposal. Mining in Rural shoreline environments requires a Shoreline Conditional Use Permit. There are no exemptions in the implementing regulations for activities which require a Conditional Use Permit. WAC 173-27-040 (formerly WAC 173-14-040) sets forth the criteria for those specific developments which may be granted exemption from the substantial development permit process. Exemptions are to be construed narrowly.

WAC 173-27-040(b) states in part that a "development or use that is listed as a conditional use pursuant to the local master program or is an unlisted use, <u>must obtain a conditional use permit even though the development or use does not require a substantial development permit.</u>" (Emphasis added)

The proposal to place a conveyor system into the one hundred year floodplain of the Lewis River requires a Shoreline Conditional Use Permit.

4. The Department disagrees with the County's determination that the conveyor belt is considered equipment and not a structure. "Structure" is defined in WAC 173-27-030(15) as follows:

   "Structure" means a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels;

"Development" is defined, in part, in WAC 173-27-030(6) and RCW 90.58.030(3)(d) as "a use consisting of the construction or exterior alteration of structures" (emphasis added). The conveyor belt is clearly a "piece of work artificially built or composed of parts joined together in some definite manner".

The proposal to place a conveyor system into the one hundred year floodplain of the Lewis River requires a Shoreline Substantial Development Permit.

5. The Sepa checklist neglects to point out that processing of the material mined from this site will occur within the 100 year floodplain of the Lewis River. Active, unpermitted stockpiles are within approximately 100 feet of the Ordinary High Water Mark. In the absence of any information to the contrary, the Department assumes material from this proposal will be stockpiled within the 100 year floodplain of the Lewis River. A shoreline substantial development permit and shoreline conditional use permit are required for this activity.

6. In the absence of information, the Department is skeptical that mining can occur on this site that stays wholly outside the 100 year floodplain. A 20 foot buffer is minimal, and there is no information provided to show that it will adequately protect the 100 year floodplain and the Lewis River system from impacts associated with this proposal.

7. The Department strongly urges the County to withdraw the Mitigated Determination of Nonsignificance for this proposal and include this proposal as part of the larger proposed surface mine operation which is going through the EIS process.

8. The Lewis River is identified as a Shoreline of Statewide Significance under the Shoreline Management Act. As such, the Legislature has set forth use preferences in RCW 90.58 (which states in part) that recognize and protect the state-wide interest over local interest; preserves the natural character of the shoreline; results in long term over short term benefit; and protects the resources and ecology of the shoreline. The Sepa checklist lacks any discussion of how this proposal meets these goals.

9. The effort to piecemeal this project is inconsistent with the policies and regulations of the Shoreline Management Act and the Clark County Shoreline Master Program.

10. Any wells proposed to be abandoned must meet the minimum standards set forth in WAC 173-160 and must be done by a licensed well driller. The wells must be sealed below final grade due to the potential for contamination of the aquifer if the wells are deeper than the depth of the proposed mining operation.

If you have any questions regarding comments 1-9, please contact me at (360) 407-6520. If you have any questions regarding comment 10, please contact Chris Anderson at (360) 407-0272.

Sincerely,

Kim Van Zwalenburg

Kim Van Zwalenburg
Shoreline Specialist
Shorelands and Water
Resources Program

KVZ:cl

cc: Abbe White, Ecology
Scott Morrison, Ecology
Rex Hapala, Department of Natural Resources

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

RECEIVED
APR 21 1997
Clark County
Community Dev/Records

EXHIBIT # 17

April 18, 1997

Clark County Planning
Attn: SEPA Coordinator
PO Box 9810
Vancouver, WA 98666-9810

SEPA No. 011696

Dear Mr. Butts:

Thank you for the opportunity to comment on the J.L. Storedahl & Sons' "Site plan review and approval to operate a surface mine for the purpose of extracting sand and gravel on approximately 20 acres (SPR #96-092/Daybreak Resource Project). The proposal also includes the placement of an electrically operated conveyor from the mining site to an existing rock crusher on an adjacent site." This site is known to the Department more commonly as the "Daybreak Pit" (#70-010139) with Ray & Merry Woodside dba Sammamish Farms, the permit holder and J.L. Storedahl & Sons, the operator.

I have been asked to submit these comments on behalf of both DNR's Southwest Region and the Geology and Earth Resources Division. Due to time constraints, we have only touched a few of the many issues we believe need to be evaluated in a more detailed manner.

The first and most obvious comment that we have is that a Reclamation Plan will need to be submitted to the Department for review. The revised/modified Reclamation Plan must meet the requirements and standards set forth in RCW 78.44 and WAC 332-18. The Reclamation Plan needs to include all the areas that have been mined and that are to be mined. The SEPA Checklist indicates that "An application for a Surface Mining Reclamation Permit (Form SM-2) has been submitted to the Department of Natural Resources for this parcel." An application was submitted by the applicant but returned for its incompleteness on November 18, 1996 (See Attached Letter). In addition, on January 23, 1997, the Department reaffirmed that any reclamation plan submitted must be for the entire permit area and not portions of it (See Attached Letter). Since this issue is not addressed in documentation supporting the MDNS, we believe it should be treated as new information.

The second obvious issue concerns the interrelationship of the 20 acre parcel at issue, and the remaining adjoining acreage at the mine site. The Department has interpreted the Woodside's existing surface mining permitted area to be the full 349 acres, part of which is the proposed 20 acre parcel. As noted, in the Background section of the Draft Site Plan Review, Storedahl and the Woodsides have been in the process of developing their full plans for the 349 acre permitted area since 1991.

The pending proposal to mine 20 acres is clearly linked with other mining and mine-related activities on the adjoining 329 acres that have occurred in the past, will occur under this proposal, and are planned in terms of future proposals. First, this proposal clearly involves the movement and processing of tons of material through and on the floodplain, to the existing crusher, scale house, and stockpile area used for the prior mining activities. The impacts of these and other parts of the facility are not being considered. Mining is an all inclusive issue and by leaving that part of the project out, it would appear that some extremely important environmental issues are being ignored (noise, dust, surface and ground water, transportation, etc.). Shouldn't the effects of the reclamation and post-mining condition of these adjoining areas be considered in the context of the pending proposal to mine 20 more acres at the site? It would appear that the scope of the project should be all the areas where mining and mining related activities have occurred and will occur.

Second, more mining of the adjoining areas is clearly contemplated by the applicants. In the SEPA checklist, page two, question #7 (addressing plans for future additions, expansion, or further activity "connected" with this proposal), the applicant has affirmatively indicated that they plan to mine an additional adjacent 40 acre parcel. Is there any reason why the environmental review of these two linked proposals should be considered in this piecemeal fashion? The Department believes that all of the projects related to mining on the entire 349 acre permitted area are physically and functionally linked, and the environmental effects of all these activities should be assessed in one project document.

We have included three key definitions from the Washington Surface Mining Act, Chapter 78.44 RCW that may be of use when trying to better understand how the Department interprets mining operations.

> RCW 78.44.031(6) "Disturbed area" means any place where activities clearly in preparation for, or during, surface mining have physically disrupted, covered, compacted, moved, or otherwise altered the characteristics of soil, bedrock, vegetation, or topography that existed prior to such activity. Disturbed areas may include but are not limited to: Working faces, water bodies created by mine-related excavation, pit floors, the land beneath processing plant and stock pile sites, spoil pile sites, and equipment staging areas.
>
> RCW 78.44.031(8) "Operations" means all mine-related activities, exclusive of reclamation, that include, but are not limited to activities that affect noise generation, air quality, surface and ground water quality, quantity, and flow, glare, pollution, traffic safety, ground vibrations, and/or significant or substantial impacts commonly regulated under provisions of land use or other permits of local government and local ordinances, or other state laws.
>
> Operations specifically include:
>
> (a) The mining or extraction of rock, stone, gravel, sand, earth, and other minerals;
> (b) Blasting, equipment maintenance, sorting, crushing, and loading;
> (c) On-site mineral processing including asphalt or concrete batching, concrete recycling, and other aggregate recycling;
> (d) Transporting minerals to and from the mine, on site road maintenance, road maintenance for roads used extensively for surface mining activities, traffic safety, and traffic control.
>
> RCW 78.44.031(11) "Reclamation" means rehabilitation for the appropriate future use of disturbed areas resulting from surface mining including areas under associated mineral processing equipment and areas under stockpiled materials.

Clark County has indicated that the existing processing plant and stockpile area is pre-existing or "grandfathered" and thus does not need a Shorelines Permit. The issue of "grandfathering" of the existing processing area is questionable. On April 15, 1991, the DNR sent a letter to the Department of Ecology about this issue (See Attached Letter). The response from the Department of Ecology stated that ***"There should be no grandfathering of the older mines, despite the fact that they may have pre-existed the Shoreline Management Act..."*** (See Attached Letter). In addition, the determination not to require a Shorelines Permit for the conveyor is also questionable.

A major question that is not addressed and should be considered is that the excavation of this site (20 acres and 45 feet deep) directly adjacent to the floodplain may have the physical and legal effect of changing the location of the floodplain line. We believe that these issues need to be explored in the environmental review of this project.

One of the concerns that the Department has had for numerous years has been the issue of river avulsion. Section 3 of the Draft Site Plan Review Staff Report and Determination has some conflicting information about the potential for the river to invade the site. According to Dr. Bradley *"avulsion of the main channel of the East Fork of the Lewis River into the subject mining area is highly improbable."* Continued on the next page, G. Mathias Kondolf, Ph.D., indicates that ***"the river does have the potential and will most likely flow into the proposed or the existing adjacent mining pits in the future (Kondolf, pp.5)."*** We were unable to locate Dr. Bradley's January 9, 1997 letter/report in Response to County Concerns Regarding Effects on Floodplain and Avulsion or Dr. Kondolf's April 11, 1996 report on Effects of Aggregate Mining on River Floodplains. It is interesting to note that Dr. Bradley indicates that since 1935 the river has never approached within 1,300 feet of the site and has consistently moved to the south, away from the project site. It should be pointed out that from circa 1854 to circa 1937 the river showed classic features of a braided stream/channel. By 1937 or so, the braided stream/channel is replaced with a single channel that is probably unstable during major floods. This issue is by far the largest concern but little data or conclusions are provided to support the MDNS. The only mitigation measures identified are to move the conveyor if flooding threatens and seasonal drainage through the berm.

Some of the SEPA Mitigation measures identified are not clear:

-Number 1 of the SEPA Mitigation says no mining will occur as indicated on the site plan. No site plan was attached. What is meant when the word "[illegible]" is used? Who will make that determination? Does this mean the floodplain no longer functions as a floodplain? Avulsion is imminent or likely? This is vague. Is there a study that discusses this issue and defines thresholds?

-Number 4 of the SEPA Mitigation says that *"The conveyor shall be removed if flooding threatens to enter the location of the conveyor."* How and who will make the determination to move the conveyor?

-Number 5 of the SEPA Mitigation talks about expected flows into the mining site. What size of an event will it be looking at? How will these effect the channel morphology? Will avulsion result? [illegible] required?

-Number 6 of the SEPA Mitigation says mining shall not occur into the Troutdale Formation. Have test holes been drilled on the site to locate this formation and determine its exact location and depth throughout the site?

-Number 8 of the SEPA Mitigation shows that a 10 foot high berm will be built for noise. What specifications is it going to be constructed too? How long will this and other berms be in place? The material stored in berms plays a key role in reclamation, so this is of interest to the Department.

It is our opinion that a thorough Hydrogeologic Report should be required. That report should assess all effects and potential effects of mining activities occurring on this site (349 acres). Additionally, the Department's position is that a reclamation plan must be submitted for the areas where mining and mining related activities have occurred and will occur.

Once again, thank you for allowing us the opportunity to comment on this proposal. If you have any questions please feel free to call or write me at our Southwest Region office (360)577-2025.

Sincerely,

Rex J. Hapala
Geologist

Enclosures

c: SEPA Center
SW SEPA File
Jan Gano, SW Region Manager
Neil Smith, SW Assistant Region Manager
Lloyd Handlos, District Manager
Phil Ferester, Assistant Attorney General
Kim Van Zwalenburg, Department of Ecology
Scott Morrison, Department of Ecology
Brian Cowan, Department of Fish and Wildlife
Geology & Earth Resources Division
File #10139
r.f.

WASHINGTON STATE DEPARTMENT OF
Natural Resources

BRIAN BOYLE
Commissioner of Public Lands

Division of Geology & Earth Resources
Rowesix Bldg. 1, MS:PY-12
4224 6th Ave. SE
Lacey, WA 98503
(206) 459-6372

April 15, 1991

Tom Mark
Department of Ecology
Shorelands Management Section
Mailstop PV-11
Lacey, WA 98504

Subject: Grand fathering of the Shorelines Management Act

Dear Mr. Mark:

I have a question regarding the "grandfathering" of surface mines along shorelines. As an example, the East Fork of the Lewis River in Clark County has several sand and gravel mines located on the 100 year flood plain and also within 200 feet of the river. The active surface mine permits are:

SM Permit	Name	Location	Issued	Acres
11236	J.L Storedahl	Sec.13,24 T4N R1E	1974	70
10139	Ray Woodside	Sec.13,19,18,24 T4N R1,2E	1971	300+
10389	Clark County	Sec.19 T4N R2E	1972	100

There are currently two new proposed surface mines adjacent to the above surface mine permits which will require shoreline permits according to Clark County. However, none of the older surface mine permits are required to have shoreline permits because Clark County has determined that the mines are "grandfathered".

The question is, don't all of the older surface mines need a shoreline permit as well as the newer ones? If all of the above mines need a shoreline permit it would be appropriate to inform Clark County as they seem confused about their jurisdiction.

As we understand it the Shoreline Management Act can provide the best master plan for the river, further development, and the past and future mining.

Thank you for your assistance and please do not hesitate to call if you have any questions regarding surface mines on the floodplain of the East Fork of the Lewis River.

Sincerely,

David K. Norman
Geologist

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APR 17 1991
SW REGION

WASHINGTON CENTENNIAL

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

RECEIVED

April 26, 1991

Mr. David Norman
Department of Natural Resources
Division of Geology and Earth Resources
Mailstop PY-12
Olympia, WA 98504

Dear Mr. Norman:

You are correct in assuming that both old and new surface mines require shoreline permits. There should be no grandfathering of the older mines, despite the fact that they may have pre-existed the Shoreline Management Act, because any mining activities which may have been legal at the effective date of the Shoreline Management Act on June 1, 1971, were required to be permitted not later than June 1, 1973. The requirement to obtain permits for pre-existing developments is set out specifically by 90.58.140(10) RCW, which states:

> A permit shall not be required for any development on shorelines of the state included within a preliminary or final plat approved by the applicable state agency or local government before April 1, 1971, if: . . .
>
> (b) The development is completed within two years after June 1, 11. (Emphasis added.)

This requirement is reiterated by Ecology's implementing regulations at WAC 173-14-050, which exempt from permitting those substantial developments undertaken on the shorelines of the state prior to the effective date of the act "except . . . [w]here the development is not completed within two years after the effective date of the act." (Emphasis added.)

The surface mining is clearly an ongoing project, and as such requires a valid shoreline permit in order to continue operations lawfully. That mining operations constitute "development" under the Act is unquestioned, because the definition of development includes "dredging; drilling; dumping; filling; removal of any sand, gravel or minerals . . . ." 90.58.030(3)(d).

Finally, Clark County's own Shoreline Master Program spells out that in areas that have shoreline environment designations of Urban, Rural, and Conservancy, mining is a Conditional Use, and thus requires a Conditional Use Permit to be a lawful activity. These three designations are the predominant environment designations on the East Fork of the Lewis River. In those areas with an environment designation of Natural, mining is prohibited completely.

If you should have additional concerns regarding this matter, please feel free to contact me at 438-7468.

Sincerely,

Bonnie S. Shorin
Legal Liaison
Shorelands and Coastal Zone
Management Program

BSS:del

cc: Rich Hines

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

November 18, 1996

Virgil Barnett
J.L. Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

RE: Comments on September 26, 1996 Segment 2 & 3 Reclamation Plan for the Daybreak Mine (#70-010139)

Dear Mr. Barnett:

We have reviewed your most recent reclamation plan for the Daybreak Mine. It is extremely difficult to make a detailed list of the items that your reclamation plan is presently missing. I have tried to give a general list of the most obvious items below:

- A single/complete Application for Surface Mining Reclamation Permit (Form SM-2)
- A single/complete County or Municipality Approval for Surface Mining (Form SM-6)
- A single/complete Standard Reclamation Plan (Form SM-8A)
- A written narrative describing the proposed mining and reclamation scheme (RCW 78.44.091(1))
- River avulsion/flood plain issues not addressed (RCW 78.44.091(1)(i)(j))
- Topsoil/overburden management plans (RCW 78.44.091(1)(k))
- Cross-section maps (RCW 78.44.091(3))
- Maps that depict the entire permit boundary
- Maps as they relate to the flood plain (RCW 78.44.091(2)(a))
- Setbacks (RCW 78.44.121)
- The ponds presently do not show irregular shoreline configurations, sinuous bathymetry and shorelines, peninsulas, islands, etc. (RCW 78.44.141(4)(c)(iv))

It does not appear appropriate to split the proposal into different permits. As it stands, any reclamation plan submitted to the Department needs to be a single comprehensive plan for the whole permit area. Please note that due to the above needs the SEPA documents were not reviewed.

The Department can not approve the plan as it is presently submitted. I am returning the documents that you submitted.

It would appear that it may be necessary to sit down and review your plan and the issues that were not addressed. With the holiday season close at hand and various other scheduling conflicts, please keep in mind that meetings may not be easily scheduled with short notice. If you wish to go in this direction please contact me at our Southwest Region office so that we may make the necessary arrangements.

Sincerely,

Rex J. Hapala
Geologist

c: Ray & Merry Woodside
Monty Anderson, Clark County
Rich Hines, Clark County
Phil Ferester, AAG
Neil Smith, RP&S Assistant Manager
Lloyd Handlos, District Manager
Dave Norman, Geology Division
File #10139
r.f.

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

January 22, 1997

Virgil Barnett
J.L. Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

Dear Mr. Barnett:

This is a follow up to my November 18, 1996 letter and additional conversations dealing with the Daybreak Pit on the East Fork of the Lewis River.

The Department has reviewed and considered your proposal(s) to mine both the 20 and 60 acre parcels that are within the existing 349 acre permit area (#70-010139). We have decided not to accept those applications. Our position is that we will not split the permit area. This is based on the [redacted] permit holder in 1990 that the reclamation plan that would be submitted would cover the entire permit area.

Sincerely,

Rex J. Hapala
Geologist

c: Ray & Merry Woodside, Permit Holder
John Dentler, J.L. Storedahl & Sons Legal Counsel
Monty Anderson, Clark County
Rich Hines, Clark County
Melissa Remick, Clark County
Brian Carrico, Clark County
Phil Ferester, Assistant Attorney General
Bill Lingley, Geology Division
Dave Norman, Geology Division
Jan Gano, SW Region Manager
Neil Smith, SW Assistant Region Manager
Lloyd Handlos, District Manager
File #10139
r.f.

SOUTHWEST REGION ▮ 601 BOND RD ▮ PO BOX 280 ▮ CASTLE ROCK, WA 98611-0280 ▮ FAX: (360) 274-4196 ▮ TEL: (360) 577-2025

RECYCLED PAPER

EXHIBIT # 18

SHORELINE MANAGEMENT MASTER PROGRAM

CLARK COUNTY, WASHINGTON

August, 1974

Prepared by the Clark County Citizen Advisory Committee for Shoreline Management in cooperation with the Regional Planning Council of Clark County.

The preparation of this Master Program was aided by the Washington State Office of Community Development through a Federal grant from the U.S. Department of Housing and Urban Development under the provisions of Section 701 of the Housing Act of 1954, as amended, and a State grant from the Washington State Department of Ecology under Section 25 of the Shoreline Management Act of 1971.

This document was completed under provisions of Contract No. 1006-500.2-6, and Contract No. 1020-502.0-6 between the Department of Ecology and the Regional Planning Council of Clark County.

CLARK COUNTY
WASHINGTON

File: SPR #96-092 (DAYBREAK RESOURCE PROJECT)
Date Published: April 4, 1997

EXHIBIT # 19

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

April 4, 1997

This document contains a combined SEPA Review and Development Review Staff Report.

Please find enclosed an environmental Mitigated Determination of Nonsignificance (MDNS) issued pursuant to the State Environmental Policy Act (SEPA) Rules (Chapter 197-11, Washington Administrative Code). The enclosed review comments reflect evaluation of the environmental checklist by the lead agency as required by WAC 197-11-330 (1)(a)(i). You may comment on this determination within fifteen (15) days of its issuance, after which the MDNS will be reviewed in light of the comments received.

Please address any correspondence to:

Clark County Planning Division
Attn: SEPA Coordinator
PO Box 9810
Vancouver, WA 98666-9810

DISTRIBUTION

Federal Agencies:
Federal Emergency Management (FEMA)
National Marine Fisheries
USDA Soil Conservation
US Environmental Protection (Water Quality Division)
US Department of Commerce (National Marine Fisheries)
US Fish & Wildlife Service (Fisheries Assistant Office)
US Fish & Wildlife Service (Don Anglin)
US Fish & Wildlife, Enhancement
US Army Corps of Engineers

State Agencies:
Archeology & Historic Preservation
Department of Community, Trade & Economic Development
Department of Fisheries
Department of Fisheries, SEPA Coordinator
Department of Fish and Wildlife
Department of Ecology
Department of Ecology, SW Regional Office (Shoreline Section)
Department of Natural Resources, SEPA Center
Department of Natural Resources, SW Region
Department of Transportation

Regional Agencies:
Fort Vancouver Regional Library
SW Washington Health District
SW Washington Air Pollution Control (SWAPCA)

Local Agencies:
Clark County Department of Community Development
- Central Files
- Planning
- Water Quality Division
- Fire Marshal's Office

Clark County Public Works:
- Transportation Division
- Environmental Services

MITIGATED
DETERMINATION OF NONSIGNIFICANCE

Description of proposal: SPR #96-092 (Daybreak Resource Project) Site plan review and approval to operate a surface mine for the purpose of extracting sand and gravel on approximately 20 acres in the AG-20-S zoning district (Agriculture with Surface Mining Combining). The proposal includes the placement of a electrically operated conveyor from the mining site to an existing rock crusher on and adjacent site.

Proponent: JL Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

Location of proposal, including street address, if any: South of NE JA Moore Road and West of NE 61st Avenue at approximately the 28000 block of NE 61st Avenue. Tax lot 107 (225047) located in the southwest quarter of Section 18, Township 4 North, Range 2 East, W.M.

Lead agency: Clark County, Washington

The lead agency for this proposal has determined that, as mitigated, it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This determination is based, in part, on several environmental documents submitted by the applicant. These documents are available for viewing at Clark County Community Development, Planning Department, 1408 Franklin Street, Vancouver WA 98666. Free copies of these environmental documents are also available by contacting Debi LaZier, in advance, at (360) 699-2375, extension 4277.

This MDNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 15 days from the date below.

Responsible Official: Michael V. Butts, Clark County Community Development
Position/title: Current Planning Manager
Address: 1408 Franklin Street, P.O. Box 9810, Vancouver, WA 98666-9810
Staff Contact: **Gary Fish** **Phone: 699-2375, extension 4968**
Date: April 4, 1997
Signature: [signature]

SEPA Mitigation

The following measures are based on the general policies of Chapters 20.50.020 and 20.50.025 of the Clark County Code, subsections (1) (a)(c)(d), and (3) (a)(i)(iv), (b)(i), (c)(i)(ii), (f), (g)(x)(xi) (i)(iv) and (k), and on the specific policies of Chapter 18.402A and 18.329.

1. *No mining shall occur within the floodplain as indicated on the site plan. The applicant shall submit information clearly indicating how these narrow fingers can be mined without threatening the integrity of the floodplain. If at any time the integrity of the floodplain is threatened, mining will cease and the county notified. Appropriate measures shall be implemented to protect or restore the floodplain prior to commencing further mining in these areas.*

DISTRIBUTION
CONTINUED:

Special Purpose Agencies:

Fire Protection District #11
Clark County Conservation District

Other:

Applicant (3)
Audubon of Vancouver
Clark County Neighbors
Clark County Water Quality Resource Council
Chehalis Business Council
Chinook Tribe
Cowlitz Indian Tribe
The Columbian (2)
The Oregonian
Clark County Natural Resource Council
Clark County Citizens United
Muckleshoot Tribal Council
Puyallup Tribal Council
Shoalwater Bay Tribal Council
Siletz Tribal Court
Sequoyah Institute
C-TRAN
Friends of the East Fork
Historic Preservation

CLARK COUNTY
WASHINGTON

File: SPR #96-092 (DAYBREAK RESOURCE PROJECT)
Date Published: April 4, 1997

EXHIBIT # 19

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

April 4, 1997

This document contains a combined SEPA Review and Development Review Staff Report.

Please find enclosed an environmental Mitigated Determination of Nonsignificance (MDNS) issued pursuant to the State Environmental Policy Act (SEPA) Rules (Chapter 197-11, Washington Administrative Code). The enclosed review comments reflect evaluation of the environmental checklist by the lead agency as required by WAC 197-11-330 (1)(a)(i). You may comment on this determination within fifteen (15) days of its issuance, after which the MDNS will be reviewed in light of the comments received.

Please address any correspondence to:

Clark County Planning Division
Attn: SEPA Coordinator
PO Box 9810
Vancouver, WA 98666-9810

DISTRIBUTION

Federal Agencies:

Federal Emergency Management (FEMA)
National Marine Fisheries
USDA Soil Conservation
US Environmental Protection (Water Quality Division)
US Department of Commerce (National Marine Fisheries)
US Fish & Wildlife Service (Fisheries Assistant Office)
US Fish & Wildlife Service (Don Anglin)
US Fish & Wildlife, Enhancement
US Army Corps of Engineers

State Agencies:

Archeology & Historic Preservation
Department of Community, Trade & Economic Development
Department of Fisheries
Department of Fisheries, SEPA Coordinator
Department of Fish and Wildlife
Department of Ecology
Department of Ecology, SW Regional Office (Shoreline Section)
Department of Natural Resources, SEPA Center
Department of Natural Resources, SW Region
Department of Transportation

Regional Agencies:

Fort Vancouver Regional Library
SW Washington Health District
SW Washington Air Pollution Control (SWAPCA)

Local Agencies:

Clark County Department of Community Development
- Central Files
- Planning
- Water Quality Division
- Fire Marshal's Office

Clark County Public Works:
- Transportation Division
- Environmental Services

DISTRIBUTION
CONTINUED:

Special Purpose Agencies:	Fire Protection District #11 Clark County Conservation District
Other:	Applicant (3) Audubon of Vancouver Clark County Neighbors Clark County Water Quality Resource Council Chehalis Business Council Chinook Tribe Cowlitz Indian Tribe The Columbian (2) The Oregonian Clark County Natural Resource Council Clark County Citizens United Muckleshoot Tribal Council Puyallup Tribal Council Shoalwater Bay Tribal Council Siletz Tribal Court Sequoyah Institute C-TRAN Friends of the East Fork Historic Preservation

MITIGATED
DETERMINATION OF NONSIGNIFICANCE

Description of proposal: SPR #96-092 (Daybreak Resource Project) Site plan review and approval to operate a surface mine for the purpose of extracting sand and gravel on approximately 20 acres in the AG-20-S zoning district (Agriculture with Surface Mining Combining). The proposal includes the placement of a electrically operated conveyor from the mining site to an existing rock crusher on and adjacent site.

Proponent: JL Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

Location of proposal, including street address, if any: South of NE JA Moore Road and West of NE 61st Avenue at approximately the 28000 block of NE 61st Avenue. Tax lot 107 (225047) located in the southwest quarter of Section 18, Township 4 North, Range 2 East, W.M.

Lead agency: Clark County, Washington

The lead agency for this proposal has determined that, as mitigated, it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This determination is based, in part, on several environmental documents submitted by the applicant. These documents are available for viewing at Clark County Community Development, Planning Department, 1408 Franklin Street, Vancouver WA 98666. Free copies of these environmental documents are also available by contacting Debi LaZier, in advance, at (360) 699-2375, extension 4277.

This MDNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 15 days from the date below.

Responsible Official: Michael V. Butts, Clark County Community Development
Position/title: Current Planning Manager
Address: 1408 Franklin Street, P.O. Box 9810, Vancouver, WA 98666-9810
Staff Contact: **Gary Fish** **Phone: 699-2375, extension 4968**
Date: April 4, 1997
Signature: Marty Chilvin for Michael Butts

SEPA Mitigation

The following measures are based on the general policies of Chapters 20.50.020 and 20.50.025 of the Clark County Code, subsections (1) (a)(c)(d), and (3) (a)(i)(iv), (b)(i), (c)(i)(ii), (f), (g)(x)(xi) (i)(iv) and (k), and on the specific policies of Chapter 18.402A and 18.329.

1. *No mining shall occur within the floodplain as indicated on the site plan. The applicant shall submit information clearly indicating how these narrow fingers can be mined without threatening the integrity of the floodplain. If at any time the integrity of the floodplain is threatened, mining will cease and the county notified. Appropriate measures shall be implemented to protect or restore the floodplain prior to commencing further mining in these areas.*

2. *A geotechnical engineer shall visit the site a minimum of every 3 months, or more often as needed during mining to assess changing circumstances, from the date of initial operation to assess the soil conditions and the stability of the created slopes. If any unanticipated or unsafe conditions are encountered, mining practices and slopes shall be modified as recommended by the engineer. The applicant shall submit a copy of the report from the engineer to the county following each visit.*

3. *The applicant shall provide a dust control plan for mining activities, the use of the conveyor and any access roads.*

4. *The conveyor shall be removed if flooding threatens to enter the location of the conveyor.*

5. *Appropriate provisions shall be made to accommodate the seasonal drainage through the proposed berms to prevent damage to the road and threats to public safety. Engineering plans and specifications shall be submitted for review and approval to Development Engineering prior to site plan approval. Appropriate provisions shall be made to accommodate expected flows and to prevent erosion from occurring to the walls of the mining pit where the seasonal drainage enters the pit.*

6. *Mining shall not occur within the cemented fine-grained sandstone layer. When excavation encounters this layer mining shall not proceed to a greater depth.*

7. *In order to prevent possible spills, the maintenance of equipment involving potential pollutants shall not occur on site. Equipment shall be moved to a location that has facilities to handle spills and other incidents prior to servicing. This is not intended to prevent refueling of equipment for occurring on site. Appropriate practices shall be undertaken to reduce the possibility of spills while refueling of equipment. A pollution prevention plan shall be submitted prior to final site plan approval indicating what practices will be followed and how spills will be handled.*

8. *A 10 foot high earthen berm shall be constructed along the north and east project boundaries prior to the commencing of mining operations. This measure is not intended to prevent the excavation of overburden to construct the required berms. Upon commencement of the mining activities, a measurement of the actual noise impacts on residences shall be conducted to determine whether the berms adequately mitigate noise impacts. A report containing the measurement results shall be completed and submitted to Clark County. If it is found that the berms do not provide adequate mitigation additional measures shall be recommended by the applicant, reviewed by Clark County and implemented.*

9. *Excavation of overburden within 100 feet of shovel probe 4 shall be monitored by a professional archaeologist. If any remains are found, excavation shall be stopped until the nature and significance of the remains are determined. Prior to recommencing mining activities the applicant shall consult with State agencies and the County to determine the significance of the find and the appropriate course of action to be taken.*

The staff contact person and telephone number for any questions on this review is Gary Fish, extension 4968 at (360) 699-2375.

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CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

LEAD AGENCY SEPA THRESHOLD DETERMINATION and DRAFT SITE PLAN REVIEW STAFF REPORT AND DETERMINATION

Date: April 4, 1997

To: David J. Newton & Associates
Mr. Robert B. Laird
1201 SW 12th Avenue, Suite 400
Portland OR 97205

From: Monty K. [illegible], Senior Planner
for: Michael V. Butts, Current Planning Manager

Staff: Brian P. Carrico, Planner II
Gary Fish, Planner II

Case File: Site Plan Review #96-092 (Daybreak Resource Project)

Applicant: JL Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

Request: The applicant requests approval for the operation of a surface mine for the purposes of extracting sand and gravel on approximately 20 acres in the AG-20-S (Agriculture with Surface Mining Combining District). The project will occur in 3 to 6 acres phases over a period of 3 to 6 years. The applicant also proposes the placement of a conveyor from the mining site to an existing rock crusher adjacent to the site.

SEPA Determination: Mitigated Determination of Nonsignificance

Draft Site Plan Determination: **Approval**, subject to the conditions identified at the end of this report.

1408 FRANKLIN STREET • P.O. BOX 9810 • VANCOUVER, WASHINGTON 98666-9810
(360) 699-2375 • FAX (360) 699-2011 • TDD (360) 737-8057

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I. FACTS

Review Type: Site Plan Type II and SEPA Review

Authorization: Clark County Code Sections 18.65 (Impact Fees), 18.303 (Forest and Agriculture Districts), 18.329 (Surface Mining Combining District), 18.402A (Site Plan Review), 18.409 (Signs), 12.05 (Roads), 13.08 (Sewer Guidelines), 13.25 (Stormwater/Drainage), 13.27 (Erosion Control), 13.36 (Wetland Protection), 13.40 (Water Supply), 13.50 (Vegetation Clearing Management), 15.12 (Uniform Fire Code), 20.50 (SEPA and County Decisions).

Location: South of NE JA Moore Road and West of NE 61st Avenue. Approximately the 28000 block of NE 61st Avenue.

Legal: Tax lot 107 (225047), located in the southwest quarter of Section 18, Township 4 North, Range 2 East, W.M.

Area: Approximately 20 acres.

II. BACKGROUND INFORMATION

Tax lot 107 (225047) is a legal lot of record as determined by staff review.

The original proposal involved the mining of the entire site, including the area within the Shoreline Management jurisdiction. The proposal was subsequently modified (Revision #1) to exclude mining from the floodplain and therefore Shoreline Management jurisdiction. Although mining is no longer proposed for the floodplain, an electrically operated conveyor belt is proposed to be located in portions of the floodplain in order to transport materials off-site to a processing area. Based on the revised site plan, the Planning Director issued a determination concluding that a Shoreline Management Permit is not required since mining is not proposed in the floodplain, and the conveyor belt is considered equipment and not a structure (see January 27, 1997, letter from Monty Anderson for Jerri Bohard, Acting Planning Director). This Planning Director determination was appealed to the Hearings Examiner on February 10, 1997, by Friends of the East Fork and is scheduled to be heard on May 8, 1997. At the time of this report, a determination has not been made regarding the appeal.

This 19 acre project site is also identified as a portion of a larger, 349 acre surface mining proposal (#CC-256-91, JL. Storedahl & Sons/Woodside Gravel Mining (Woodside)). The applicant applied for a Shoreline Management Permit for the Woodside project in 1991. The Woodside project is located to the north and west (south of JA Moore Road, north of the East Fork of the Lewis River), and to the east (north of Bennet Road between NE 61st and NE 69th

Avenues) of this project area. A SEPA Determination of Significance was issued on May 22, 1991, for that Shoreline Management Permit application. The environmental impact statement (EIS) required by the SEPA Determination of Significance has yet to be completed for that project. A preliminary EIS was submitted to Clark County in July, 1996. The EIS was returned to the applicant for revisions based on Clark County and other agency comments.

III. REVIEW

The following is a review of the proposed site plan for your project. Items listed as "Acceptable" indicate that there were no concerns or issues with that specific portion of the review. Other comments indicate revisions, which are required, for a final site plan submittal or to provide you with information about the review thus far. Attached is a redlined copy of your site plan indicating necessary revisions.

If you have questions regarding a specific issue please direct your calls to the appropriate person, as follows:

Transportation - John Ruben	699-2375 Ext. 4102
Drainage - Warren Wannamaker	699-2375 Ext. 4585
Fire Marshal - Joe Cartisser	699-2375 Ext. 4110

A. ZONING

The site is zoned Agriculture with the Surface Mining Combining District (AG-20-S) and carries a Comprehensive Plan designation of Agriculture with a mining overlay. A portion of the subject site is also within the Shoreline Combining district. Surrounding zoning is as follows:

North:	Rural Estate (RE)
South:	Agriculture (AG-20)
East:	Rural Estate (RE)
West:	Agriculture (AG-20)

B. IMPACT FEES

Traffic impact fees (TIF) are not required for this proposal as the project is within an area without an adopted TIF program. School and Park Impacts fees (SIF, PIF) do not apply to this project as no residential units are being established.

C. SITE PLAN REVIEW (SEPA Environmental Elements #8. Land and Shoreline Use, #9. Housing, #11. Light and Glare, #12. Recreation)

18.402A.010 (Applicability and review process): Site plan review is required for all new development and modifications to existing permitted development, unless expressly exempted by the site plan review title.

A site plan application shall include the following information presented on separate sheets or combined:

- *An existing conditions plan*
- *A site plan*
- *A preliminary stormwater and erosion control plan or plans*
- *Architectural plans and elevations*
- *A landscape plan*
- *A sign plan*

Drawings shall be on sheets not larger than twenty-four (24) inches by thirty-six (36) inches. Site plans shall be drawn at a scale of one (1) inch equals fifty (50) feet or larger (e.g., one (1) inch equals thirty (30) feet). Building elevations and floor plans shall be drawn at a scale of one-quarter (1/4) inch or one-eighth (1/8) inch equals one (1) foot.

A site plan application also shall include a narrative describing the uses proposed for site, hours of operation, hours and frequency of deliveries, and construction schedule.

1. Existing Conditions Plan [CCC 18.402A.030 (B)]

Criteria: The site plan review application packet shall contain an existing conditions plan. The existing conditions plan shall include the following information:

1. *A vicinity map showing streets and access points, pedestrian and bicycle pathways, transit stops and utility locations within a given radius of the site;*
2. *The site size, dimensions and orientation relative to north;*
3. *The location, name and dimensions of public and private streets adjoining the site;*
4. *The location of existing structures and other improvements on the site, including structures, driveways, parking, loading, pedestrian and bicycle paths, passive or active recreational facilities or open space, and utilities;*
5. *Elevation of the site at two (2) foot contour intervals for grades zero to ten percent (0% to 10%) and at five (5) foot contour intervals for grades more than ten percent (10%);*

6. *The approximate location of significant natural conditions, such as:*
   a. *The one hundred (100) year floodplain,*
   b. *The location of drainage patterns and drainage courses,*
   c. *Slopes in excess of fifteen percent (15%),*
   d. *Unstable ground (land subject to slumping, slides or movement),*
   e. *High seasonal water table or impermeable soils,*
   f. *Areas having a severe soil erosion potential,*
   g. *Areas having severe weak foundation soils,*
   h. *Significant wildlife habitat or vegetation,*
   i. *Significant historic, cultural or archeological resources,*
   j. *Rock outcroppings,*
   k. *The approximate location and description of individual trees that have a diameter of six (6) inches or more measured four (4) feet above grade at the base of the tree(s); provided, the plan may show clusters of such trees, rather than individual trees, when trees are near one another, and*
   l. *Other information necessary to comply with Chapter 13.50 (Vegetation Management) of this code, where applicable.*

Findings:

CCC 18.402A.030 (B) requires a separate Existing Conditions plan be submitted indicating several items, such as existing structures, environmentally sensitive features, etc. A separate existing conditions plan was provided as sheets 2A and 2B of the submittals, which included all of the required information.

2. Site Plan [CCC 18.402A.030 (C)]

Criteria: *The site plan review application packet shall contain a site plan. The proposed site plan shall be drawn at the same scale as the existing conditions plan and shall include the following information:*

1. *The proposed site and its dimensions and area;*
2. *Abutting properties or, if abutting properties extend more than one hundred (100) feet from the site, the portion of abutting properties within about one hundred (100) feet of the site, and the approximate location of structures and uses on abutting property or portion of the abutting property;*
3. *The location and dimensions of proposed development, including the following:*
   a. *Streets and other rights-of-way and public or private access easements on and adjoining the site,*
   b. *Vehicle, pedestrian and bicycle parking and circulation areas,*
   c. *Loading and service areas,*
   d. *Active or passive recreational or open space features,*
   e. *Above-ground utilities,*

f. *Existing structures to be retained on the site and their distance from property lines,*

g. *Proposed structures on the site, including signs, fences, etc., and their distance from property lines,*

h. *The location and type of proposed outdoor lighting and existing lighting to be retained,*

i. *The size and location of solid waste and recyclable storage areas.*

Findings:

Site area and dimensions
The site plan indicates site area and dimensions. Acceptable.

Abutting properties
The site plan needs to indicate the portions of abutting properties within 100 feet of site and the approximate locations of any structures within that 100 feet.

Streets, rights-of-way and access easements
The site plan submitted indicates existing, abutting public rights-of-way for NE JA Moore Road and NE 61st Avenue. All access to the site will be from the existing processing area. No access is indicated from JA Moore Road and NE 61st Avenue. Indicate the access road for the quarry, including location, width and construction type.

Chapter 18.402a does not provide specific parking standards for mining activity. Parking requirements for this proposal will be based on the maximum number of employees that will be present on site on the average work day. Applicant will need to provide employee numbers and indicate the parking spaces on the site plan. Parking may be located off site however the applicant will have to insure that adequate parking is available off-site.

Active or passive recreational or open space features
No residential uses are proposed and therefore no recreational space is required. No Park Impact Fees are required. In addition, the site is not located in the area of a designated park location, as indicated on the Clark County Comprehensive Parks and Recreation Plan. Acceptable.

Above-ground utilities
The site plan indicates above ground utilities. There is an existing power line running through the project site. This power line must be properly abandoned or moved prior to commencing mining activity. The site plan must clearly indicate how the power line will be handled. Acceptable.

Existing/proposed structures
There is an existing single family residence on the site. A demolition or moving permit must be approved and the structure must be removed prior to commencing mining activities.

Outdoor lighting
A detailed lighting plan is required for all proposed lights, including height, wattage, glare and photometrics.

Solid waste and recyclable storage areas
No solid waste and recyclable storage areas are indicated. Mining operations and equipment maintenance are likely to create solid waste. The applicant shall provide, at a minimum, facilities on site to handle the solid waste. The final site plan should indicate the location of the solid waste storage area or alternat vely, a narrative on how solid waste created on site will be handled.

3. Landscape Plan [CCC 18.402A.030 (F)]

Criteria: *The site plan application packet shall include a landscape plan. The landscape plan shall be drawn at the same scale as the existing conditions plan, or a larger scale if necessary. Where proposed development affects only a portion of a site, the landscape plan need show only the areas where existing soil contours and vegetation will be disturbed by the construction or use, or other areas where landscaping is required. A landscape plan shall show the following:*

1. *The location, species and size, (i.e., diameter and/or height), of existing landscape material, identifying the material to be removed and to be retained;*
2. *The location, species, size at planting and spacing of proposed plant materials;*
3. *The proposed landscape area of the site, (i.e., in terms of square feet and a percentage of the net site area);*
4. *The location, height and material of fences, buffers, berms, walls and other proposed screening;*
5. *The location and dimensions or area of terraces, decks, shelters, play areas and open spaces; and*
6. *Surface water management features that are integrated with landscape, recreation or open space areas.*

Findings:

No landscape plan is required for this proposal. The site will be revegetated consistent with DNR standards. The approved reclamation plan must be submitted prior to final site plan approval.

4. Sign Plan [CCC 18.402A.030 (G), CCC 18.409]

Criteria: *Sign drawings shall be submitted as described in Chapter 18.409 of this title.*

Findings:

No additional signs are indicated. A separate sign permit and fee will be required (CCC 18.409) for any proposed signs. For specific questions regarding signs please contact Karen Williams at (360) 699-2375, extension 4964.

5. Architectural Plans/Elevations [CCC 18.402A.030 (E), SEPA Environmental Element #10. Aesthetics]

Criteria: *The site plan application packet shall include architectural plans and elevations. The following architectural plans and elevations shall be provided:*

1. *Floor plans showing at least the gross square footage of each structure and outdoor activity area proposed on the site, including existing structures and outdoor activity areas to be retained;*
2. *A description of the proposed and potential uses of each structure or portions of a structure and each outdoor activity area; and*
3. *Typical elevation drawing of each structure.*

Findings:

No architectural plans and elevations were submitted as no additional structures were proposed. Acceptable.

D. WETLANDS, WATER QUALITY and EROSION CONTROL [CCC 13.25, 13.27, 13.36, SEPA Environmental Elements #1. Earth, #3. Water]

Criteria: *CCC Chapters 13.25 and 13.27 provide drainage, water quality, and erosion control standards and requirements. The mitigation measure imposed through SEPA places a temporal limitation on grading to control erosion.*

CCC 13.36 sets for the wetland classification criteria, protection measures and permitting processes for lands effected by and work proposed within wetlands.

Findings:

A final erosion control plan shall be a separate plan and shall meet the requirements of CCC 13.27. In addition to other requirements the plan is to protect the county right of way from silt during the construction of the berm.

E. UTILITIES [CCC 13.08, 13.40, SEPA Environmental Element #16 Utilities]

Criteria: *CCC 13.08 requires extension and connection to public sewer for new developments in the urban area.*

CCC 13.40 requires extension and connection to public water of all development within the urban area.

Findings:

No connection of public water or sewer is required as the project is located within the rural area and will not create the need for these services.

F. VEGETATION CLEARING [CCC 13.50, SEPA Environmental Element #4. Plants]

Criteria: *The Vegetation Clearing Management Ordinance requires a vegetation removal, replanting and mitigation plan to be submitted if a proposal involves the clearing of 6 or more trees or 500 square feet or more of groundcover in critical areas. In addition, the ordinance provides review guidelines to be considered when reviewing development applications.*

Findings:

Portions of the subject site are within areas subject to the Vegetation Clearing Management Ordinance. No mining is to occur within the area subject to the ordinance. Only the conveyor path is within the area. The vegetation in this area is composed of field crops, grasses and weeds. No significant vegetation is required to be removed.

G. FIRE [CCC 15.12, SEPA Environmental Element #15. Public Services]

Criteria: *The Fire Code sets for the minimum life safety and fire protection standards for residential developments. Such standards include minimum emergency vehicle access provisions, fire hydrants spacing, and water flow volume and pressure for hydrants.*

Findings:

The Fire Marshal has no requirements for this project.

H. ROADS/TRANSPORTATION [CCC 12.05, SEPA Environmental Element #14. Transportation]

Criteria: The Road Standards provide the classification. capacity and construction standards for all public and private roads in the County.

Findings:

The operation will utilize a mechanical conveyor to transport mined material to an off site processing center. No new road approaches will be built. The Transportation Department has no requirements for this proposal.

I. SEPA [CCC 20.50]

Criteria: CCC 20.50.020 sets forth the policies and goals that are supplementary to those in the existing authorization of Clark County. The County may attach conditions to mitigate a permits impacts or deny a permit if the County finds that the approving the proposal would have a probable significant adverse environmental impact, and that there are not reasonable mitigation measures that are sufficient to mitigate the identified impact. Depending upon their size and intensity of use, site plans may require the review of an environmental checklist, and subsequent threshold determination, per CCC 20.50 and WAC 197-11-310 and 315.

Findings:

The analysis contained in the sections identified above and the following constitute an evaluation of the environmental checklist by the lead agency as required by WAC 197-11-330(1)(a)(i). Based upon this analysis, Clark County as the lead agency for this proposal has determined that, *as mitigated*, it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This determination is based, in part, on several environmental documents submitted by the applicant. These documents are available for viewing at Clark County Community Development, Planning Department, 1408 Franklin Street, Vancouver WA 98666. Free copies of these environmental documents are also available by contacting Debi LaZier, in advance, at (360) 699-2375, extension 4277.

Environmental Elements (*Italics* indicates possible mitigation measures.)

1. Earth

The soils on site are composed of Puyallup fine sandy loam 0 to 3% slopes (PuA), and Washougal gravelly loam 0 to 8% slopes (WgB), according to the Soil Survey of Clark County prepared by the Soil Conservation Service. The terrain on site is primarily level with slightly rolling areas. There are no areas of unstable or potentially unstable slopes mapped on the site.

The mining of the site to approximately 45 feet below grade as proposed will create steep slopes around the perimeter and throughout the site. Due to the high groundwater of the site, the slopes and the bottom of the mining pit will be primarily below the water surface. Furthermore, these slopes will be adjacent to the existing public right-of-way of both JA Moore Road and 61st Avenue. These slopes will consist of 3:1 (horizontal:vertical) slope for the upper 10 feet and 1.5:1 slope for the remainder. Reclaimed slopes are indicated to be a maximum slope of 2:1.

Since the proposal excludes mining within the 100 year floodplain areas of the site, but proposes mining on the remaining portions of the site and within 20 feet of the floodplain, individual unmined areas or "fingers" of the floodplain will be left traversing the project site. Steep slopes will also occur along both sides of these floodplain fingers. Although mining is not proposed in these fingers, it is unclear from the applicant's submittal how the mining operation will avoid these areas. *As a mitigation measure, no mining shall occur within the floodplain as indicated on the site plan. The applicant shall submit information clearly indicating how these narrow fingers can be mined without threatening the integrity of the floodplain. If at any time the integrity of the floodplain is threatened, mining shall cease and the county notified. Appropriate measures shall be implemented to protect or restore the floodplain prior to commencing further mining in these areas.*

The applicant submitted a Preliminary Geotechnical Review of Proposed Slope Cuts (Mount I. Murbach, C.E.G and Lloyd Rietz P.E for David J. Newton Associates, Inc., January 6, 1997) and based upon the analyses conducted, the report indicated that the proposed slopes will be stable provided that soil conditions are similar to those conditions occurring at nearby mining sites and that no rapid drawdown of the water table occurs. The report recommends that the excavated slopes be periodically observed by an engineering geologist or geotechnical engineer to confirm that soil conditions are as anticipated.

Based upon the recommendation of the Preliminary Geotechnical Review of Proposed Slope Cuts, the following mitigation measure shall be required: *A geotechnical engineer shall visit the site a minimum of every 3 months, or more often as needed during mining to assess changing circumstances, from the date of initial operation to assess the soil conditions and the stability of the created slopes. If any unanticipated or unsafe conditions are encountered, mining practices and slopes shall be modified as recommended by the engineer. The applicant shall submit a copy of the report from the engineer to the County following each visit.*

See also D. Wetlands, Water Quality and Erosion Control, above.

2. Air

Long term emissions are anticipated from fossil fuel use by mining equipment and truck transport and from dust caused by the mining activity and use of the conveyor. Due to the relatively high water table in the vicinity much of the mining will occur in wet conditions or beneath the water table minimizing dust creation during mining. The applicant proposes to mitigate dust generation from the access road through watering of the road. In order to prevent unnecessary dust creation watering of roads and mining areas and wash down area for vehicles will be required whenever conditions create the possibility of dust affecting neighboring properties. *The applicant shall provide a dust control plan for mining activities, the use of the conveyor and any access roads.*

Permit approval from the Southwest Washington Air Pollution Control Authority may be required for any new activity. The applicant shall supply the appropriate approval documentation or letter indicating no approval is necessary from the authority prior to commencing any site activity.

3. Water

Surface

The East Fork of the Lewis River is located approximately 2,300 feet to the south of the site. An unnamed and inactive gravel pond is located approximately 100 feet to the southwest of the site. Portions of the 100 and 500 year floodplains for the East Fork of the Lewis River are located on the subject site. The applicant is proposing no mining within the 100 year floodplain. A 20 foot setback for mining activity is proposed from the floodplain boundary. No withdrawal of surface water is anticipated.

The applicant submitted a Response to County Concerns Regarding Effects on Floodplain and Avulsion (Jeffrey B. Bradley Ph.D., P.E. of WEST Consultants Inc., January 9, 1997). Based upon the FEMA Flood Boundary and Floodway Map, Dr. Bradley determined that the floodplain in the northern portion of the site had no upstream connection to the East Fork and as such concluded that it must be a backwater area of the river and "adverse hydraulic or erosional effects in that area would not be expected." The report also indicated that the floodplain area on the south portion of the site was not inundated by the February 1996 floods and concluded that "hydraulic and erosion hazards in this regulatory floodplain area would not be significant." The report also emphasizes that mining will not occur in the floodplain and since there will be no physical connection from the proposed mine to the floodplain, "there cannot be hydraulic or erosional impacts caused by mining adjacent to the regulatory floodplain". The report recommends the following mitigation measure to allow for any inaccuracy in the 100-year floodplain delineation: A buffer distance between the floodplain limit and the limit of mining equal to the smaller of a 20 feet horizontally or an elevation difference of 1 foot above the 100 year floodplain elevation. This Condition is reflected on the site plan.

According to the report by Dr. Bradley, air photos since 1935 indicate that the river has never approached within 1,300 feet of the site and has consistently moved to the south, away from the project site and is now further away from the project site then any time in recorded history. Based upon the current trend of the river to move south within its floodplain and the history of the movements Dr. Bradley concludes that "avulsion of the main channel of the East Fork of the Lewis River into the subject mining area is highly improbable."

The proposal is located in an area where the East Fork of the Lewis River exists in a narrow, steep sided valley with little or no floodplain and enters a broad floodplain. The valley then widens and the drop of the river decreases from 20 feet per mile to 2 feet per mile (East Fork Lewis River Watershed Characterization Background Report, Robert Hutton, August 1995, pp. 10) During the period of 1954 to 1990 the river channel migrated up to 1,800 feet in places (G. Mathias Kondolf, Ph.d, Effects of Aggregate Mining on River Floodplains, April 11, 1996, pp. 4) An example of channel diversion is the recent action of the river in breaching the Ridgefield mine ponds on the south side of the river. Impacts to the river after breaching gravel pits include: increased sediment load which are often detrimental to aesthetic values, stream biota, domestic and commercial uses and the ability of the water body to purify itself; impacts to fisheries from decreases in water quality and increases in water temperature, destruction of spawning beds, increase habitat for warm water predators and capture of smolts and adults during high water period; and the long term changes to stream dynamics and geomorphology.

A similar situation may occur if the river reverses its present southward trend and instead moves northward. If this occurs, the river may enter the existing mining pits adjacent to this project site, and may eventually break through into the proposed mining pit. If this does occur, then the East Fork of the Lewis River, the floodplain, and the existing and proposed mining pits would all be interconnected. Although the proposed mining pit is designed to be separated from the existing jurisdictional floodplain by a horizontal distance of 20 feet and a minimum vertical distance of 2 feet, rapid river avulsion or stream bed erosion could destroy these horizontal and vertical buffers and link the river, currently located 2,300 feet to the south, with the mining pits.

Floodplains are formed by river deposits and by definition rivers migrate across their floodplains. According to the East Fork Lewis River Watershed Characterization Background Report completed by Clark County, the area of the proposed mine consists of recent (approximately 8,000 years ago to the present) alluvium deposited by the East Fork of the Lewis River. According to G. Mathias Kondolf, Ph.D. (Effects of Aggregate Mining on River Floodplains, April 11, 1996), the river does have the potential and will most likely flow into the proposed or the existing adjacent mining pits in the future (Kondolf, pp. 5).

The Watershed Characterization Background Report completed for the East Fork of the Lewis River by Clark County contains a discussion of the impacts that gravel pits have on channel diversion. The presence of gravel pits increases the likelihood of future diversion because during flood events the force of the river is capable of breaching the land surrounding the gravel pits. Examples of rapid channel diversion caused by gravel pits and major flood events include the Yakima River near Union Gap (Hutton, 1995, pp. 57.), Salmon Creek above Klineline Pond and the East Fork of the Lewis River directly southwest of the project site.

If river avulsion, or diversion, into the project area were to occur, the resulting impacts to river hydraulics, fisheries and river dynamics could be substantial. During the February 1996 floods, flows from the East Fork of the Lewis River entered the existing mining pond located directly south of the subject site. This flow created significant erosion at the entrance to the mining pond and created a substantial delta in the pond. However, based upon the distance the project is from the East Fork of the Lewis River it is unlikely that the river will enter this area in the foreseeable future.

The project also involves the placement of an elevated conveyor belt across portions of the 100 year floodplain. The placement of this conveyor could increase the extent of impacts caused during flood events by trapping debris under the conveyor and altering the flow of river. However, since the conveyor is

located within the floodplain and not the floodway there is little chance of extreme flows in the area during flooding. Additionally, the conveyor can be easily removed, (as it is a piece of equipment) if water threatens to enter the area. *Based upon the potential for debris entrapment the conveyor shall be removed if flooding threatens to enter the location of the conveyor.*

At the northeast corner of the site, a seasonal drainage passes under JA Moore Road through a culvert and enters the site. The applicant proposes placing a berm in this location and along the entire northern project boundary. The placement of the berm could prevent the flow of water through the culvert and cause damage to the public road or it may cause water to back up and flood the road. *Appropriate provisions shall be made to accommodate the seasonal drainage through the proposed berms to prevent damage to the road and threats to public safety. Engineering plans and specifications shall be submitted for review and approval to Development Engineering prior to site plan approval. Appropriate provisions shall be made to accommodate expected flows and to prevent erosion from occurring to the walls of the mining pit where the seasonal drainage enters the pit.*

Groundwater:

The applicant submitted a Hydrogeologic Evaluation (January 8, 1997) of the project by David J. Newton Associates. This report indicates that groundwater in the project area is located within an unconfined aquifer at 1 to 10 feet below ground level. Groundwater in the area roughly parallels the flow of the East Fork of the Lewis River which may indicate that the site's groundwater hydrology is connected to the East Fork of the Lewis River.

The report states that the Troutdale formation is located below this unconfined aquifer at a depth of 35 to 45 feet. A layer of cemented, fine-grained sandstone is reported to be located between and separates the unconfined aquifer from the Troutdale formation. The Troutdale formation is an important aquifer and water source for the area. If mining were to occur into the area impacts to ground water may occur. *To prevent this mining shall not enter the Troutdale Formation. Mining shall not occur within the cemented fine-grained sandstone layer. When excavation encounters this layer, mining shall not proceed to a greater depth.*

Existing On-site Wells

There are two existing wells located on site and within the proposed mining area which are anticipated to be mined to a depth of 45 feet. The applicant indicates that the wells will be abandoned according to Health District standards. Abandonment will involve destroying the well casing, therefore, special consideration must be given to the abandonment of the wells. Health District approval is required. Prior to final site plan approval, Health District review and approval of the well abandonment shall be required.

See also D. Wetlands, Water Quality and Erosion Control, above.

4. **Plants**

The site contains a variety of vegetation including evergreen and deciduous trees, shrubs, grasses and field crops. Approximately 90% of the project site has historically been used for agriculture and is currently planted with field crops. There are no known threatened or endangered plant species on site. The applicant proposes to clear all vegetation from the site as necessary. The portions of the site within the jurisdictional 100 year floodplain are classified as Riparian Priority Habitat and Species areas by Clark County Code 13.50, Vegetation Clearing Management Ordinance. Since mining will not occur in these areas, no clearing will occur.

The buffers and setbacks will remain undisturbed or be vegetated to stabilize the soil. Vegetation on the mined portions of the site will be replaced during reclamation consistent with requirements set forth by the Department of Natural Resources. The applicant indicates that native plants and grasses will be used for reclamation to proximate nearby riparian and mixed woodland habitat.

See also E. Vegetation Clearing, above.

5. **Animals**

The applicant indicates that hawks, herons, songbirds, scrub jay and kingfisher have been observed on or within the vicinity of the site. Mammals which have been observed on site include beaver, deer, bear, mouse and mole. Bass, salmon, trout, herring and shellfish inhabit nearby waterways. There are no known endangered species on or within the vicinity of the site. However, the National Marine Fisheries Service has proposed the listing of Lower Columbia River wild steelhead as a threatened species.

The portions of the site within the jurisdictional 100 year floodplain are classified as Riparian Priority Habitat and Species areas by Clark County Code 13.50, Vegetation Clearing Management Ordinance. Clearing within these areas should be limited. Reclamation of the site will involve the planting of native vegetation and the creation of areas of riparian habitat. This could increase the habitat value of the site for certain species.

The East Fork of the Lewis River contains runs of spring Chinook, fall Chinook, early and late Coho, summer and winter Steelhead and Searun Cutthroat as well as resident trout, bass, and other fish. The East Fork is one of the region's most important streams for producing wild anadromous fish (Hutton, pp. 60). The section of the East Fork in the area of the site contains significant spawning areas for salmonids (Hutton pp. 62).

Mining can cause a number of significant impacts to fisheries and habitat, including increased water temperature, increased turbidity, creation of habitat for predatory species, entrapment during high water flows and the loss of spawning habitat. For example, the movement of the East Fork of the Lewis River into the Ridgefield mining pits to the south of the site caused the abandonment of significant spawning habitat. Based on the distance the river is from this site, it is unlikely that impacts to fisheries will occur at this time as a result of this proposal. However, if the river were to move into this proposed mining pit, a significant adverse environmental impact may occur to anadromous fish in the East Fork of Lewis River.

6. Energy and Natural Resources

Mining equipment will utilize fossil fuels and the conveyor will utilize electricity. The proposal will not affect potential solar energy use by adjacent properties. No concerns noted.

The site is currently used for agriculture. Operation of the mine will prohibit any future use of the site for agriculture by leaving a large pond. The net result will be a loss of productive agricultural ground, which is limited in Clark County.

7a. Heath Hazards

There are no known on or off-site potential health hazards considered to be a detriment to, or will be exacerbated by the proposal. The expected increase in the need for emergency services is negligible throughout the operation of the project. There is a potential for pollution to occur in the refilling or overhauling of mining equipment on site. *In order to prevent possible spills, the maintenance of equipment involving potential pollutants shall not occur on site. Equipment shall*

be moved to a location that has facilities to handle spills and other incidents prior to servicing. This is not intended to prevent refueling of equipment from occurring on site. Appropriate practices shall be undertaken to reduce the possibility of spills while refueling of equipment. A pollution prevention plan shall be submitted prior to final site plan approval indicating what practices will be followed and how spills will be handled.

7b. Noise

The applicant submitted a noise study from Daly Standlee and Associates, however it should be noted that the noise study submitted involves a much larger project area then the project under review here. The use of the findings in this determination in no way indicates the county's acceptance of the document for use in the EIS.

The study submitted determined that the proposed mining will violate WAC 173-60-040 unless appropriate mitigation measures are provided to reduce noise impacts to nearby residences. Since the proposal covers a much larger project area beyond this site, utilizing Alternative 2 in the noise study most closely matches this proposal. The study indicates that mitigation is required for modeling locations 3 through 9, modeling location 11, and the residence located north of location 8 and south of location 5. The study indicates that a 10 foot high berm would adequately mitigate the noise impacts. Based upon the noise study, *a 10 foot high earthen berm shall be constructed along the north and east project boundaries prior to the commencing of mining operations. This measure is not intended to prevent the excavation of overburden to construct the required berms. Upon commencement of the mining activities, a measurement of the actual noise impacts on residences shall be conducted to determine whether the berms adequately mitigated noise impacts. A report containing the measurement results shall be completed and submitted to Clark County. If it is found that the berms do not provide adequate mitigation, additional measures shall be recommended by the applicant, reviewed by Clark County and implemented.*

8. Land and Shoreline Use

The site is zoned Agriculture with the Surface Mining Combining District. It is designated as Agriculture with a mining overlay on the Comprehensive Plan Mining is a permitted use subject to Site Plan review. The proposed use will render the site unsuitable for agricultural use in the future therefore impacting the amount of available farmland in the county.

The site is adjacent to the East Fork of the Lewis River. The East Fork is classified as a Rural Shoreline by the Shoreline Master Program for Clark County. Portions of the project site are within the Shoreline Management jurisdiction. However, no mining will occur within the Shoreline Management jurisdiction. The conveyor to the existing crusher does cross into the Shoreline Management jurisdiction. The placement of the conveyor will not displace or prevent normal use of the shoreline or river. No concerns noted.

See also C. Site Plan Review, above

9. Housing

The proposal will displace a single residential structure. No additional housing units will be provided. No concerns noted.

See also C. Site Plan Review, above

10. Aesthetics

The site is located in the valley floor. Residences located on the valley sides have views of the proposed project site. During the operation, the mining area may be visually obtrusive due to the presence of bare soils and equipment. Once reclamation is completed and the conveyor removed visual impacts will no longer be present. No concerns noted.

See also C. Site Plan Review, above

11. Light and Glare

The applicant anticipates to utilize lights on both the field conveyor and the excavator during non-daylight hours. The applicant indicates that the loader and excavator will operate primarily 8 to 12 feet below grade reducing lighting impacts. Since the mining operation is limited to the hours of 6 am to 8 pm, resulting lighting impacts should be minimal. All site lighting shall be directed inward onto the site and shielded to prevent glare. No glare or site lighting shall impact abutting properties as required by Clark County Code 18.402A, Site Plan Review. A lighting plan indicating height, wattage, glare and photometrics of all proposed lighting shall be submitted for review and approval prior to site plan approval.

See also C. Site Plan Review, above

12. Recreation

The site is located on private property. Therefore public recreation will not be affected. However if the proposed operation were to harm anadromous fish runs or change the flow of the river, significant impacts could occur. Since the location is a significant distance from the current location of the river, this impact is unlikely to occur.

See also C. Site Plan Review, above.

13. Cultural and Historic Preservation

According to the Archaeological Predictive Model for Clark County the subject site is located in an area with a 80 to 100% probability of containing archaeological resources. There is one prehistoric site, which is thought to be a burial site, located within 1 mile of the project area. The applicant submitted an Archaeological Survey of Proposed Gravel Quarry (January 14, 1997) of the project area, completed by Jefferson Davis, to address concerns regarding archaeological resources and to determine if archaeological resources were present on site.

The archaeological study consisted of a reconnaissance survey and the excavation of 16 shovel probes. A small, near surface scattering of historic debris was found, however no prehistoric objects or sites were found. Mr. Davis did not anticipate finding prehistoric objects or sites due to the likelihood that Native Americans were more likely to travel and camp on high ground above the river channel, and if any sites were located in the area they would have been moved or destroyed by stream movements. Based upon the finding of historic debris in part of the project site, Mr. Davis recommends that the excavation of the topsoil in this area be monitored during removal by a professional archaeologist. If any intact remains are found excavation should cease and the remains evaluated for significance.

Based upon the recommendation of the archaeological study: *Excavation of the overburden within 100 feet of shovel probe 4 shall be monitored by a professional archaeologist. If any remains are found, excavation shall be stopped until the nature and significance of the remains are determined. Prior to recommencing mining activities the applicant shall consult with state agencies and the county to determine the significance of the find and the appropriate course of action to be taken.*

If any cultural resources are discovered in the course of undertaking the development activity, the Office of Archaeology and Historic Preservation in Olympia and Clark County Planning should be notified. Failure to comply with these State requirements may constitute a Class C felony, subject to imprisonment and/or fines.

14. Transportation

The project will utilize a conveyor to transport the excavated material to an off site crusher. No increase in traffic is expected as a result of the project. However, the site is adjacent to two counties roads and the proposed excavation could endanger the stability of the road or cause additional hazards for those traveling on the road. A discussion of the stability of the road is contained in #1 Earth above. The applicant submitted a review of the safety aspects of the proposal completed by DKS Associates. Based upon WSDOT standards the proposed setbacks and design of the road edge meet all established design criteria. No concerns noted.

See H. Roads/Transportation, above.

15. Public Services

The project will employ a number of people. This could increase the need for emergency services. No increase are expected for schools and other services.

See G. Fire, above.

16. Utilities

The site will utilize electricity for the operation of the conveyor. The location of any above ground power poles necessary for the conveyor must be indicated on the site plan. There is an existing septic system and two wells on site. Proof of abandonment of these facilities is required prior to final site plan approval.

There is an existing, privately owned power line running through the proposed mining area which supplies power to the on-site wells. Abandonment and removal of the line is required prior to commencing mining.

See E. Utilities, above.

J. PHASING

Mining will occur in phases over a period of 3 to 6 years.

K. OTHER

Shoreline Combining District

To insure that no activity occurs within the area which would require a Shoreline Management permit, the setback from the Shoreline jurisdiction shall be marked whenever mining is occurring and shall be composed of materials that are visible by equipment operators to limit the possibility of accidental intrusion into the shoreline area.

On January 29, 1997, the Planning Director issued a determination that the project was not subject to a Shoreline Management Permit under the County's Shoreline Master Program and Shoreline Ordinance. Please see the attached determination letter for specifics. This determination was appealed. At the time of this report the appeal has yet to be resolved. The applicant may proceed at their own risk pending the resolution of the appeal.

Surface Mining Combining District

Criteria: *CCC 18.329 contains special standards and requirements for surface mining including site size, setbacks fencing, noise, hours of operation, erosion control, drainage and land restoration.*

Findings:

Site Area:

Since the proposal does not involve crushing on site there is no minimum site size. Acceptable.

Fencing:

The periphery of all sites being actively mined are required to be fenced according to DNR standards. The site plan does not indicate any fencing. If required by DNR, fencing shall be provided and indicated on the site plan.

Setbacks:

Tops and toes of slopes must be set back from property lines consistent with DNR standards.

Hours of operation:

Operation of the facility shall occur only between the hours of 6am and 8pm. A note shall be placed on the site plan indicating this.

IV. CONCLUSION

This document does not grant approval to the site plan. The following conditions are provided based upon an initial review of the site plan to support the SEPA determination and to facilitate public comment on both the SEPA determination and the site plan. A determination on the site plan can not be issued prior to the end of the SEPA comment period. At such time the county may issue an *Approval, Approval with Conditions,* or *Denial* of the site plan application.

Prior to issuance of building permits, the applicant shall obtain FINAL SITE PLAN APPROVAL subject to the following conditions:

A. The applicant shall submit a final site plan (four copies) for review and approval by the Planning Director, in compliance with all provisions of CCC 18.402 A, including the following amendments to the original plan:

1. Indicate abutting properties within 100 feet of the site and any structures located within that distance.

2. Provide anticipated employee numbers and provide adequate parking locations on the site plan or provide evidence of off-site parking adequate to meet the expected demand.

3. Indicate access road location, dimension and construction type on the site plan.

4. Submit a detailed lighting plan indicating height, wattage, glare and photometrics for all proposed lights.

5. Indicate the power line to be removed on the site plan.

6. Provide adequate facilities to accommodate solid waste generated on site.

7. Indicate how the setback from the 100 year floodplain will be marked and indicate it on the site plan.

8. Submit a vegetation clearing plan indicating all disturbed areas and all vegetation to be removed or destroyed for that area of the project site subject to the vegetation clearing management ordinance.

9. Place a note on the site plan indicating operating hours of 6am to 8pm.

B. Prior to final site plan approval, the applicant shall:

1. Submit final stormwater and erosion control plans for review, approval and implementation pursuant to CCC 13.25 and 13.27. These plans shall also address the following SEPA mitigation:

   "Appropriate provisions shall be made to accommodate the seasonal drainage through the proposed berms to prevent damage to the road and threats to public safety. Engineering plans and specifications shall be submitted for review and approval to Development Engineering prior to site plan approval. Appropriate provisions shall be made to accommodate expected flows and to prevent erosion from occurring to the walls of the mining pit where the seasonal drainage enters the pit".

2. Provide a dust control plan that adequately provides for the suppression of dust from mining and use of access roads to comply with the following SEPA mitigation measure:

   "The applicant shall provide a dust control plan for mining activities, the use of the conveyor and any access roads."

3. Submit an approved reclamation plan from DNR.

4. Submit evidence of permit approval or exemption from SWAPCA.

5. Provide information to address the following SEPA mitigation:

   "As a mitigation measure, no mining shall occur within the floodplain as indicated on the site plan. The applicant shall submit information clearly indicating how these narrow fingers can be mined without threatening the integrity of the floodplain. If at any time the integrity of the floodplain is threatened, mining will cease and the county notified. Appropriate measures shall be implemented to protect or restore the floodplain prior to commencing further mining in these areas.".

6. Submit copies of the Health District review and approval of the well abandonment.

7. Comply with the following SEPA mitigation:

> *"Appropriate practices shall be undertaken to reduce the possibility of spills while refueling of equipment A pollution prevention plan shall be submitted prior to final site plan approval indicating what practices will be followed and how spills will be handled."*

D. Prior to commencing site activities,

1. Submit as-built plans for the stormwater facilities in accordance with CCC 13.25 and the approved final stormwater plans.

2. Comply with the following SEPA mitigation:

> *"A 10 foot high earthen berm shall be constructed along the north and east project boundaries prior to the commencing of mining operations. This measure is not intended to prevent the excavation of overburden to construct the required berms."*

3. Receive a permit and remove or demolish the existing dwelling on site.

E. The following SEPA mitigation are conditions of Site Plan Approval:

1. *"Based upon the potential for debris entrapment, the conveyor shall be removed if flooding threatens to enter the location of the conveyor."*

2. *"Mining shall not enter the Troutdale Formation. Mining shall occur within the cemented fine-grained sandstone layer. When excavation encounters this layer mining shall not proceed to a greater depth."*

3. *"Upon commencement of the mining activities, a measurement of the actual noise impacts on residences shall be conducted to determine whether the berms adequately mitigated noise impacts. A report containing the measurement results shall be completed and submitted to Clark County. If it is found that the berms do not provide adequate mitigation, additional measures shall be recommended by the applicant, reviewed by Clark County and implemented."*

4. *"In order to prevent possible spills, the maintenance of equipment involving potential pollutants shall not occur on site. Equipment shall be moved to a location that has facilities to handle spills and other incidents prior to servicing. This is not intended to prevent refueling of equipment from occurring on site."*

This site plan approval is draft only. It is provided to support the issuance of the SEPA determination. Final site plan approval must be issued in compliance with the conditions of approval contained herein and subject to the provisions of Clark County Code Sections 18.402A before any building permit for the structures on the site plan may be issued.

Please contact this office with any questions regarding the Site Plan Review Ordinance

Enclosure: Exhibit A - Preliminary Site Plan
SEPA Checklist

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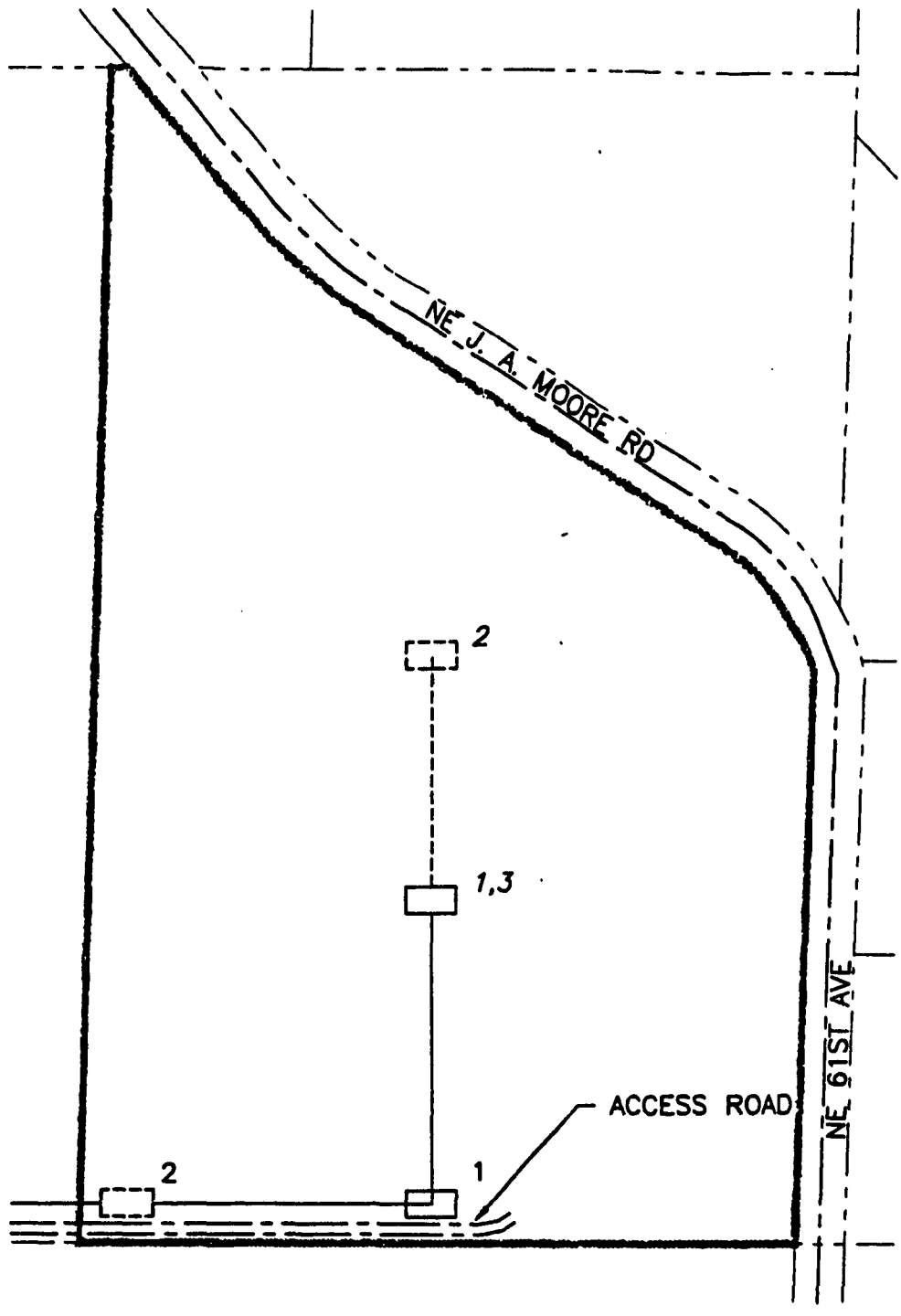
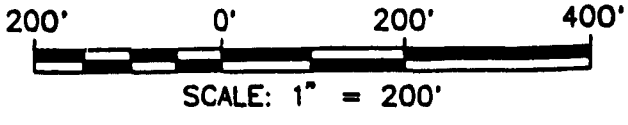


STRUCTURES/ OPERATIONAL PLAN

FIG.—4

NOTES:

NORTH – SOUTH HOPPER MOVEMENTS *1–3*
EAST – WEST HOPPER MOVEMENTS 1–2



A. BACKGROUND

1. Name of proposed project, if applicable:
   Daybreak Resource Project

2. Name of applicant:
   J. L. Storedahl & Sons, Inc.

3. Address and phone number of applicant and contact person:
   2233 Talley Way Kelso WA. 98626
   (360) 636-2420 Mr. Virgle Barnett

4. Date checklist prepared:
   October 8, 1996

5. Agency requesting checklist:
   Clark County Department of Community Development

6. Proposed timing or schedule (including phasing, if applicable):
   19-acre parcel mined in 3 to 6-acre phases per year with concurrent reclamation.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
   Yes: An adjacent 40-acre parcel is also zoned Agriculture with the Surface Mining Overlay (AG/S), known as a Mining Combining District. Application for Site Plan Review on this parcel may occur in the near future.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
   Environmental information was prepared as part of a Surface Mining Reclamation Plan submitted to the Department of Natural Resources and is directly related to this proposal.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
   Yes: An application for a Surface Mining Reclamation Permit (Form SM-2) has been submitted to the Department of Natural Resources for this parcel.

10. List any government approvals or permits that will be needed for your proposal, if known.
    See #9.

11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

This approximately 19-acre site will be excavated for sand and gravel by a hydraulic shovel to a maximum depth of 45 ft. over a period of 3 to 6 years. The sand and gravel will be windrowed for draining and loaded into a field hopper by a front-end loader and conveyed offsite for processing. The entire 19-acre parcel will be mined, excluding setbacks. The site will be reclaimed as open space, as forseen at this time.

12. Location of proposal.
A portion of the S.E.1/4 of the S.W.1/4, Sec. 18, T4N, R2E. Located approximately 4 mi. S.E. of the town of LaCenter, near the East Fork of the Lewis River.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountains, other:
Flat pastureland.

b. What is the steepest slope on the site (approximate percent slope)?
4%

c. What general types of soils (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.
80% Puyallup fine-sandy loam and 20% Washougal gravelly loam. Soils are highly permeable and are classified as Prime Farmland. Clark County has zoned this property AG/S, confirming the fact that the property contains very high quality aggregate and that mining of this aggregate is a pre-emptive use over other land uses which could be considered on this site.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
No.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
No filling is being proposed. Temporary berms will be constructed on the west and south sides of the site, made up of stripped overburden from the area to be mined. These berms will be removed and utilized for topsoiling during reclamation.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Some local erosion could occur as part of site preparation for mining, but will be confined within the project area.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

None.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
No erosion should occur offsite and will be contained onsite. A SWPPP would have to be developed for this project, which would meet Federal criteria. Properly designed berms, swales, or drainage ditches will be installed, if necessary.

2. Air

a. What types of emissions to the air would result from this proposal (i.e. dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
Diesel emissions from the front-end loader and hydraulic shovel. Relatively small quantities of dust from the maintenance road has the potential to occur. No emissions are expected to occur upon project completion.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
Proper maintenance and tuning of equipment and watering of maintenance road adjacent to conveyor belt, if necessary.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.
Unnamed mined gravel pond 100 ft. to the southwest. East Fork of the Lewis River is approximately 2300 ft. to the southwest.

2) Will the project require any work over, in, or adjacent to (within 200 feet) of the described waters? If yes, please describe and attach available plans.
Sand and gravel will be mined on this site, which is within 200 ft. of the unnamed mined gravel pond.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of the fill material.
None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.
No.

5) Does the proposal lie within a 100 year floodplain? If so, note location on the site plan.
Small areas of the site are shown to lie within the 100-year floodplain as located by Clark County GIS information. However, this proposal does not anticipate mining in the 100-year floodplain boundary; rather mining would be daylighted to the outer boundary of the flood plain (e.g., see pre-application site plan review letter issued by Clark County).

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
No.

b. **Ground**:

1) Will groundwater be withdrawn, or will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.
No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals . . .; agricultural; etc.). Describe the general size of the system, the number such systems, the number of houses to be served (if applicable), or the number animals or humans the system(s) are expected to serve.
None.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities if known). Where will this water flow? Will this water flow into other waters? If so, describe.
Only source of runoff would be rainfall. Little or no runoff occurs as soils are highly permeable, well-vegetated and site slopes are very low gradient. Most, if not all, runoff will be naturally directed towards the mining pond as mining progresses. Undisturbed setbacks and the 6 ft. berms on the west and south sides should preclude offsite runoff.

2) Could waste material enter ground or surface waters? If so, generally describe.
No. Should a hydraulic leak occur, hydraulic fluid should remain on the soil or water surface and would be subject to a response plan.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

All, or most, surface runoff will be naturally directed into the mining pond. Small berms or drainage swales/ditches will be built, if necessary. However, no offsite erosion should occur. Most rainfall will percolate into soils.

4. Plants

a. Check or underline types of vegetation found on the site:
✓ deciduous tree: alder, maple, aspen, other: ash, poplar
✓ evergreen tree: fir, cedar, pine, other
✓ shrubs: vine maple, hazel, snowberry
✓ grass: rye, barnyard, quackgrass
✓ crop or grain: alfalfa, corn
__ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
__ water plants: water lily, eelgrass, milfoil, other
__ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?
The area to be mined is approximately 90% cropland and 10% mixed woodland. This vegetation will be removed in the course of mining. Cropland and mixed woodland will remain in the setback areas.

c. List threatened or endangered species known to be on or near the site.
None.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
Reclamation of the site will utilize native plants and grasses to return, and to enhance the remaining vegetation, to proximate the naturally occurring nearby riparian and mixed woodland habitat.

5. Animals

a. Underline any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other: scrub jay, kinglet
mammals: deer, bear, elk, beaver, other: mouse, mole
fish: bass, salmon, trout, herring, shellfish, other: N/A

b. List any threatened or endangered species known to be on or near the site.
None.

c. Is the site part of a migration route? If so, explain.
Not known. Canada geese have been seen to feed in adjacent, harvested cropfields in Winter.

d. Proposed measures to preserve or enhance wildlife, if any:
Final reclamation of the site will produce an aquatic and riparian flora and fauna habitat that will be far more productive than what currently exists.

6. Energy and Natural Resources

a. What kinds of energy (electrical, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
Diesel fuel and electricity will be utilized. Both energy types are used to extract and transport aggregate.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
Proper maintenance and tuning of equipment: diesel excavation equipment and electrically-powered conveyor belt.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.
Slight potential for hydraulic fluid leak from shovel. No toxic chemicals will be utilized.

1) Describe any emergency services that might be required.
None. Applicant has in place an emergency spill prevention plan at a nearby operation which could be amended to include this area. See also c., (2. Otherwise, no special services required.

2) Proposed measures to reduce or control environmental health hazards, if any:
Spill-prevention plan would be developed for the project.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
None.

2) What types and levels of noise would be created by or associated with the project on a short-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noise emanating from hydraulic shovel and front-end loader. Hours of operation: 6:00 am to 10:00 pm.

3) Proposed measures to reduce or control noise impacts, if any:
Berm will be built in S.E. corner of site at a 6 ft. height to mitigate offsite noise impacts. See Site Plan and associated Notes.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?
This site is cropland. Adjacent properties are utilized as pastureland, cropland, mining and rural residential.

b. Has the site been used for agriculture? If so, describe.
Yes, for over 50 years as pastureland and for hay production.

c. Describe any structures on the site.
A single-wide mobile home with a water well and septic tank exists. Another water well also exists on site and is used for irrigation.

d. Will any structures be demolished? if so, what?
Septic tank and well casings. Mobile home will be removed.

e. What is the current zoning classification of the site?
Agriculture with a Surface Mining Overlay (AG/S) or "mineral resource."

f. What is the current comprehensive plan designation of the site?
Mining Combining District, or "mineral resource".

g. If applicable, what is the current shoreline master program designation of the site?
N/A.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
No, not to Applicant's knowledge.

i. Approximately how many people would reside or work in the completed project?
None in the completed project, as far as is known. During the 3 to 6 year project life , 2 to 3 people would work on the site.

j. Approximately how many people would the completed project displace?
One single-wide mobile home has 1 to 3 residents.

k. Proposed measures to avoid or reduce displacement impacts, if any:
Displacement impacts cannot be avoided.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
The project is compatible with existing and projected land uses. See 8. f. (i.e., land is zoned as "mineral resource").

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle or low-income housing.
N/A

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
One low-income housing unit would be eliminated.

c. Proposed measures to reduce or control housing impacts, if any:
N/A. No structures will be built on the site.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
N/A. No structures will be built on the site.

b. What views in the immediate vicinity would be altered or obstructed?
View west from one single-family home would be slightly impacted for duration of project due to 6 ft. high berm.

c. Proposed measures to reduce or control aesthetic impacts, if any:
Berm in setback area used for overburden storage and noise control will be vegetated with grasses and legumes. This will help to blend the berm in with surrounding views.

11. Light and Glare

a. What kind of light or glare will the proposal produce? What time of day would it mainly occur?
Lights on the field conveyor and headlights on the shovel and loader would be utilized in the evening hours, possibly up until 10:00 p.m. The field conveyor, loader and shovel will be operating 8 to 12 ft. below grade, so glare from lighting will not exist.

b. Could light or glare from the finished project be a safety hazard or interfere with views?
Not a safety hazard. Lights will not exist at the finished project.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:
Lights on the conveyor belt will be downcast and below grade. The loader and shovel will operate 8 to 12 ft. below grade. Lights will produce glow, but should not ordinarily produce direct lighting or glare. The 6 ft.berms will also further reduce glow from the lighting.

12. Recreation

a. What designated and informal recreation opportunities are in the immediate vicinity?
No recreation occurs in the immediate vicinity. Fishing and other water-oriented activities, such as swimming and boating, occurs on the East Fork Lewis River at Daybreak Park, approximately 1 mi. away.

b. Would the proposed project displace any existing recreational uses? If so, describe.
No.

c. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any:
No impacts to recreation on the river. Possibility for fishing, bird and wildlife watching, and associated recreation on reclaimed 12-acre pond.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
No.

b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site? If so, generally describe.
No landmarks or evidence of historic archeological, scientific or cultural sites of importance are known on or next to the site.

c. Proposed measures to reduce or control impacts, if any:
N/A

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans if any.
No access to existing street system is being proposed by this project. Aggregate will be conveyed from property to processing site.

b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No. Unknown; probably greater than 3 miles.

c. How many parking spaces would the completed project have? How many would the project eliminate?
None.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
No.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
None.

g. Proposed measures to reduce or control transportation impacts, if any:
N/A

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
No.

b. Proposed measures to reduce or control direct impacts on public services, if any.
N/A

16. Utilities

a. Underline utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
No utilities are being proposed for project. Electricity to power conveyor is obtained at plant site from local electric company.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Date Submitted: 10-14-96

Approved by: _____

Title: _____

Date: _____

EXHIBIT # 20

RECEIVED
APR 18 1997
CLARK COUNTY
Plan & Dev. Review

April 18, 1997

Clark County Planning Division
ATT. SEPA Coordinator
P.O. Box 9810
Vancouver, Wa 98666-9810

RE: SPR # 96-092 (Daybreak Resource Project)
Mitigated Determination of Nonsignificance

Dear SEPA Coordinator:

Cumulative impacts are addressed in NEPA and SEPA regulations. They are not addressed here. What must be acknowledged is that this kind of project and the other projects that have been abandoned, are still operating or proposed, must be looked at as a whole. What is the rational in piecemealing these projects? Is it to make the issue more convoluted than it already is? Are separate mining permits required. The applicant states that another 40 acre project, in the area, is in the works. How can an accurate analysis of this project occur without considering future acreage by the applicant. Becker? etc.

The following are my concerns regarding this project and the submitted responses

River Avulsion

We must look beyond the short term. What will the rivers hydrology, hydraulics look like 50 — 100 years from now? Will the flow rates be more than they currently are or ~~was~~ were in 1935? What is known is that the river is unstable in the area. The river recieves considerable deposited material from upstream and that the river has entened every gravel mine in the area.

The river is now in two abandoned sites. This is only temporary. Little attention is being directed toward the secondary flow channel lightly touched upon in the West hydrology study. The place where the river shifts south is at the Wiseman avulsion. This breach location recieves a considerable amount of deposited material. When this deposited material puts the river back into its correct channel all southern migration will cease. The secondary channel is showing us where the river wants to go. This secondary channel (see projected direction) is currently separated from existing sunken mined out pits only by the haul road. (See photos) If the river

Migrates to this location private property in the area will be threatened. The dike adj. the mined out county pits will give way. This area was flooded in the February 96 flood. See photos.

Many of the pictures and references detailing the February 96 flood ~~was~~ were taken on 2/10/96. It should be remembered that the main flood events occured on 2/8/96. By 2/10/96 the river had shifted due to failed dikes at the wiseman mined out area.

How will the numerous cut banks (some 50ft + high) in the area affect deposition? Can earthquakes affect river hydrology? Deposition?

Storm water

It is unclear what will become of the storm water coming off the ridge and entering the project area. Considerable run off flows in this area. (see photos) How will the berm direct this water? How clean is this water? Will it go into Dean Creek? The exposed ground water? Will the diversion of surface water cause a recharge deficit elsewhere Dean Creek?

Surface water, process water and storm water should not be allowed to degrade ground water. Domestic animals and wildlife potentialy can pollute exposed ground water

Ground Water

The ground water information provided by David Newton Associates (DNA) provides only a jigsaw puzzle of information with most of the pieces missing. DNA's memo of January 8, 1997 to John Dentler "Hydrogeologic Evaluation" does little to clarify anything dealing with the aquifer recharge situation in the area. This short response to a complicated situation is demonstrated by the fact that they used the words "likely, inferred, believed, probably, unknown, is expected" over 20 times.

The data available is limited as to scope or area and (although they presumably meet the special needs of the collector) they do not explain the occurrence and movement of the ground water in the region. Specific quantities of flow are needed as well as chemical make up. What is the precise flow direction? How many feet/day does it flow? feet/year?

DNA states Ground Water gradients in the area appears to be low. Could the water be moving up from fissures in the strata? DNA states "Local variations in ground water movement directions are common in alluvial aquifers and likely to exist in the project area". How will your mining activities affect ground water velocity? The velocity of ground water movement is an important factor determining the sustained yield of wells. yield is limited to the quantity of water that moves to the well from places where the water entered the ground.

The DNA report states 2 separate water bearing areas exist. The included well logs do not detail or prove that a cemented fine grained sandstone layer exists in the project area or any area. If one did exist who says it is continual throughout the project area? How can equipment operators tell when they have broken through such a layer? Could this inferred unconsolidated upper aquifer be feeding the inferred lower troutdale aquifer? I don't think an opening of any kind in the troutdale aquifer is a good idea!. Some shallow wells in the area have excellent quality water. The people

on the hills adj. the valley floor have their wells in the upper zone of saturation.

The recent shift of the river south, into the abandoned gravel pits, already may have the effect of lowering ground water elevations in the area over the next few years. who is responsible if we have to re-dig our wells because of this? any further diggins in the recharge area acts as drainage ditches or projects do. up gradient water supplies will be drawn down.

Pockets of un-saturated materials may be disrupted. These areas may further lower the water table when they become saturated. what about springs or seeps that will be degraded if encountered? Recharge issues are not adequetely addressed. what about ~~Cumulative~~ cumulative effects, particularly if other area projects go forward. you can't piece meal these kinds of projects, more analysis is needed.

flood PLAIN

mining adjacent the 100 year floodplain itself threatens the integrity of the flood PLAIN. How can diggings to the water table NOT threaten the integrity of the flood plain? 20 ft buffers to flood PLAIN seem small. ULTIMATELY the river will migrate back to this side of the valley.

NOISE

Berm should be around the entire Project (Property). NOT JUST the North and East borders. use of backup alarms and exhaust brakes are quite annoying.

DUST

See pictures. This was when active mining wasn't even occuring. Simply the processing of materials from off site. A violation of the Zoning of the area.

Sincerely,

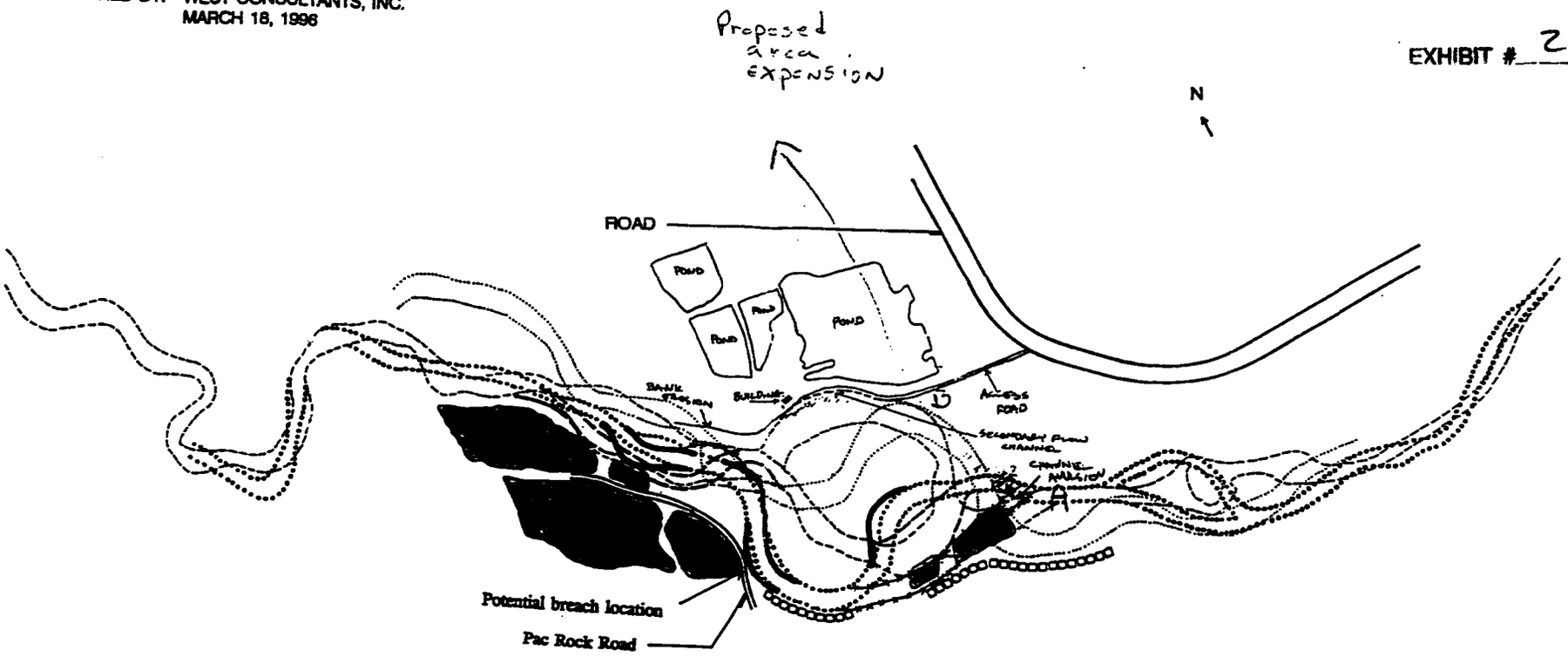
Scott Rose
27313 NE Bennett Rd
Battle Ground, Wa 98604

FIGURE 8

EXHIBIT # 21

EAST FORK LEWIS RIVER 1935 - 1996

PREPARED BY: WEST CONSULTANTS, INC.
MARCH 18, 1996



A - wiseman breach

B - flood water next to haul Road

KEY

EAST FORK LEWIS RIVER
- 1935
- 1963
- 1968
- 1984
- 1990
- 1996

POND

HARD POINT

ROAD

SCALE - 1" = 1000'

DUST

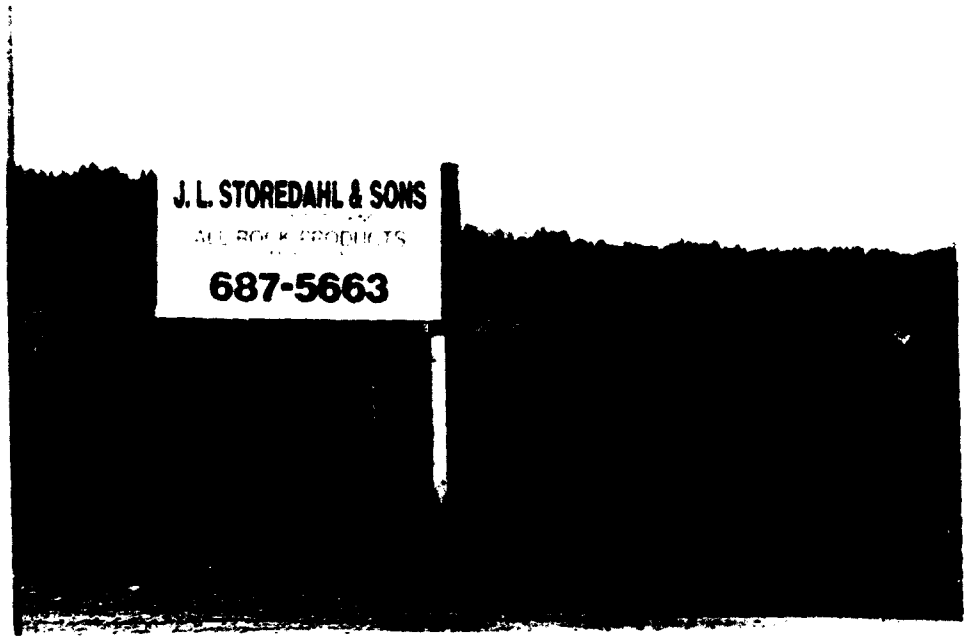
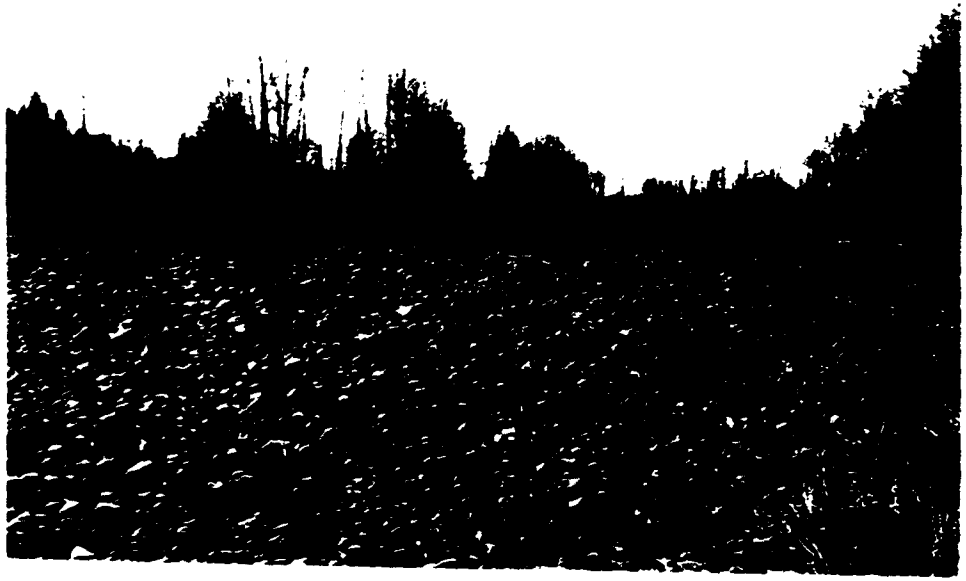
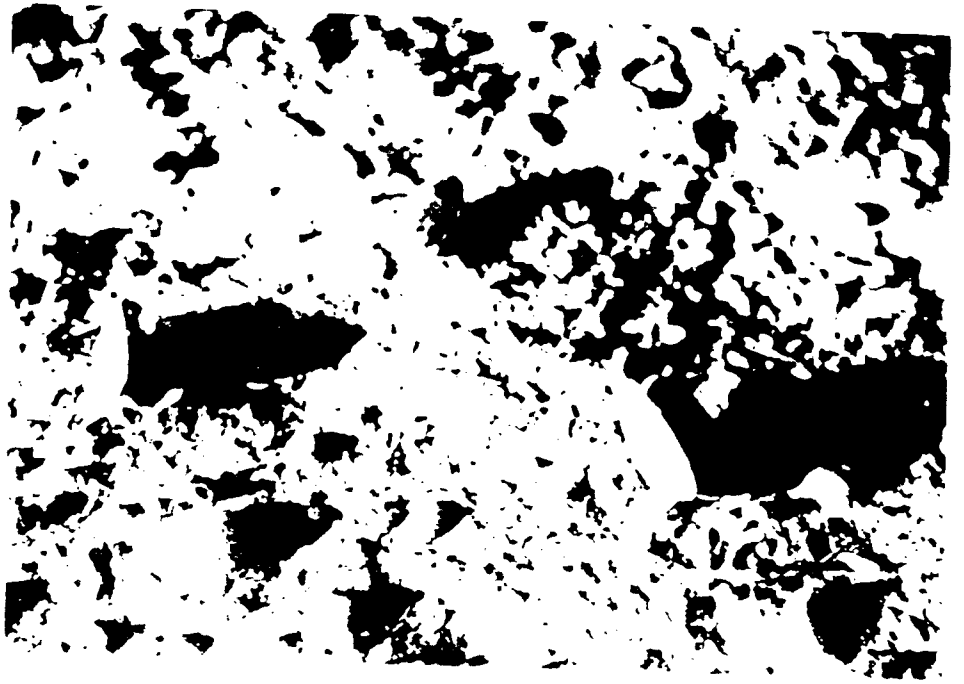
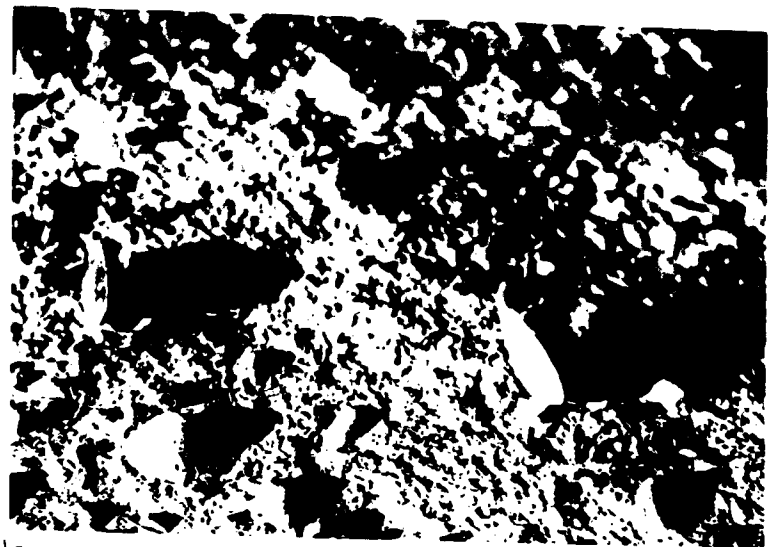


EXHIBIT # 22

Lost Habitat
due to Avulsion
in Area







dewatered channels. Lost spawning habitat

2/8/96

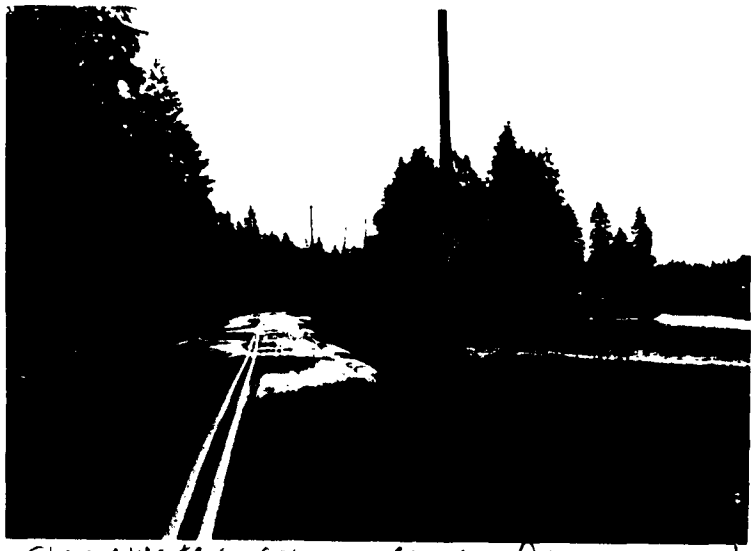
Stormwater through project area

Project area
1997
stormwater

Project Area

1997

Stormwater Winter 97



Stormwater coming down from ridge - Winter 97

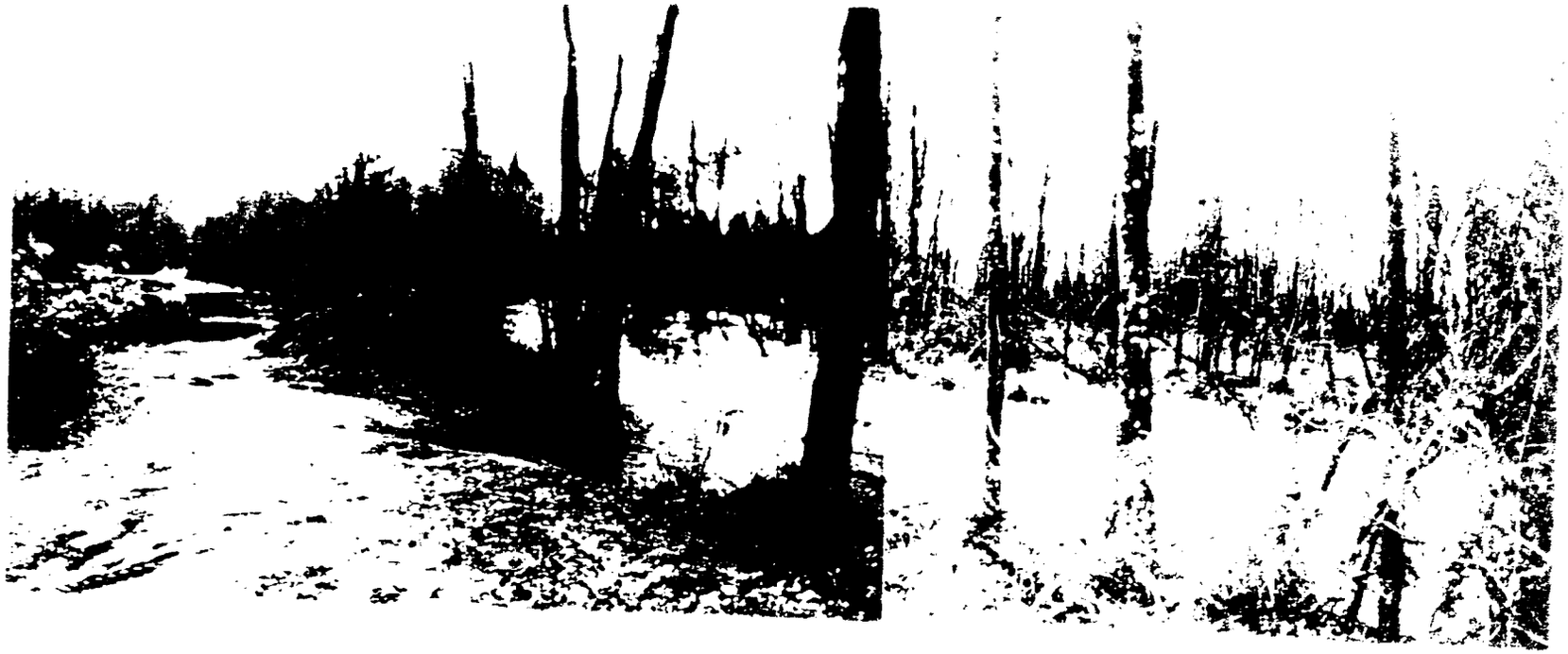
Stormwater

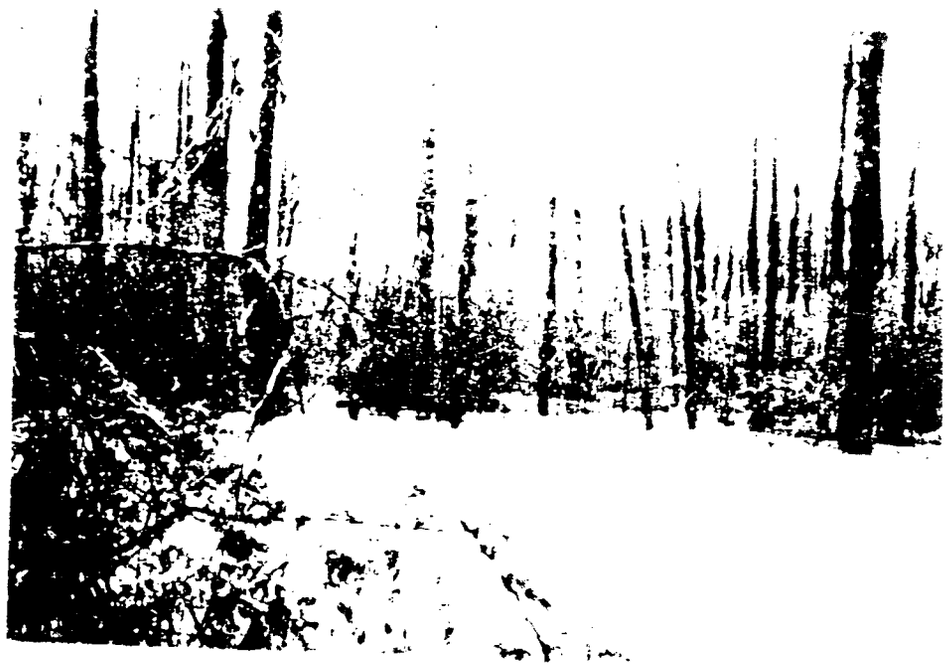
Project Area Winter 97

Pits

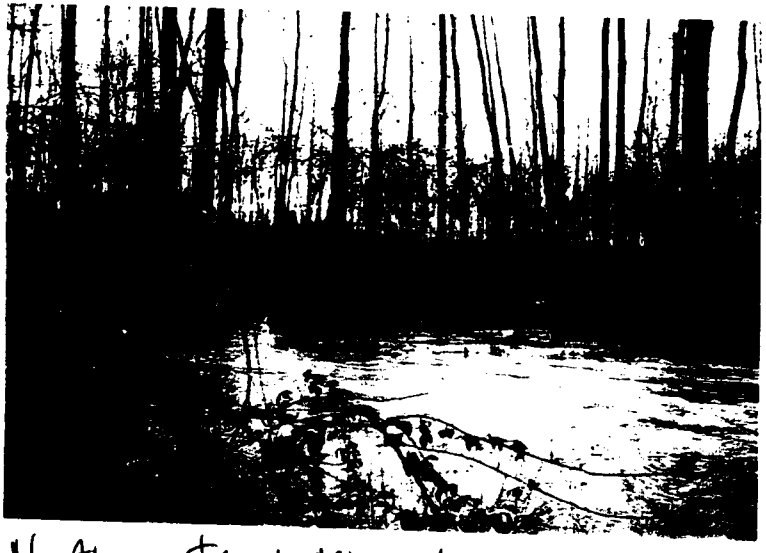
Secondary [illegible]

[illegible] channel with haul road sign





Secondary flow adj to haul road



Northern flood migration

Secondary Channel B Northerly flood migration Feb 98

EXHIBIT # 23

TO: BRIAN CARRICO

FYI

David T. McDonald
Courtroom Lawyer
Admitted to Oregon and Washington State Bar
510 S.W. 3rd Ave., Suite 302 (503) 226-0188
Portland, OR 97204 Fax: (503) 226-1136

April 21, 1997

Michael V. Butts
Responsible SEPA Official
Clark County Planning Division
P.O. Box 9810
Vancouver, WA 98666-9810

Re: SPR #96-092 (Daybreak Resource Project/Storedahl Mining Operation at or new 100 year flood plain of East Fork of the Lewis River

Dear Mr. Butts:

My name is David T. McDonald and I am the attorney representing Friends of the East Fork (FOEF), a non-profit organization dedicated to the continuing conservation and protection of the East Fork of the Lewis River. This letter is to express our collective great disappointment with the County's reversal of a position held since 1991 that an EIS would be required for any expanded mining activities at the Daybreak pit area, and to provide Clark County Planning Department with specific comments on the environmental determination made regarding the proposal by J.L. Storedahl & Sons, Inc. It is sad that the abandonment of such a long held policy occurred concomitant with the retirement of the lead agency's veteran SEPA official and the person who has knowledge of this project area which reaches back into the 70s.

By this letter, we incorporate by reference all of the documents we have filed previously regarding the environmental impacts of this project, as well as its scope, which are a part of the record in this case.

The proponent has requested approval to scrape overburden off of lands in, or immediately adjacent to, the 100 year flood plain of the East Fork of the Lewis River, dig a pit or pits to approximately 30 - 40 feet deep, extract sand and gravel and carry hundreds of tons of extracted material by conveyor belt across the flood plain to a crusher and washing

system. The crusher is located within the floodway, within 200 feet of the shoreline of the East Fork of the Lewis River and on land that has previously been part of some type of mining operation by the proponent and his predecessors, but which has never been reclaimed.

Specifically, Friends of the East Fork (FOEF) believes that 1) there has been a violation of WAC 197-11-360 as to the withdrawal of the DS and therefore the DS should be reinstated, 2) the County should reinstate its determination of significance that was originally made in March 1997 and order and EIS on this project on the merits; and 3) the current MDNS is insufficient in the following specific areas:

a. The MDNS fails to adequately and accurately consider the impacts (197-11-060(4)(b) and 197-11-330(3)(4));

b. The proposal as set forth in the MDNS is not an accurate proposal in that it fails to consider the entire project contemplated by the proponent;

c. Mitigation measures set forth in numbers 1-9 of pages 1 and 2 of the mitigating determination of non-significance do not meet the criteria set forth in Clark County code section 20.06.050(5)(c)(d)[1]

FACTS

The current proposal by the proponent J.L. Storedahl and Sons is to carve out a piecemeal section of a 349 acre site in or immediately adjacent to the 100 year flood plain of the East Fork of the Lewis River for the purpose of gravel extraction. The East Fork of the Lewis River is one of the last undammed, free-flowing rivers that wild steelhead call home. The National Marine Fisheries Service (NMFS) recently has predicted that they

---

[1] These comments made by FOEF regarding this proposal are our initial comments. We reserve the right to make further comment prior to the new comment period deadline of May 6, 1997 as authorized by the Clark County Planning Department (a copy of the letter extending the comment period on this SEPA proposal is attached and incorporated by this reference).

will list the steelhead run on the East Fork of the Lewis River as threatened. In addition, NMFS recognizes that the spawning numbers in an indexed area from near Lewisville Park to the mouth of the river are at 38% of their goal (see The Columbian, Section E published January 2, 1997, article by Milan Chuckovich). The area proposed to be mined by the proponent is in that exact stretch of river.

Although there is some discrepancies and differing opinions as to the scope of the mining permit issued by the Department of Natural Resources for mining on the 349 acre site, the Department of Natural Resources' position is that the permitted area for mining is the entire 349 acre site and that prior to the mining of any piece of that site, a reclamation plan must be done for the entire site. Currently, the proponent apparently is engaged in crushing and washing of rock imported from another site off of the 349 acre piece. The current crushing and washing takes place in the 100 year floodplain and within the shoreline area (i.e., within 200 feet of the shoreline of the East Fork of the Lewis River). The proponent does not have a shoreline permit or a conditional use permit for that area.

Over the years, approximately 91 acres of the 341 acre site has been mined, yet no adequate reclamation has been completed on any of the pits excavated by the proponent or the proponent's predecessors. As far back as 1975, the DNR and the local responsible SEPA official (at that time, Rich Hines) were questioning the mining operations' on this 349 acre piece (see attached memorandum to Dick Mayhew from Rich Hines regarding gravel extraction on this parcel dated July 15, 1975).

In addition, there has been a clamoring since at least the late 1970's by government officials that mining activity on the parcel required a shoreline permit (see letter dated April 16, 1979 from the Department of Natural Resource, Kenneth E. Herman, Assistant Area Manager, to Paul Zimmerly who was the permit holder of surface mining permit number 10139 at that time). Currently no shoreline permit has been issued for any activity on this parcel in the ensuing 18 years, even though there has been many specific requests for the proponent and/or the proponent's predecessors to apply for and be issued a permit.

Currently, litigation regarding mining on or adjacent to this 349 acre parcel is raging in several different venues:

1) A Notice and Order issued by the County in February of 1996 was appealed by FOEF and the proponent. The Notice and Order involves the proponent's ability to mine much of this site, including the area within the delineated 100 year floodplain. An appeal of a hearings examiner's determination on issues regarding the structuring of the litigation at the hearing examiner level was appealed to the Clark County Superior Court. The Superior Court ruled adversely to the proponent and the proponent has appealed that determination to the Court of Appeals;

2) The proponent has appealed the County's GMA plan which provides for the ban on mining in the 100 year delineated floodplain to the Western Washington Growth Management Hearings Board. The matter was initially remanded to the County as part of a stipulated remand of all the parties in October of 1996. The proponent has now re-opened that litigation and requested a hearing on the issues raised in their initial petition. The WWGMHB has set a hearing for July 17, 1997;

3) The County found that the huge conveyor system which the proponent intends to utilize to carry hundreds of tons of gravel over the floodplain and into the shoreline area for crushing and washing does not constitute a structure and, therefore, no substantial development existed requiring the proponent to get a shoreline permit. FOEF appealed that decision and a hearing has been set for May 8, 1997 in front of the Clark County Land Use Hearings Examiner;

4) In January of 1997, the DNR refused the proponent's request to allow a piecemeal reclamation plan for this parcel based upon the agreement the proponent's lessee, Ray and Merry Woodside dba Sammamish Farms, made with the DNR in 1989. The DNR believes that the proponent is attempting to create a piecemeal project when, in fact, the project is so closely related that it is a single course of action and should all be evaluated at the same time. The proponent has appealed that

determination to the Administrative Law Judge in Olympia. A prehearing conference in that action is pending.

I. An Environmental Impact Statement Is Required Because It Is Reasonable To Believe That This Proposal May Have A Significant Adverse Environmental Impact.

Washington law requires an EIS be prepared where "if after following WAC 197-11-080 and 197-11-335, the lead agency reasonably believes that a proposal may have a significant adverse impact, an EIS is required." WAC 197-11-330(4). In determining when a significant adverse environmental impact exists, the County should consider the 1) absolute quantitative effects of a proposal because the quantitative effects of a proposal may result in significant adverse impacts regardless of the nature of the existing environment and 2) the combination of what may be considered marginal impacts which considered as a whole may result in a significant adverse impact. WAC 197-11-330(3)(b)(c).

Moreover, "a threshold determination *shall not balance whether the beneficial aspects of a proposal outweigh its adverse impacts, but rather shall consider whether a proposal has any probable significant adverse environmental impacts under the rules stated in this section.*" WAC 197-11-330(5). (emphasis supplied). A significant adverse impact is probable where it is "likely or *reasonably likely* to occur as in "a reasonable probability of more than a moderate effect on the quality of the environment" (see WAC 197-11-794)(emphasis supplied). Probable is defined as "reasonably likely to occur" and is not a "strict statistical probability test." WAC 197-11-782. Therefore an EIS is required where the lead agency has a "reasonable belief" that a proposal may have a "more than moderate effect on the quality of the environment"

An EIS is required in this case because the lead agency specifically found that

> Floodplains are formed by river deposits and by definition rivers migrate across their floodplains. According to the East Fork Lewis River

> Watershed Characterization Background Report completed by Clark County, the area of the proposed mining consists of recent (approximately 8,000 years ago to the present) alluvium deposited by the East Fork of the Lewis River. **According to G. Mathias Kondolf, Ph.D. (*Effects of Aggregate Mining on River Floodplains*, April 11, 1996) the river does have the potential and will most likely flow into the proposed or the existing adjacent mining pits in the future (Kondolf, pp. 5)(emphasis supplied).**

The Watershed Characterization Background Report completed for the East Fork of the Lewis River by Clark County (the lead agency in this case) contains a discussion of the impacts that gravel pits have on channel diversion. The presence of gravel pits increases the likelihood of future diversions because during flood events the force of the river is capable of reaching the land surrounding the gravel pits. *See* Draft Site Plan Review Staff Report and Determination at p. 14.

It is important to note that the lead agency must evaluate the environmental impacts *over the lifetime of the proposal.* I am hard pressed to see where the lead agency has even identified the life span of the proposal much less figured out the long term impacts. In any event the lead agency has at least agreed with Dr. Kondolf and recognized that it is likely that the East Fork of the Lewis will flow through the projected pits, as well as the adjacent pits, in the future.

Therefore, the lead agency has recognized, based upon scientific data and studies, that it is "most likely" that the East Fork of the Lewis River will flow into the proposed, or the existing adjacent, mining pits in the future. In addition, the lead agency recognizes that if there is river avulsion or diversion into the project area "the resulting impacts to river hydraulics, fisheries and river dynamics could be substantial." *Id.*

The lead agency initially made a "determination of significance" regarding this proposal and sent out a draft determination of significance and scoping notice to the proponent. Based upon that draft determination of significance and scoping notice, the proponent then requested a meeting with the lead agency and requested an opportunity to provide the lead agency with additional materials.

One of the documents provided was a March 13, 1997 letter to Monty Anderson from Thomas Grindeland, P.E. of West Consultant, Inc. The information in that document is almost identical to the document held by County staff at the time they made their initial determination of significance. *See* January 9, 1997 from West Consultants, Inc. to John L. Dentler. Therefore, there is no new information provided to justify the change in the lead agency's determination of DS to MDNS. Basically, the proponent claims that there is no reason to worry because the County's claim that "the East Fork of the Lewis River has the potential and will most likely flow into the proposed or existing adjacent mining pits in the future." is improbable.

The two letters from West Consultants simply draw broad conclusions with no data to back up those conclusions. The East Fork of the Lewis River continues to move within that area. Although it currently seems to be moving to the south away from the site, reclamation of the Storedahl/Ridgefield pits (another area the proponent mined out on the East Fork of the Lewis River and then left unreclaimed) by the environmental enhancement group that is the current owner of the area could restore the river to its original channel. Restoring the river to its original channel would cause the river to migrate back to the north, its natural migratory path.

Even the broad conclusions drawn by West Consultants and F2 Resource Consultants are contrary to the facts. The proponent's information has been contested by past comments by FOEF and its members. Specifically, Richard Dyrland, a local hydrologist has commented on the fallacy of West Consultant's broad conclusionary statements. Despite the proponent's attempts over the last seven to ten months to provide the lead agency with information regarding this proposal, a review

of the record does not show any scientific data to support the claims set forth in West Consultant's letters to the proponent's attorney and the lead agency. Richard Dyrland points out that

> During the flood of February 1996 a section of the channel of the East Fork, just upstream from the old Storedahl gravel mining pits, shifted the main flow south because of the buildup of large gravel and cobble. This caused a loss of previously utilized spawning area. The old channel is still active and the November 1996 and the January 1997 flooding had substantial flows moving through the old channel as well as flow the wooded area to the north that is directly south of the proposed mining area.
>
> Although the old channel has changed, it is active at flood stage and has reconfigured its hydraulic geometry and distribution of bed materials twice since the flood of January 1996.
>
> The section of stream channel that flows adjacent to the east end of the old southside Storedahl gravel mining pits was widened as much as 15 feet where it turned north and flowed directly Storedahl & Sons gravel washing operation. The channel also became agraded with large cobble material and lost much of its depth. This north flowing section flows straight and directly into a vertical stream bank that is part of the Storedahl gravel washing and storage operation, the river makes a 90 degree turn westward. During the flood of January 1996, three feet to as much as eight feet of bank was eroded away along the north section of the channel adjacent to the Storedahl operation. A large bar of gravel and cobble material was also

> built up just below the point where the channel turned west along the south end of the current Storedahl gravel washing operation. *See* Letter dated February 11, 1997 from Richard Dyrland to Monty Anderson at pp 2-3.

Mr. Dyrland goes on to evaluate the flood impacts on the proposed gravel mining area. He concludes

> This hydraulic analysis and evaluation **have passed three** recent floods clearly indicates that the whole mining influence area, including the proposed gravel mining site, (proposed Daybreak Resource Project) is now highly prone to flooding even at lower (less than 100 year or 1% chance/year) flood occurrence intervals. Stream channel conditions have become more deteriorated and unstable. Existing as well as potential erosion and sedimentation levels are high. The floodplain risk for the area is increasing, not decreasing due the continued decline in the capability of old and new channels reaches to carry floodflow. This situation and trend can be expected to continue as more urbanization occurs in the East Fork Lewis River watershed, more areas are "hard" roaded, and more acres of vegetation are converted to uses that have a less effective hydrologic function capability. *Id.* at pp 4-5.

Therefore, there is ample evidence to support the lead agency's initial determination that an EIS should be required based upon the conclusion that this project probably will have significant adverse environmental impacts and should require an EIS.

It is important to also consider the following when evaluating the significant environmental impact that this project will have: the

wetlands in the area, the fisheries of the East Fork of the Lewis River, the inextricably related nature of this proposal to the current activity of crushing and washing in the floodplain and the requirements on other related mining activities in the area. In addition, more attention must be given to the fact that once the peeling back of the topsoil begins, the area will no longer have "fingers within the floodplain" but will meld with, and become, the floodplain.

No wetland delineation has been done for this project. No consideration has been given to the interest of the Army Corps of Engineers. In 1994, the jurisdiction of waters regulated by the Corps under section 404 of the Clean Water Act expanded. Now the Corps has jurisdiction over streams, rivers, lakes ponds and any area which is saturated below the surface for more than fourteen consecutive days in the growing season. Known in the industry as the "Excavation Rule", the rule requires strict Corps approval. Although the area is a clear drainage and has an attachment to the Dean Creek drainage, there is no discussion of wetland areas, or the potential for the involvement of the Corps.

The East Fork of the Lewis River is a prime wild steelhead habitat. In 1996, the National Marine Fisheries Service collected data and predicted that the lower Columbia including the East Fork of the Lewis River will be listed as "threatened" under the Endangered Species Act. In addition, due to the fact that the East Fork of the Lewis River is one of the last undammed rivers, it is likely that it will be the focus of reestablishing wild steelhead runs in the lower Columbia Basin.

II. The Lead Agency Failed To Consider The Full Scope Of The Proposal And, Therefore, It Is Insufficient In Being Able To Determine All Of The Probable Significant Adverse Environmental Impacts.

The Lead Agency has inaccurately determined the scope of the proposal and therefore the environmental determination fails for lack of full, accurate and adequate information. Friends of the East Fork concur in the comments made by the Department of Natural Resources that: "The Department believes that all of the projects relating to the mining of the

entire 349 acre permitted area are physically and functionally linked, and the environmental effects of all of these activities should be assessed in one project document."

It is clear that lead agencies should make certain that a proposal that is "the subject of the environmental review is properly defined." WAC 197-11-060(3)(a). The Washington Administrative Code specifically states that "Proposals or parts of proposals that are related to each other to each other closely enough to be, in effect, a single course of action shall be evaluated in the same environmental document. Phased review is allowed under some specific exceptions listed subsection (5) which are not applicable to this proposal.

Proposals or parts of proposals are closely related, and they **shall** be discussed in the same environmental document, if they:

> (i) cannot or will not proceed unless the other proposal (or parts of proposals) are implemented simultaneously with them; or (ii) are interdependent parts of a larger proposal and depend on the larger proposal as their justification or for their implementation. WAC 197-11-060(3)(b).

A **phased** review is not appropriate where "It would merely divide a larger system into exempted fragments or avoid discussion of cumulative impacts; or it would segment and avoid present consideration of proposals and their impacts that are required to be evaluated in a single environmental document under WAC 197-11-060(4)(b) or 197-11-305(1)." WAC 197-11-060(5).

This project cannot or will not proceed under the current proponent's theory unless they are allowed to crush and wash in an area *that is within the delineated 100 year floodplain and within the 349 acres.* The washing and crushing operation in the floodplain, along with the environmental impacts is attached to this project by the conveyor belt like an umbilical cord. In addition, the reclamation of the adjacent pits which

have been mined out is going to be closely intertwined with the mining operation on the 19 acre parcel. Most importantly, the Department of Natural Resources is requiring a complete reclamation plan for the entire 349 acre site.[2]

The law requires that agencies "shall carefully consider the range of probable impacts, including short term and long term effects. Impacts shall include those that are likely to arise or exist over the lifetime of a proposal or, depending upon the particular proposal, longer period." WAC 197-11-060(4)(c). Therefore, since it is reasonably likely that the river is going to have some interaction with this project according to the lead agency's own determination, and that impact is likely to be a significant adverse impact on the environment, then it is required that an EIS be constructed. One of the processes for an EIS would include the reclamation plan, which is totally absent from this MDNS. Therefore, there is nothing submitted by the proponent which would show the lifetime of the proposal and its long term environmental impacts.

Therefore, the lead agency failed to consider the proposal as a whole and the impacts *over the lifetime of the proposal*. Obviously, it is impossible for the lead agency to consider the impacts which will occur over the lifetime of a proposal when they fail to accurately define the entire proposal.

Moreover, it seems contrary to logic to believe that the proponent does not consider this area all part of a 349 acre parcel to mine. Over the past several years the proponent has claimed mightily that they have the right to mine the entire 349 acre parcel in several different forums in an apparent effort to maintain their assertions regarding vested rights and "grandfathering". Recent forums where proponent has extolled the wholeness of the mining proposal are:

1. An appeal from the County's Notice and Order dated February 27, 1996;

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[2] Friends of the East Fork's position is that Permit No. 70-10139 does not cover the entire 349 acre site but notwithstanding that closely held belief, that is the current position of the Department of Natural Resources until changed through litigation.

2. A Superior Court action in Thurston County in the summer of 1996;

3. The Department of Natural Resources in determining the full scope and extent of Permit No. 10139;

4. An appeal to the Western Washington Growth Management Hearings Board by claiming that the ban on mining in the delineated 100 year floodplain is unlawful.

However, now, it appears the proponent has changed its position and claims it has every reason to "avoid mining to the maximum extent possible in the 100 year regulatory floodplain." *See* Letter dated March 13, 1997 to Michael Butts and Monty Anderson from John Dentler at p. 2. In fact, Mr. Dentler states: "The applicant is not pursuing and does not plan to pursue a proposal to mine the entire 349 acre site." However, the proponent's actions are contrary to words.

The proponent continues to try to amend the 100 year floodplain delineation (see March 13, 1997 letter from Thomas Grindeland to Monty Anderson at page 2-3). The proponent continues to fight a legal battle regarding the County's ban on mining in the delineated 100 year floodplain[3]. Contrary to the County's apparent interpretation, the March 13, 1997 letter simply states that the applicant is not pursuing and does not plan to pursue a proposal for "the entire" 349 acre site. Does that mean that the applicant will pursue a proposal to mine 340 acres? 250 acres? 290?

In addition, the proponent states that they will "heed the local communities desires expressed by members of FOEF to avoid mining to the maximum extent possible" in the 100 year regulatory floodplain. Does that mean that they only want to mine 90% of the area in the 100 year regulatory floodplain? 80% of the area in the 100 year regulatory

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[3] Such litigation would be absolutely unnecessary if the proponent had no intention of mining in the floodplain.

floodplain? 20% of the area in the 100 year regulatory floodplain? It is totally unclear what the "maximum extent possible" means in this particular context.

Moreover, if the proponent is still attempting to have a map change of the 100 year regulatory floodplain, there may be a question as to what the proponent believes the actual 100 year regulatory floodplain is at this time. Although the proponent states they do not plan to pursue a proposal to mine the 349 acre site, plans have been known to change. The proponent could easily change their plans next week depending upon the needs, desires and requests of the corporation.

Finally, the proponent acknowledges the interrelationship between the East Fork of the Lewis River and the project. First the proponent admits that the project area is "hydraulically connected to the East Fork of the Lewis River and nearby surface bodies" and the "aquifer at the site likely discharges groundwater to the river when the river level falls below the elevation of the surrounding water table. Yet no ground water monitoring has been completed and there is none required by the MDNS. In addition, although the proponent claims that it is "backwater", there is still a connection between the 19 acre site and the East Fork of the Lewis River. Areas downstream are considered significant by NMFS.

Therefore, the following issues should be considered as part of proposal for the lead agency to make an accurate and adequate environmental environmental determination:

1. Consideration of the impacts on the floodplain due to the increase of mining operations around the current existing rock crusher;

2. Consideration of the area becoming *de facto* part of the current 100 year delineated regulatory floodplain when the overburden is sheared off down to the aquifer;

3. The interrelationship of the current existing **UNRECLAIMED PONDS WITH THE RIVER <u>BOTH UPSTREAM AND DOWNSTREAM</u>;**

4. The long term and short term effects over the lifetime of the proposal;

5. The impacts of mining on the 19 acre proposal to potential mining on the remainder of the 349 acre permitted area; and the

6. Impacts on groundwater as shown by monitoring.

III. The Mitigation Measures Are Listed In Nos. 1-9 Are Insufficient To Meet The Standards Of Clark County Code 20.06.050(5).

The mitigation measures listed in Nos. 1-9 of the lead agency's Mitigated Determination of Significance are insufficiently specific to address the important critical environmental issues which are raised by this project. The Clark County Code provides that an "Applicant's proposed mitigation measures (clarification's, changes or conditions) must be in writing and must be specific. For example, proposals to "control noise" or "prevent stormwater runoff" were inadequate whereas proposals to "muffle machinery to X decibel" or "construct 200 foot stormwater retention pond at Y location" are adequate." CCC 20.06.050(5)(c).

In addition, "Mitigation measures incorporated in the mitigated DNS shall be deemed conditions of approval of the permit decision and may be enforced in the same manner as any term or condition of the permit, or enforced in any manner specifically proscribed by the county." CCC 20.06.050(7). In this particular case, it is impossible to evaluate the validity, or the credibility, of the mitigation measures set forth by the County because they are so vague.

Initially, the lead agency failed to

Mitigation Measure No. 1 states "No mining shall occur within the floodplain as indicated on the Site Plan. The applicants shall submit information clearly indicating how these narrow fingers can be mined

without threatening the integrity of the floodplain. If at any time, the integrity of the floodplain is threatened, mining will cease and the County notified. Appropriate measures shall be implemented to protect or restore the floodplain prior to commencing further mining in these areas."

There are several problems with this mitigation measure:

1) The applicant has submitted nothing which clearly indicates how the "narrow fingers" will be mined without threatening the integrity of the floodplain;

2) Who is to make the determination that the floodplain is threatened?[4]

3) The Mitigation Measure assumes that mining will cease as soon as the floodplain is threatened, but does not set forth who will make the determination of when the floodplain is actually threatened; and

4) The Mitigation Measure assumes that there will be destruction to the floodplain by putting in that "appropriate measures will be implemented to protect or restore" the floodplain.

Mitigation Measure 3 provides the proponent "Shall provide a dust control plan". However there is no dust control plan and therefore its environmental significance cannot be addressed by the public. The plan must be part of this particular environmental document so that it can be appropriately evaluated by the viewing public and comply with the Clark County Code..

SEPA Mitigation Measure No. 4 states that the conveyor shall be removed if flooding threatens the location. First of all, nothing is set forth as to who makes the determination as to when the conveyor will be "threatened". In addition, there is no information as to the timing of the removal of the conveyor (i.e., how long does it take to deconstruct, pack

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[4] Under the Mitigation Measure No. 2, a geotechnical engineer shall only visit the site every three months. If that is the case, it is extremely possible that the floodplain would be threatened, but no one would be on notice.

away and move a 400 foot conveyor belt which will inevitably cross the floodplain and possibly the existing unreclaimed pits?).

SEPA Mitigation No. 6 is reminiscent of telling a small child alone in a candy store not to indulge in any of the sweets readily available at this fingertips. Again, since a geotechnical engineer will not be on site except for every three months, it is unclear how the County intends to enforce this particular mitigation. Clearly, the track record of the proponent in following the rules and regulations set forth by the County and/or the DNR is, at best, poor and at worst, arrogant in its failure to follow appropriate mining practices.

Without specifically including detailed descriptions in those SEPA mitigation measures above, it is impossible for the general public and citizenry to evaluate whether or not these mitigation measures will appropriately address the concerns set forth in the Draft Site Plan Review Staff Report and Determination. In addition, figure 4 which was circulated with the SEPA document does not identify the areas of mining, the extent of the 100 year flood plain or the location of the berms, but merely shows the internal site access and the apparent location of the conveyor system.

Please accept these comments as our initial comments on this MDNS. We thank you for the extension to more fully develop our comments but felt that it was important to try and get some general information about our position to you as early as possible. We continue to urge you on both technical, environmental and legal grounds to reinstate your determination of significance and allow the public a chance to frame the scoping of the EIS.

Sincerely,

David McDonald

cc: President FOEF
John L. Denner/ Charles B. Roe
Richard S. Lowry

Ken Herman

REGIONAL PLANNING COUNCIL OF CLARK COUNTY

2400 "T" STREET VANCOUVER, WASHINGTON 98661

MEMORANDUM

July 15, 1975

TO: Dick Mayhew, Associate Director, Current Planning

FROM: Rich Hines, Program Coordinator

SUBJECT: Gravel Extraction

Regarding the proposal by Paul Zimmerly to acquire the lease of Lawrence Edwards for gravel extraction along the East Fork of the Lewis River near Daybreak, it can be assumed that Zimmerly would more actively mine the site than has Edwards. Such increased activity within a pre-existing gravel pit does not, in my opinion, require a shoreline permit provided that expansion beyond the limits of the overall, previously approved DNR site reclamation plan does not occur, and provided that substantial improvements (such as dikes, roads, etc) beyond those identified on the DNR approved plan are not involved.

It is my understanding that Zimmerly has indicated he will not operate within 200 feet of the river. Though commendable from a water quality standpoint, this would not preclude shoreline management considerations since the area of shoreline jurisdiction includes the entire flood plain.

In order to make a determination regarding the need for a shoreline permit, it will be necessary to obtain from DNR the approved reclamation plan for this site. I would also concur with DNR's recommendation that an updated five year reclamation plan be provided.

Rich Hines

Rich Hines

RH:jls

cc: Jim Sellers
Jan Rosholt
Doug Bridges
Ken Herman
Rick Trosper

JUL 24 1975

10139

cc: Zimmerly 4-18-79

From : M

STATE OF WASHINGTON
Department of
Natural Resources

P.O. Box 798 Castle Rock, WA. 98611

COMMISSIONER
BERT L. COLE

R. A. BEDWICK
SUPERVISOR

April 16, 1979

Paul Zimmerly
6706 N.W. 209th Street
Ridgefield, WA. 98642

Re: Surface Mining Permit #10139

Dear Sir:

A recent inspection of your Surface Mining Permit #10139 indicates that no shorelines permit has been granted for your mining operation. Since there is a possibilty that you are mining within the flood plain of the east fork of the Lewis River, Clark County may require that a Shorelines Permit be granted.

We are asking that you contact Clark County Regional Planning office and present to them a set of plans for your mining operation showing the boundries of the operation and your plan of operation. At that time Regional Planning will make a recommendation as to whether or not a Shorelines Permit will be needed.

Also, at this time please check with the County on the need of an County or Municipality Recommendation (SM-6). May we hear from you by April 30th, 1979 on this matter.

Very truly yours, 5-22-79 called Clark Co. Zimmerly has contacted them for Terry Oliver.

BERT L. COLE, COMMISSIONER

EDWARD G. PRICE, AREA MANAGER

Kenneth E. Herman, Assistant Area Manager

KEH:cr

cc: Rich Hines
Fred Pickering
Bob Larson
Don Ford
File 10139
Tickler 4-30-79 All Tickler 5-21-79

AN EQUAL OPPORTUNITY EMPLOYER

CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

April 18, 1997

David T. McDonald, P.C.
Courtroom Lawyer
510 SW Third Avenue, #302
Portland, OR 97204

RE: SPR 96-106/SEPA Comment Period Extension

Dear David:

Thank you for your continued interest in the environmental review and permitting process for SPR 96-106/Daybreak Resource Project. County staff has reviewed your request, dated April 18, 1997, to extend the SEPA comment period on the Mitigated Determination of Nonsignificance issued for this project for an additional 15 days. The SEPA comment period is scheduled to end on April 21, 1997. The issues and analysis surrounding the environmental review for this project are complex. In order to insure that the County has the benefit of well considered and relevant information to use in the decision-making process, staff has determined that the comment period should be extended for an additional 15 days, to May 6, 1997. Comments may be submitted to the Responsible SEPA Official through May 6, 1997.

Should you have any questions about this determination, please contact me at 699-2375, ext. 4968.

Sincerely,

Gary T. Fish

Gary T. Fish
Planner II

Post-it® Fax Note 7671	Date 4-18-97 # of pages ▶ 1
To David T. McDonald	From Gary Fish
Co./Dept. Courtroom Lawyer	Co. CC Planning
Phone #	Phone # 699-2375 x4968
Fax # 503-226-1136	Fax # 699-2011

GTF:gf

c: Michael Butts, Current Planning Manager
Monty Anderson, Rural Team Leader
Rich Lowry, Deputy Prosecuting Attorney
John L. Dentler, Legal Counsel for J. L. Storedahl & Sons

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CLARK COUNTY
WASHINGTON

EXHIBIT # 24

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

STAFF REPORT AND RECOMMENDATION TO THE HEARINGS EXAMINER

TO: Larry Epstein, Land Use Hearings Examiner

FROM: Gary T. Fish, Planner II
For: Michael V. Butts, Current Planning Manager

DATE: May 1, 1997

HEARING DATE: May 8, 1997

CASE NUMBER: Appeal # 97-004 (Friends of the East Fork) - Appeal of the Planning Director's determination that a conveyor belt is "equipment", not development governed by the Shoreline Management Act of 1971, and as such, a Shoreline Management permit is not required

RECOMMENDATION: DENY the appeal.

Team Leader's Initials GMT Date 5/1/97

SPECIFIC DATA

APPELLANT(s): Friends of the East Fork, P.O. Box 1277, Battle Ground, WA 98604. Contact - David T. McDonald, Courtroom Lawyer, 510 SW Third Avenue, Suite #302, Portland, OR 97204, Phone (503) 226-0188, FAX (503) 226-1136

OWNER: Stuart C. Woodside, et al cont

LOCATION: NE 61st Avenue at J.A. Moore Road near the East Fork of the Lewis River. Further described as Tax Lot #107 (225047); located in the SW quarter of Section 18, Township 4 North, Range 2 East, of the WM.

COMP PLAN DESIGNATION: Mineral Overlay

ZONING: Agriculture; Surface Mining Overlay

APPLICABLE LAW:

Clark County Code: Shoreline Combining District (CCC 18.330), Clark County Shoreline Master Program;
State Law: Shoreline Management Act of 1971 (RCW 90.58); Permits for Developments on Shorelines of the State (Chapter 173-14 WAC)

PUBLIC NOTICE:
One public notice sign of the appeal and public hearing was posted on the property and two within the vicinity on April 23, 1997.

APPEAL:

The appeal is to the Planning Director's determination that a Shoreline Management Permit is not required for the subject (mining) site plan (SPR96-092) application {Refer to Exhibits #6 & #11}. The appellant's letter(s) set forth six reasons for the appeal of this determination:

1. The mining of a separate 19-acre parcel is an unlawful segmentation from a larger project area that affects a shoreline of statewide significance and thus creates a piecemeal review in an attempt to allow the 19-acre mining proposal to proceed while the other portion(s) of the larger project are in the project review process.

2. The subject site plan (SPR 96-092) would allow mining in lands under the jurisdiction of the Shoreline Management Act and a Shoreline Management permit must be required.

3. Placement of a conveyor belt in the 100-year flood plain to move sand and gravel from the 19-acre parcel to an existing processing site also within the 100-year flood plain, constitutes mining in the 100-year flood plain and should be banned outright under Clark County Mineral Policy 4.5.8, which prohibits mining in the 100-year flood plain.

4. Placement and use of the conveyor belt to transfer sand and gravel constitutes development as defined in the Shoreline Management Act {RCW 90.58.030(3)(d)}. The

fair market value of the placement and use of the conveyor belt exceeds $2500 and/or materially interferes with normal public use of the shorelines of the state and as such must have a Shoreline Management substantial development permit.

5. Failure to require a Shoreline Management permit violates the Clark County Shoreline Management Master Program.

6. The County failed to follow its process for making a Shoreline Management permit determination under CCC 18.330.040 {Shoreline Combining District}.

BACKGROUND:

The subject stretch of the East Fork of the Lewis River is designated as a Shoreline Management stream in the Clark County Shoreline Master Program (Reference Exhibit #18 - page 10), and is designated as a *Rural* Shoreline Management environment (Reference Exhibit #18 - page 37) and a shoreline of statewide significance (Reference Exhibit #18 - page 12).

Site Plan SPR96-062 for the mining of gravel and rock aggregate at a site near J.A. Moore Road and NE 61st Avenue was submitted to the County for review in late 1996. The proposed site plan was later revised to reflect that no mining would take place within the 100-year flood plain of the East Fork of the Lewis River and thus, the activity would be outside the Shoreline Management jurisdictional area. However, a conveyor belt would be placed within the 100-year flood plain to transfer mined material to the applicant's existing aggregate processing operation that is located within the 100-year flood plain of the East Fork. The Shoreline Management jurisdictional area extends 200 feet from the Ordinary High Water Mark or the extent of the 100-year flood plain, whichever is greater{Reference Exhibit #18 - Clark County Shoreline Master Program: Page 6}. The conveyor belt, if defined as development, would be subject to the requirement of a Shoreline Management substantial development permit should its fair market value or cost exceed $2500.

County Counsel advised staff that the conveyor belt could be defined as "equipment" and as such, did not fall under the definition of "development" contained in the Shoreline Management Act of 1971 or that in the Clark County Shoreline Management Master Program - Page 3. According to Counsel, a Shoreline Management permit would not be required if the preceding definition of the conveyor belt as equipment was used by the County. Following receipt of this information and revision of the site plan to reflect no mining within the 100-year flood plain, Monty Anderson, Senior Planner, acting for the Planning Director (January 27, 1997) issued a determination that a Shoreline Permit was not required for the project {Reference Exhibit #6}.

PUBLIC COMMENTS:

Several letters of comment were filed in support of the appeal (Reference Exhibits #6, 7, & 8). All pointed out the need to require a Shoreline Management permit for the proposed mining project. Comments received from agencies, the public, and the appellants on the SEPA

Threshold Determination {Mitigated Determination of Nonsignificance (MDNS)} issued on April 4, 1997, again pointed out the need to require a Shoreline Management permit for the proposal. The Washington State Department of Natural Resources (Reference Exhibit #17 - letter from Rex Hapala) stated that a Shoreline Management permit should be required. The Washington Department of Ecology - Shoreland Section (Reference Exhibit #16 - letter from Kim Van Zwalenburg) outlined DOE's position that Shoreline Management Conditional Use and Substantial Development permits should be required for the project, since mining is defined in the Clark County Shoreline Management Master Program (Reference Exhibit #18 - page 67) as a conditional use for the Rural Shoreline environment. The DOE comment letter on the MDNS cited several reasons and code citations in support of the agency's position, and strongly recommended that the County revise its position on the Shoreline Management permit issue.

FINDINGS AND CONCLUSIONS:

Criteria (CCC 18.330 - Shoreline Combining District)
Criteria (Clark County Shoreline Management Master Program)
Criteria (RCW 90.58 - Shoreline Management Act of 1971)
Criteria (Chapter 173-14 WAC - Permits for Developments on Shorelines of the State)

FINDINGS - Listed by Appeal Item

1. The mining of a separate 19-acre parcel is an unlawful segmentation from a larger project area that affects a shoreline of statewide significance and thus creates a piecemeal review in an attempt to allow the 19-acre mining proposal to proceed while the other portion(s) of the larger project are in the project review process.

   The Planning Director, on advice from County Counsel, has determined that since no mining activity will take place within the 100-year flood plain for the proposed project it may proceed in the approval process outside a larger project area which is currently the subject of a Shoreline Management permit application, for which a draft environmental impact statement (DEIS) is being prepared.

2. The subject site plan (SPR 96-092) would allow mining in lands under the jurisdiction of the Shoreline Management Act and a Shoreline Management permit must be required.

   The proposed project mining activity is more than 200 feet from the ordinary high water mark (OHWM) and outside the limits of the 100-year flood plain of the East Fork of the Lewis River. Therefore, the proposed mining activity is outside the limits of the Shoreline Management jurisdictional area as defined by the Clark County Shoreline Management Master Program (Reference Exhibit #18 - page 6) and not subject to the requirement of a Shoreline Management permit.

3. Placement of a conveyor belt in the 100-year flood plain to move sand and gravel from the 19-acre parcel to an existing processing site also within the 100-year flood plain, constitutes mining in the 100-year flood plain and should be banned outright under Clark County Mineral Policy 4.5.8, which prohibits mining in the 100-year flood plain.

   The Planning Director, on advice from County Counsel, has determined that placement of the conveyor belt system does not constitute development or mining activity, and such is not subject to the prohibition on mining in the 100-year flood plain contained in Clark County Mineral Policy 4.5.8 (Comprehensive Plan).

4. Placement and use of the conveyor belt to transfer sand and gravel constitutes development as defined in the Shoreline Management Act {RCW 90.58.030(3)(d)}. The fair market value of the placement and use of the conveyor belt exceeds $2500 and/or materially interferes with normal public use of the shorelines of the state and as such must have a Shoreline Management substantial development permit.

   The Planning Director, acting on advice from County Counsel, has determined that the conveyor belt that would be placed in the 100-year flood plain may defined as equipment, not development, and as such is not subject to the requirement for a Shoreline Management permit under the definition of development in the Clark County Master Program (Reference Exhibit #18 - page 3) and RCW 90.58.030 (3)(d) {Reference Exhibit #15}. The determination that the conveyor belt is equipment and not development also means that the placement of the belt is not subject to $2500 substantial development threshold as defined in RCW 90.58.030(3)(e) - {Reference Exhibit #15}.

5. Failure to require a Shoreline Management permit violates the Clark County Shoreline Management Master Program.

   Mining within the Shoreline Management jurisdictional area is addressed on page 67 of the Master Program (Reference Exhibit #18). The use is designated as a conditional use within a Rural Shoreline environment of the East Fork of the Lewis River at the subject location. Since the proposed mining will take place outside the Shoreline Management jurisdictional area and the Planning Director has determined that placement of the conveyor system does not constitute mining, the provisions of the Master Program do not apply to the proposal.

6. The County failed to follow its process for making a Shoreline Management permit determination under CCC 18.330.040 {Shoreline Combining District}.

   The cited code section (CCC 18.330.040) states that administration of the Shoreline Management permit system is to be carried out by the Planning Director in accordance with the requirements of Chapter 173-14 WAC (Permits for Development on Shorelines of the State). After consultation with County Counsel, on January 27, 1997, the Planning

Director determined (Reference Exhibit #6) that a Shoreline Management permit was not required for the proposed project. Therefore, the County did follow the correct administrative process for making the determination on whether or not a Shoreline Management permit is required.

III. CONCLUSIONS AND RECOMMENDATIONS

In recognition of the findings and conclusions contained herein, and incorporating reports of affected agencies and exhibits received in this matter, the Current Planning Manager recommends that the Hearings Examiner DENY the appeal.

ATTACHMENTS

1. Site Vicinity Map
2. Site Plan

HEARING EXAMINER DECISION

This report to the Hearings Examiner is a recommendation from the Planning and Development Review Division of Clark County.

The Examiner may adopt, modify or reject this recommendation. The Examiner will render a decision within 14 calendar days of the hearing.

Decisions of the Hearing Examiner are appealable to the Board of County Commissioners within fourteen days from the date of the Hearing Examiner's decision. Appeals must be made in writing to the Board of County Commissioners, 1013 Franklin Street, Vancouver, Washington, 98668. The appeal should show how the Examiner erred in making his decision. A check in the amount of $25.00 made payable to Clark County should accompany the appeal.

EXHIBIT # 25

CLARK COUNTY PROSECUTING ATTORNEY
INTERNAL CORRESPONDENCE

DATE: May 5, 1997

TO: Larry Epstein, Land Use Hearing Examiner

FROM: Richard S. Lowry, Chief Civil Deputy RSL

SUBJECT: Appeal 97-004 (Friends of the East Fork)

The following summarizes the basis for my advice to the Planning Director on several issues presented by this appeal.

1. Segmentation.

The appellant, DNR and DOE all contend that the present site plan proposal impermissibly segments a larger mining project. Piecemealing single projects to avoid environmental review is prohibited under both the Shoreline Management Act and SEPA. In Merkel v. Port of Brownsville, 8 Wn.App. 844 (1973) the Court of Appeals held that the upland portion of a boat marina redevelopment project could not proceed until issuance of a substantial development permit for the Shoreline portion of the project:

> There is nothing in the record before us to indicate that the contemplated construction has ever been anything but one project. The question, therefore, is whether the Port may take a single project and divide it into segments for purposes of SEPA and SMA approval. The frustrating effect of such piecemeal approvals upon the vitality of these acts compels us to answer in the negative. 8 Wn.App. at 850-851.

See also Batchelder v. Seattle, 77 Wn.App. 154, 160 (1995) (". . . Brownsville stands for the proposition that a single project may not be divided into segments for purposes of avoiding compliance with the SMA.")

The SEPA Rules contain an express prohibition against segmenting closely related proposals in WAC 197-11-060(3)(b):

> (b) Proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action shall be evaluated in the same environmental document. (Phased review is allowed under subsection (5)). Proposals or parts of proposals are closely related, and they shall be discussed in the same environmental document, if they:
>
> (i) Cannot or will not proceed unless the other

proposals (or parts of proposals) are implemented simultaneously with them; or

(ii) Are interdependent parts of a larger proposal and depend on the on the larger proposal as their justification or for their implementation.

The standard under both the SMA cases and SEPA Rule appears to be that related actions must receive simultaneous review if a single action could not stand alone. See San Juan County v. Natural Resources, 28 Wn.App. 796, 802 (1981):

> Appellants assign error to SHB finding that future expansion of the proposed development need not be considered, claiming the project was not fully disclosed and the application was therefore defective. The checklist clearly discloses a plan to develop 10 additional campsites, but only if the site receives heavy usage. SHB considered the full scope of the project, and found the present development was not "Coercive" of future expansion. Based on this determination, SHB directed its analysis to the development proposed in the application. We find the fact that there could be a proposal in the future to expand development, which presumably is subject to County approval and SHB review, does not cause this decision of SHB to be arbitrary and capricious or clearly erroneous.

Because Storedahl represented and the staff concluded that mining on the subject twenty-acre parcel could "stand alone", I advised that the present proposal could be processed without complete SEPA and SMA review of the entire Woodside property.

2. Conveyor Belt

Appellant, DNR and/or DOE contend that placement of the conveyor belt within the flood plain requires a conditional use permit either because the conveyor constitutes a structure or because its use constitutes mining. DOE notes that the term "structure" is defined in WAC 173-27-030(15) to mean:

> A permanent to temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels.

The difficulty with this definition is its breath. The

references to an "edifice" or a "building" are not hard to understand. "Any piece of work artificially built up or composed of parts joined together in some definite manner," on the other hand, could include any manufactured item such as tools, vehicles, and equipment. A statute must be construed in a manner to avoid absurd results. Moreover, the meaning of doubtful words may be determined through their relationship to associated words or phrases.

Clark County has a virtually identical definition of "structure" in its zoning code. CCC 18.104.715. The County in the past has construed its zoning code definition of structure not to include equipment. Of course, the distinction between structures and equipment may not always be readily apparent. The County has relied upon factors such as relative permanence and ease of mobility to distinguish between structures and non-structures. Based upon Storedahl's description of the conveyor belt, staff concluded that it constituted equipment.

DOE asserts that because SMA conditional use approval is required for mining in the Rural Shoreline environment, a permit is required for the conveyor belt even if it does not constitute a structure. However, Clark County's Shoreline Management Master Program defines mining at page 67 to mean "The removal of naturally occurring materials from the earth for economic use." The definition is consistent with RCW 90.58.030(3)(d) ("'Development' means . . . removal of any sand, gravel, or minerals . . .") Once removed, the transport or processing of raw aggregate material does not constitute mining for SMA purposes.

3. <u>Processing</u>

DNR and DOE contend that a Shoreline conditional use permit is required for the existing processing plant and stockpile area located within the floodplain. For reasons stated immediately above, I have concluded that such use does not itself constitute mining for SMA purposes. Moreover, on February 27, 1996 the County Planning Director issued a Notice and Order which, in part, concluded that the Woodsides have nonconforming rights predating adoption of the SMA to import, stockpile, and process aggregate at the subject location. An appeal of such Notice and Order is currently pending before you.

RSL/jc

cc: Craig Greenleaf
Gary Fish

David T. McDonald

EXHIBIT # 26

May 16, 1997

Larry Epstein
Larry Epstein, P.C.
Attorneys at Law
722 S.W. Second Avenue, Suite 400
Portland, OR 97204

Re: In Re: Matter of J.L. Storedahl & Sons, Inc. Notice and Order

Dear Mr. Epstein,

INTRODUCTION

On January 29, 1997, the Planning Director for Clark County made a finding that the County would not require the applicant in SPR #96-092 (Daybreak Gravel Mine) to apply for a shoreline permit under the Shoreline Management Act. Friends of the East Fork filed a timely Notice of Appeal to that determination. Both the Department of Ecology and the Department of Natural Resources have concluded that the county's determination is wrong and a Shoreline Substantial Development or a Shoreline Conditional Use Permit should be required. The planning director's determination is clearly erroneous and should be reversed for the following reasons:

1. SPR 96-092 will allow gravel extraction and mining activities in lands under the jurisdiction of the Shorelines Management Act (SMA) and the Shorelines Hearing Board (SHB) thus requiring a shorelines permit; and/or

2. SPR 96-092, a 19 acre parcel, is an unlawful segmentation under the Shorelines Management Act (SMA) from a single

project which affects a water of statewide significance, uplands, floodways and/or shorelands and carves out a portion of the projected use of the property so as to unlawfully create a piecemeal review in an attempt to allow this portion of the project to proceed while the other portion(s) of the project await approval; and/or

3. The placement in the 100 year floodplain of the conveyor belt to move multiple tons of sand and gravel from the 19 acre parcel to an existing sand and aggregate processing site also located in the 100 year floodplain constitutes mining in the 100 year floodplain and, under Clark County Mineral Policy 4.5.8, should be banned outright; and/or

4. The placement and use of a conveyor belt constitutes "development" under RCW 90.58.030(3)(d) and has a total cost and/or fair market value that exceeds $2,500.00 and/or materially will interfere with the normal public use of the water, shorelands or shorelines of the state and thus must have shoreline substantial development permit (SSDP); and/or

5. Failure to require a shoreline permit violates the Clark County Shorelines Master Program.

In support of its appeal, FOEF adds the following documents to the record:

1. Three aerial color photographs of the 349 acre site.

2. Department of Ecology Comments dated April 18, 1997 by Kim Van Zwalenburg contesting the County's determinations that a Shoreline Permit is not required and the project is not a segmentation;

3. Department of Natural Resources Comments submitted on April 18, 1997 by Rex Hapala stating that a Reclamation Plan will need to be submitted for review for the entire 349 acre parcel, setting forth the DNR's interpretation that the 20 acres is part of the 349 acre site and stating their belief that the excavation of the site may effect the location of the floodplain line and that this may need to be explored further.

4. November 18, 1996 letter to Virgil Barnett from Rex J. Hapala, Washington State Department of Natural Resources, regarding the September 26, 1996 Segment 2 & 3 Reclamation Plan for the Daybreak Mine (#70-010139).

5. January 23, 1997 follow up letter to Virgil Barnett from Rex J. Hapala, Washington State Department of Natural Resources, rejecting the applications to mine the 20 and the 60 acre parcels within the 349 acre parcel.

6. April 26, 1991 letter to David Norman, Washington State Department of Natural Resources, from Bonnie S. Shorin, Legal Liaison for the Shorelands and Coastal Zone Management Program, Department of Ecology regarding the necessity for shoreline permits for both the old and new surface mines.

7. April 15, 1991 Letter to Tom Mark, Department of Ecology, from David K. Norman, Washington State Department of Natural Resources, regarding the "grandfathering" of surface mines in shoreline areas.

8. Notice of Application for a Shoreline Management Substantial Development/Conditional Use Permit, #CC-245-91, dated January 16, 1991.

9. SEPA Environmental Checklist signed by Virgil Barnett on May 14, 1991.

10. Appeal of Notice and Order: Findings of Fact and Conclusions of Law dated March 8, 1996 and signed by Charles B. Roe and James Sellers, Attorneys for J.L. Storedahl & Sons, Inc.

11. Respondent's Motion to Dismiss or Stay Processing of Petition for Review and Complaint and memorandum in Support Thereof signed by Charles B. Roe, Jr., Attorney for Respondent J.L. Storedahl & Sons, Inc. and with attached Affidavit of Virgle Barnett.

12. March 11, 1996 Staff Report to the Clark County Planning Commission from Craig Greenleaf, Planning Director and prepared by Jerri Bohard, Long Range Planning Supervisor, and regarding the GMA Remand - Mining in the 100-Yr Floodplain.

13. 1992 article from *The Reflector*; an article from *The Reflector* from August, 1995; an article from *The Reflector dated* September 6, 1995; and an article from *The Columbian* from June of 1991 by Loretta Callahan.

14. Article from *The North American Benthological Society*, A perspective on stream-catchment connections by Kenneth E. Bencala, U.S. Geological Survey (1993).

15. An article from *Landscape and Urban Planning*, 28 (1994) 225-243, Geomorphic and environmental effects of instream gravel mining by G. Mathias Kondolf.

16. The Chronology of Events-Woodside/Daybreak Surface Mine (1968-1995) compiled by the Clark County Department of Community Development.

17. Information from Cedarapids, a Raytheon Company, regarding Stackable Conveyors.

FACTS

The current proposal by the proponent J.L. Storedahl and Sons is to carve out a piecemeal section of a 349 acre site in or immediately adjacent to the 100 year floodplain of the East Fork of the Lewis River for the purpose of gravel extraction. The East Fork of the Lewis River is one of the last undammed, free-flowing rivers that wild steelhead call home. It is designated as a Shoreline Management Stream under the Clark County Master Program and is a *Rural* Shoreline Management environment as well as a Shoreline of Statewide Significance.

At the federal level, the National Marine Fisheries Service (NMFS) recently has predicted that they will list the steelhead run on the East Fork of the Lewis River as threatened. In addition, NMFS recognizes that the spawning numbers in an indexed area from near Lewisville Park to the mouth of the river are at 38% of their goal (see The Columbian, Section E published January 2, 1997, article by Milan Chuckovich). The area proposed to be mined by the proponent is in that exact stretch of river.

The permit at issue is DNR Operating Permit #70-10139. Although there are some discrepancies and differing opinions as to the scope of the mining permit issued by the Department of Natural Resources for mining on the 349 acre site, the Department of Natural Resources' position is that the permitted area for mining is the entire 349 acre site. The DNR maintains that prior to the mining of any piece of that site, a reclamation plan must be done for the entire site.

One of the reasons the site is considered to be 349 acres is that throughout the 1980s, the holders of the permit, including Ray and Merry Woodside, continued to claim on their DNR forms that the operating permit included Mr. Woodside's entire property (349 acres). The DNR continued to contest that fact until 1990. On November 8, 1990, DNR Region Geologist Stephanie Z. Waggoner advised Ray and Merry Woodside:

> The acreage under permit for Surface Mining Permit No. 10139 is all lands owned by yourselves in Sections 13, 18, 19 and 24, Township 4 North, R1-2 East, W.M., as stated in the permit issued in 1971 (i.e., the entire 349 acres).

This determination specifically provided "[a] new operation and reclamation plan for the above-permitted area is required," and imposed eight requirements for the reclamation plan. The DNR has not approved a reclamation plan for the property identified in this ruling and none of the eight conditions specified in the determination has been satisfied. In addition, the "deal" struck between the Woodsides and the DNR is alleged

to have been that the extension of the mining permitted area to 349 acres was conditioned upon a reclamation plan for the entire area

The DNR continued to allow surface mining at the Daybreak Mine outside the 10-acre area identified in the original permit application since 1976 and mining even has been conducted outside the 71-acre mining area approved by DNR since 1986 No reclamation plan for this area has been approved and no reclamation has been completed

Over the years, approximately 91 acres of the 349 acre site have been mined, yet no adequate reclamation has been completed on any of the pits excavated by the proponent or the proponent's predecessors As far back as 1975, the DNR and the local responsible SEPA official (at that time, Rich Hines) were questioning the mining operations on this 349 acre piece

In addition, there has been a clamoring since at least the late 1970's by government officials that mining activity on the parcel required a shoreline permit Currently no shoreline permit has been issued for any activity on this parcel in the ensuing 18 years even though there have been many specific requests for the proponent and/or the proponent's predecessors to apply for and be issued a permit

In 1991, J L Storedahl & Sons, Inc (Storedahl) applied for a Shoreline Management Substantial Development Conditional Use Permit to expand its mining on this parcel to an area west of 259th street at NE 45th Avenue The SEPA checklist submitted by Storedahl stated that the

> proposed use is to mine the existing sand and gravel (resource) in this area in a phased approach The initial operation would begin on the 20 acre parcel immediately southeast of the intersection of NE 61st Street and Bennett Rd (coincidentally the area subject of the current SPR)

The checklist claimed that the **project lands are located on approximately 210 acres**. The County required an EIS and a scoping notice was issued. As late as July 1996, Storedahl submitted a draft DEIS to the County. That draft was rejected by the County and sent back for additional study. Storedahl continues to claim that the Shoreline permit process for this proposal is ACTIVE and not been abandoned (see Notice and Order Appeal).

Throughout the history of mining at this site, the permit holders have continually claimed that the permit is for the entire site and they intend to mine the entire site. The gravamen of the "deal" between Woodsides and the DNR in 1990 was to grant the benefit of having the permit be construed to encompass the entire 349 acre parcel in exchange for the burden of completing a reclamation plan for the entire site before any mining takes place. The intent to mine the entire site is highlighted by the proposal submitted by Storedahl in 1991 and their refusal to abandon that proposal.

Currently, the proponent apparently is engaged in crushing and washing of rock imported from another site off of the 349 acre piece. The current crushing and washing takes place in the 100 year floodplain and within the shoreline area (i.e., within 200 feet of the shoreline of the East Fork of the Lewis River). The proponent does not have a shoreline permit or a conditional use permit for that area.

Currently, litigation regarding mining on or adjacent to this 349 acre parcel is raging in several different venues:

1) A Notice and Order issued by the County in February of 1996 was appealed by FOEF and the proponent. The Notice and Order involves the proponent's ability to mine much of this site, including the area within the delineated 100 year floodplain. An appeal of a hearings examiner's determination on issues regarding the structuring of the litigation at the hearing examiner level was appealed to the Clark County Superior Court. The Superior Court ruled adversely to the proponent and the proponent has appealed that determination to the Court of Appeals;

2) The proponent has appealed the County's GMA plan which provides for the ban on mining in the 100 year delineated floodplain to the Western Washington Growth Management Hearings Board. The matter was initially remanded to the County as part of a stipulated remand of all the parties in October of 1996. The proponent has now re-opened that litigation and requested a hearing on the issues raised in their initial petition. The WWGMHB has set a hearing for July 17, 1997;

3) The County found that the huge conveyor system which the proponent intends to utilize to carry hundreds of tons of gravel over the floodplain and into the shoreline area for crushing and washing does not constitute a structure and, therefore, no substantial development existed requiring the proponent to get a shoreline permit. FOEF appealed that decision and a hearing has been set for May 8, 1997 in front of the Clark County Land Use Hearings Examiner; and

4) In January of 1997, the DNR refused the proponent's request to allow a piecemeal reclamation plan for this parcel based upon the agreement the proponent's lessee, Ray and Merry Woodside dba Sammamish Farms, made with the DNR in 1989. The DNR believes that the proponent is attempting to create a piecemeal project when, in fact, the project is so closely related that it is a single course of action and should all be evaluated at the same time. The proponent has appealed that determination to the Administrative Law Judge in Olympia.

DISCUSSION

A. SPR 96-092 Will Allow Gravel Extraction And Mining Activities In Lands Under The Jurisdiction Of The Shorelines Management Act (SMA) And The Shorelines Hearings Board And A Shorelines Permit Must Be Required.

The 19 acre parcel is subject to a the Shorelines Management Act and requires a shorelines permit because the parcel consists of adjacent uplands to the floodplain and the intended use of adjacent lands

must be considered when taking any action under the SMA in order to achieve the coordinated development of the shorelines which is the object of the SMA. Recently, the Shorelines Hearings Board issued an order which held that the Board has jurisdiction over developments and portions of developments outside the shoreline zone. *Save Our Industrial Land v. City of Seattle and Fred Meyer, Inc.*, SHB No. 95-41 (SOIL).

In finding that the Board had jurisdiction, and ultimately denying the shoreline permit the Board stated:

> In Weyerhaeuser v. King County, a case considering the relative reach of the Shoreline Management Act versus the Forest Practices Act, the Court found that the SMA, and the Board, could regulate construction of a logging road, even though much of the construction was outside the shoreline. The court affirmed the Board's conclusion that the SMA does not regulate forestry practices such as "replanting, fertilization and thinning" outside the shoreline zone because they do not constitute "developments" within the meaning of the SMA. The Court noted, however, that "[f]urthermore, *the intended use of adjacent lands should be considered when taking any action under the SMA* in order to achieve the coordinated development of the shorelines which is the object of the SMA." Weyerhaeuser v. King County, 91 Wn.2d 721, 736 (1979). SOIL, Findings, Conclusions and Order Denying Shoreline Permit at 9 (emphasis supplied).

The decision in *SOIL* that the jurisdictional areas of the SMA may extend to areas adjacent to the shorelines is supported by a plain reading of the SMA and court interpretations. The jurisdiction of the SMA is to be broadly construed. RCW 90.58.900(Shoreline Management Act is exempted from the rule of strict construction and should liberally construed to give full effect to the objectives and purposes); *Buechel v. DOE*, 125 Wn.2d 196, 884 P.2d 910 (1994)(SMA is to be broadly construed

to protect Washington's shorelines as fully as possible); *Clam Shacks v. Skagit Co.*, 109 Wn.2d 91 (1987)(RCW 90.58.100(2)(b), (c) & (e) broadly encompass *uses* which may not necessarily constitute developments); *Weyerhaeuser v. King County*, 91 Wn.2d 721, 736 (1979)(holding that logging practices on lands adjacent to the shoreline may be regulated).

The primary purposes of the SMA include that each development promote and enhance the public interest. The underlying foundation of the enhancement prong is the protection of the environment. *See* William H. Chapman, *Substantive Decision-Making Under the Washington Shoreline Management Act*, 9 U. Puget Sound L. Rev 337, 346-347 (1986). There is a preference under the SMA for 1) uses which protect the ecology of the shoreline and preserve the natural character, 2) uses which are consistent with pollution control and prevention of damage to environment and 3) uses which are designed to minimize damage to the environment. 9 U. Puget Sound l. rev at 347.

The language of the Shorelines Management Act Purpose Statement is eloquent, commands attention and supports an expansive reading of the legislation. At its core the SMA recognizes that

> the shorelines of the state are among the *most fragile of its natural resources* and that there is great concern throughout the state relating to their utilization, protection, restoration, and *preservation*. In addition it finds that *ever increasing pressures of additional uses* are being placed on the shorelines necessitating increased coordination in the management and development of the shorelines of the state. RCW 90.58.020 (emphasis supplied).

The policy statement does recognize some rights to the private property owner rights as to the potential development, but only as to being "consistent with the public interest" and which protect against "adverse effects to public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life". *Id.*

The policy strongly states "the interests of "all of the people shall be paramount in the management of shorelines of statewide significance and *shall* give preference" to specific uses in the following order of priority: 1) *Recognize* and *protect* the state-wide interest over the local interest, 2) *Preserve* the natural character of the shoreline, 3) Result in *long term over short term* benefits, 4) *Protect* the resources and ecology of the shoreline; 5) Increase public access to publicly owned areas of the shoreline, 6) Increase recreational opportunities and, finally, 7) Provide for any other element as defined in RCW 90.58.100 (Master Programs). *Id.*

As stated the statutory scheme is by statute to be liberally construed. RCW 90.58.900 states "This chapter is exempted from the rule of strict construction, and it *shall* be liberally construed to give full effect to the objectives and purposes for which is was enacted.(emphasis supplied).

The current site is an island in the midst of the delineated 100 year floodplain of the East Fork.[1] The East Fork is a river of statewide significance (SOSS) and, now with the potential for being the river for the revitalization of the wild steelhead, is a river of nationwide significance. It is adjacent to the delineated 100 year floodplain on several sides. In addition, the proposal involves pulling a tractor trailer rig and crane onto the area of the 100 year floodplain to construct a structure intended to convey hundreds of thousands of tons of sand and gravel to an area on the banks of the East Fork to be washed, crushed and stockpiled.

The record is full of adverse impacts which will be caused by this project. Impacts on 1) water, both groundwater and the river itself, 2) the floodplain and 3) the surrounding environmental ecosystem are integrally related in this area.

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[1] The applicant has claimed that the 100 year floodplain does not cross the 19 acre site. However, FEMA sets the delineated 100 year floodplain lines, the county has adopted those lines and any argument by the applicant that the FEMA floodplain should not apply is invalid. In addition, the applicant sought a map change from FEMA last year and it was rejected.

Currently the county has adopted a ban on mining activities in the 100 year floodplain. Any "development" or "substantial development" occurring within the upland areas adjacent to the floodplain will affect the floodplain of this area and is within the jurisdiction of the SMA. See SOIL, Findings, Conclusions and Order Denying Shoreline Permit at 9; *Buechel*, 125 at In addition, all of the activities proposed including dredging, drilling, dumping, filling, removing sand, gravel or minerals (includes grading for roads), or the placing of obstructions in the floodplain (conveyor belt) or the immediate upland area are activities for which a permit is required.

B. SPR 96-092 Is An Unlawful Segmentation Under The Shorelines Management Act Of The Projected Use Of The Property Which Unlawfully Creates A Piecemeal Review In Contravention Of The Letter And Spirit Of The SMA.

SPR 96-092, a 19 acre parcel, is an unlawful segmentation under the Shorelines Management Act (SMA) from a single project which affects a water of statewide significance, uplands, floodways and/or shorelands and carves out a portion of the projected use of the property so as to unlawfully create a piecemeal review in an attempt to allow this portion of the project to proceed while the other portion(s) of the project await approval. Therefore, the entire area is subject to SEPA and the Shoreline Management Act and to allow for the sixty acres to go through the planning process results in a piece-mealing of the property in contradiction to the edicts set forth in *Merkel v. Port of Brownsville*, 8 Wa App 844, 500 P2d 390 (1973).

In *Merkel*, the Port of Brownsville sought to expand the marina, portions of which were located in the shoreline area of Burk Bay located in Kitsap County, Washington, in part located in the upland areas of the shoreline. Before obtaining substantial development permits, conditional use permits, and a shoreline permit, the Port prepared an EIS for the upland portion of the property and began to seek development of the property. The Attorney General's Office, and the Prosecuting Attorney of the City of Port Orchard, sought an injunction preventing the Port of Brownsville from proceeding with the development of the upland portions.

The government's attorneys claimed that such development violated the letter and intent of the Shoreline Management Act and the State Environmental Protection Act.

The Port contended that SEPA governed the entire project and once an EIS had been prepared that had weathered any challenges, they were allowed to go forward with the development of the uplands prior to satisfying the remaining requirements under the shoreline management act. The court found that the development of the parcels subjected to the **SMA** in the upland portions were **one project and always meant to be one project**, therefore,

> the coercive effect the construction of one segment would have upon the other is obvious. If clearing and construction activity is allowed to continue in the uplands portion before the wetlands portion has been approved, *it is obvious the entire area will be affected*. The legislature in extending the scope of SMA to consideration of use of lands adjacent to the shorelines, *sought to prevent this type of coerced land use development. Merkel*, 8 Wa App at _____, 509 P2d at 395(emphasis supplied).

The Court concluded that piece-meal development of an entire project would lower the environmental mandates of the acts in question and would frustrate the legislative intent inherent in both SEPA and the SMA. *Id.* "Piecemealing" is the act of segmenting a single parcel or project for the purposes of avoiding compliance with the Shoreline Management Act. *Id.* at 390.

The prevention of piecemeal development and the concomitant requirement to include cumulative impacts in the analysis has been approved and reaffirmed by the Washington Supreme Court. *Hayes v. Yount*, 87 Wn.2d 280, 552 P.2d 1038 (1976)(numerous projects which taken together will have a significant impact should be considered together); *Skagit County v. DOE*, 93 Wn.2d 742, 750 (1980)(emphasizing

that the SMA recognizes effectiveness of coordinated planning of all development).

In *Skagit County*, the Supreme Court stated:

> The court (*Hayes*) observed at page 287: 'Logic and commonsense suggest that numerous projects, each having no significant effect individually, may well have very significant impacts taken together.' The SMA recognizes *the necessity for controlling the cumulative detrimental impact of piecemeal development through coordinated planning of all development.* RCW 90.58.020. *Skagit County*, at 750, *quoting*, *Hayes* 87 Wn.2d at 287 (emphasis supplied).

In several venues, J.L. Storedahl and Sons, Inc. has claimed that the 349 acre parcel owned by Ray and Merry Woodside, and subject to a lease option held by J.L. Storedahl and Sons, Inc., is one mining project. (See Statement of Facts from Storedahl's Motion To Dismiss in Thurston County Case No. 96-2-01586-2, Storedahl's Appeal of Notice and Order, Storedahl's Environmental Checklist submitted as part of shoreline Permit, Agreement between permit holder Ray Woodside and DNR in 1990, and the fact that Storedahl has not terminated its Shoreline Permit Application which is currently in the DEIS process[2]). Storedahl's assertions that there is a plan out there, maybe in the future, to mine the remaining area is real and their actions speak louder than their words.

Moreover, the fact that the projects are interrelated and this is an attempt at piecemealing is reinforced by the DNR's allegations that there is a permit for the entire 349 acres and a reclamation plan must be

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[2] It is my understanding from the county that this application is "inactive". However, it can be reactivated at any time by the applicant/proponent Storedahl and Storedahl refuses to withdraw the application. The reason Storedahl refuses to withdraw the application is because it would lose its argument that the application gives it a vested right to not be subjected to Clark County Mineral policy which bans mining in the 100 year floodplain.

set forth for the entire 349 acres. In November 1996[3], the DNR refused to approve a reclamation plan for this parcel carved out of the whole permitted area.[4] One of the reasons claimed by the DNR is that the other areas mined by Storedahl on either the north side, or south side, of the East Fork have been adequately reclaimed and the reclamation of those parcels is interdependent with the reclamation of these parcels. In addition, the reclamation plans should include the consideration of the full nature and scope of the mining activity which is occurring on the banks of the East Fork.

The county attorney, Rich Lowry, claims that "because Storedahl contended and staff concluded that mining on the subject twenty (sic) acre parcel could 'stand alone' I advised that the present proposal could be processed without complete SEPA and SMA review of the entire Woodside property." However, staff report states:

> The Planning Director, on advice from county Counsel, has determined that since no mining activity will take place within the 100 year floodplain for the proposed project it may proceed in the approval process outside the larger project area which is currently the subject of a Shoreline Management permit application, for which a draft environmental impact statement (DEIS) is being prepared.

The two reports statements are contradictory. As in *Merkel*, there is "nothing" which "indicates that the contemplated construction has

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[3] As early as August 1995, the Attorney General's office notified Storedahl that "AAG Reneaud stated that "the department believes that the *State Environmental Policy Act* mandates it to require a complete reclamation plan, which covers the entire area affected by mining, so that the department can *fully assess the potential environmental impacts*.

[4] FOEF contests DNR's position that the permitted area is 349 acres. However, since that is the proponent's contention, and the current position of the DNR, it should control the environmental and shoreline permit processes. Under FOEF's contention, this 19 acre parcel would not be permitted at all.

ever been anything but one project". There clearly is a "one project area" and that includes the entire Woodside property. Staff confirms it, the Chronology confirms it, the fact that Storedahl continues to pursue its shoreline permit confirms it and the two state agencies in charge of permitting mining and shorelines confirm it. Most importantly, the pictures and common sense confirm it. One look at an aerial view of the area starkly reveals the cookie cutter mining ponds throughout the floodplain are intricately related.

The lone wolf supporting the twisted position that mining on this parcel can stand alone, is the county attorney, and even he equivocates. Finally, the project on its own terms cannot stand alone. A structure must be built in the 100 year floodplain and connect the rock extracted to the washing, crushing and stockpiling site which is in the 100 year floodplain. The conveyor belt connects the project to the floodplain like an umbilical cord connects a baby to its mother.

The Shoreline Management Act is

> an acknowledgment that the shorelines of the state are among the most valuable and fragile of its natural resources: that unrestricted construction upon them is not in the best public interest and therefore there is a need for coordinated planning to prevent the *inherent harm occasioned by piecemeal development of the shorelines.* RCW 90.58.020. *Merkel*, 8 Wa App at _____, 509 P2d at 394 (emphasis supplied).

It is all one project that is being segmented like worm on a hook simply as attempt to avoid the regulatory requirements. The County's theory allows the county to take a picture and crop it to hide the ugly imperfections. Storedahl simply does not want the county, or the state to look at the project as a whole so that a full assessment of the cumulative long term impacts are aired. Claiming this project is isolated from the entire remainder in either the goals of the developer, or the impact on the area, is like claiming the preparation of the crust is isolated

from the goal of making a pizza and the impact it will have on the entire pizza pie.

C <u>The Placement In The 100 Year Floodplain Of The Conveyor Belt To Move Multiple Tons Of Sand And Gravel From The 19 Acre Parcel To An Existing Sand And Aggregate Processing Site Also Located In The 100 Year FloodPlain Constitutes Mining In The 100 Year Floodplain And, Under Clark County Mineral Policy 4.5.8, Should Be Banned Outright.</u>

The placement of the conveyor in the 100 year floodplain constitutes "mining" and therefore should be banned. Clark County Mineral Policy 4.5.8 bans "mining" within the delineated 100 year floodplain. Under RCW 78.44 mining includes "disturbed areas".

"Disturbed Area" is defined as :

> any place where activities clearly in preparation for, or during, surface mining have physically disrupted, covered, compacted, moved, or otherwise altered the characteristics of soil, bedrock, vegetation, or topography that existed prior to such activity. Disturbed areas may include but are not limited to: Working faces, water bodies created by mine related excavation, pit floors, the land beneath processing plant and stockpile sites, spoil pile sites and equipment staging areas. RCW 78.44.031(5)

"Operations" mean

> all mine-related activities, exclusive of reclamation, that include but are not limited to activities that affect noise generation, air quality, surface and ground water quality, quantity, and flow, glare, pollution, traffic safety, ground vibrations, and or significant or substantial impacts commonly regulated under provisions of land use or other

permits of local government and locals ordinances or other state laws.

Operations specifically include:

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(d) Transporting minerals to and from the mine, on site road maintenance, road maintenance for roads used extensively for surface mining activities, traffic safety and traffic control. RCW 78.44.031(8).

"Surface mine"

means any area or areas in close proximity to each other, as determined by the department, where extraction of minerals from the surface result in :

(i) More than three acres of disturbed area. RCW 78.44.031(17)(a).

CCC 18.329.010 adopts the use of provisions of RCW 78.44 by reference. Since under the state laws surface mining includes disturbed areas and operations, and the county has adopted those provisions by reference, surface mining in the county includes operations and disturbed areas greater than three acres. Mineral Policy 4.5.8 bans "mining" within the 100 year floodplain. Since under RCW 78.44, and thus under the county code, the use of the conveyor structure in this area constitutes "mining", the use of the conveyor system within the delineated 100 year floodplain is banned by the county's Mineral Policy 4.5.8.

This determination is consistent with the staff report dated March 11, 1996 which reaffirmed the importance of keeping the ban on mining in the 100 year floodplain. First the staff determined that "[W]hile there are regulatory processes in place, ones such as the Shorelines Master

Program adopted in 1974 *do not adequately address potential* ***cumulative impacts,*** nor recognize the increased knowledge and studies regarding the impacts which has occurred during the last 20 years." In its own staff report, the county clearly recognizes the degradation caused to the county's shorelines by mining activities in the past and intend on prohibiting such activities because all of the king's regulatory systems and all of the King's staff cannot adequately protect the shorelines from the potential ***cumulative impacts,***.

Therefore part of the intent of the Mineral Policy which adopted the ban on mining in the 100 year delineated floodplain was meant to prohibit mining activities due to the uncertainty and risks of the ***cumulative impacts*** produced by mining. Surely, the County did not intend to allow mining activities and operations in the floodplain and simply eliminate the excavation and extraction process. Such an absurd result would not serve the concern of keeping the waterways protected since the SMA and SEPA did not provide adequate protection.

D. The Conveyor Belt Constitutes A "Structure" And Therefore "Development" Under RCW 90.58.030(3)(D) And Has A Total Cost And/Or Fair Market Value That Exceeds $2,500.00 Thus Must Have Shoreline Substantial Development Permit

The conveyor belt proposed by the applicant to be staked into in the delineated 100 year floodplain for the purpose of conveying tons of extracted gravel and sand is a "structure" under both the DOE guidelines (see WAC 173-27-030(15) and Clark County Code 18.104.715. The cost of the conveyor is greater than $2,500 and therefore a shoreline substantial development permit is required. See RCW 90.58.030(3)(d) ("Development means ...the construction of structures"); RCW 90.58.030(3)(e) ("Substantial development shall mean any development which has a cost or FMV which exceeds $2,5000.00); RCW 90.58.140(2)(requirement of substantial development permit).

At the outset, CCC 18.104.715 states:

> 'Structure' ***shall*** mean that which is built **or constructed**, and edifice or building **of any kind**, or any piece of work artificially built up or composed of parts joined together in some definite manner. (Emphasis supplied).

First, structure is adequately defined. The SMA states that the construction of a "structure" with a total cost or value of greater than $2,5000.00 requires a substantial development permit. "Structure", to avoid any question, is defined by both WAC and CCC. In evaluating a statute, great weight is given to an unambiguous plain reading of the statute itself, especially where the term in question is actually defined. As stated by the Washington Supreme Court:

> If a term is defined in a statute, that definition is used. Absent a statutory definition, the term is generally accorded its plain and ordinary meaning unless a contrary legislative intent appears. *Cowiche Canyon Conservancy v. Bosley*, 118 Wn.2d 801, 813 (court construed "exterior alteration" of structure and found that "removal" of structure did not meet the definition of "alteration" in RCW 90.58.)

In addition, the language of this statute is to be liberally construed and therefore the definition of structure must be given a liberal construction. In this case, unlike the situation in *Cowiche Canyon, supra*, the term "structure" is specifically defined by the WAC and the county has adopted that definition. Therefore it must be used. *Id.* The conveyor system meets the statutory definition, even under a strict interpretation of the plain meaning rule, and constitutes "substantial development" requiring a permit.

The county attorney feebly argues that the problem with the definition is its "breadth". However, since the statute does not involve free speech issues then its "breadth" is irrelevant. *See Seattle v.*, 115 Wash. 2d. 635, 631, 802 P.2d 133 (1990), cert. den., ___ US ___, 111 Sup. Ct. 1690,

114 L.Ed.2d 85 (1991). The legislature would be free to define "structure" as broadly as they choose. Simply because the definition encompasses many types of structures does not make it illegal. Although the statutes may take in a great many types of structures, as claimed by Mr. Lowry, it is the legislative bodies' right to draft statute which encompass a great deal of activities, as long as the "breadth" of the statute does not implicate free speech. Therefore, Mr. Lowry's argument that the statute is too broad fails.

The conveyor fits the definition like a glove. As can be seen by the photographs which are attached, the conveyor system must be constructed like an erector set in the floodplain by use of a crane and semi-truck. According to the manufacturer each 30" wide section weighs 5500 lbs. plus the weight of the drive, which is 328 lbs. The 36" wide section would weigh about 6500 lbs. (almost three tons). Putting this structure together is more complex and time consuming than it would be to set in a manufactured home.

Finally, Mr. Lowry claims that the conveyor belt is "equipment" based upon some county practice which is not defined or codified. As stated by the Washington Supreme Court, "[T]he proper action on a land use decision cannot be foreclosed because of a possible past error in another case involving different property". *Buechel*, 125 Wn.2d at 211. Simply because the county has chosen an incorrect process in the past does not give it the opportunity to avoid applying the legally correct criteria to this project.

Mr. Lowry cannot point to any statute, piece of legislative history or rule of law which allows any reading of a definition of "structure" other than the definition found in the WAC and the substantially similar definition found in the CCC. The term "equipment" is not even mentioned. Therefore, the definition found in the WAC and CCC for "structure" must apply and under that definition, the conveyor is a "structure and a "substantial development" permit is required.

E. <u>If Conveyor Is Not Considered Mining, Then It Is A Conditional Use and WAC 173-140140(2) Requires A Shoreline Conditional Use Permit</u>

The Washington Supreme Court has held that even where an activity does not necessarily fit the definition of "substantial development", the SMA regulates *uses* which are subject to the conditional use permit requirement of WAC 173-14-140(2). *See Clam Shacks* , 109 Wn.2d at 96. The *Clam Shacks* court stated the SMA clearly regulates both "developments" and "uses" *Id.*

WAC 173-14-140(2) states:

> Other *uses* which are not classified or set forth in the applicable master program *may* be authorized as conditional uses *provided the* applicant can demonstrate, in addition to the criteria as set forth in WAC 173-14-140(1) above, that *extraordinary circumstances* preclude reasonable use of the property in a manner consistent with the use regulations of the master program. (Emphasis supplied)

The Clark County SMP sets forth specific permitted uses in Chapter 6. All uses which are not permitted are conditional. Therefore even if the use of the conveyor within the 100 year floodplain does not constitute either a structure (thus requiring a "substantial development" shorelines permit) or mining (thus being subject to the ban on mining under Mineral Policy 4.5.8, it can ONLY be allowed as a conditional use and subject to a conditional use permit. *Clam Shacks* , 109 Wn.2d at 96-97; WAC 173-14-140(1)(2).

<u>CONCLUSION</u>

SPR 96-092 will allow gravel extraction and mining activities in lands under the jurisdiction of the Shorelines Management Act (SMA) and the Shorelines Hearing Board (SHB) and therefore the applicant must be

required to apply for a shorelines permit. SPR 96-092, a 19 acre parcel, constitutes an unlawful segmentation of a single project which affects a water of statewide significance, its uplands, floodways and/or shorelands. The project unlawfully carves out a portion of the projected use of the property so as to create a piecemeal review in an attempt to allow this portion of the project to proceed while the other portion(s) of the project await approval.

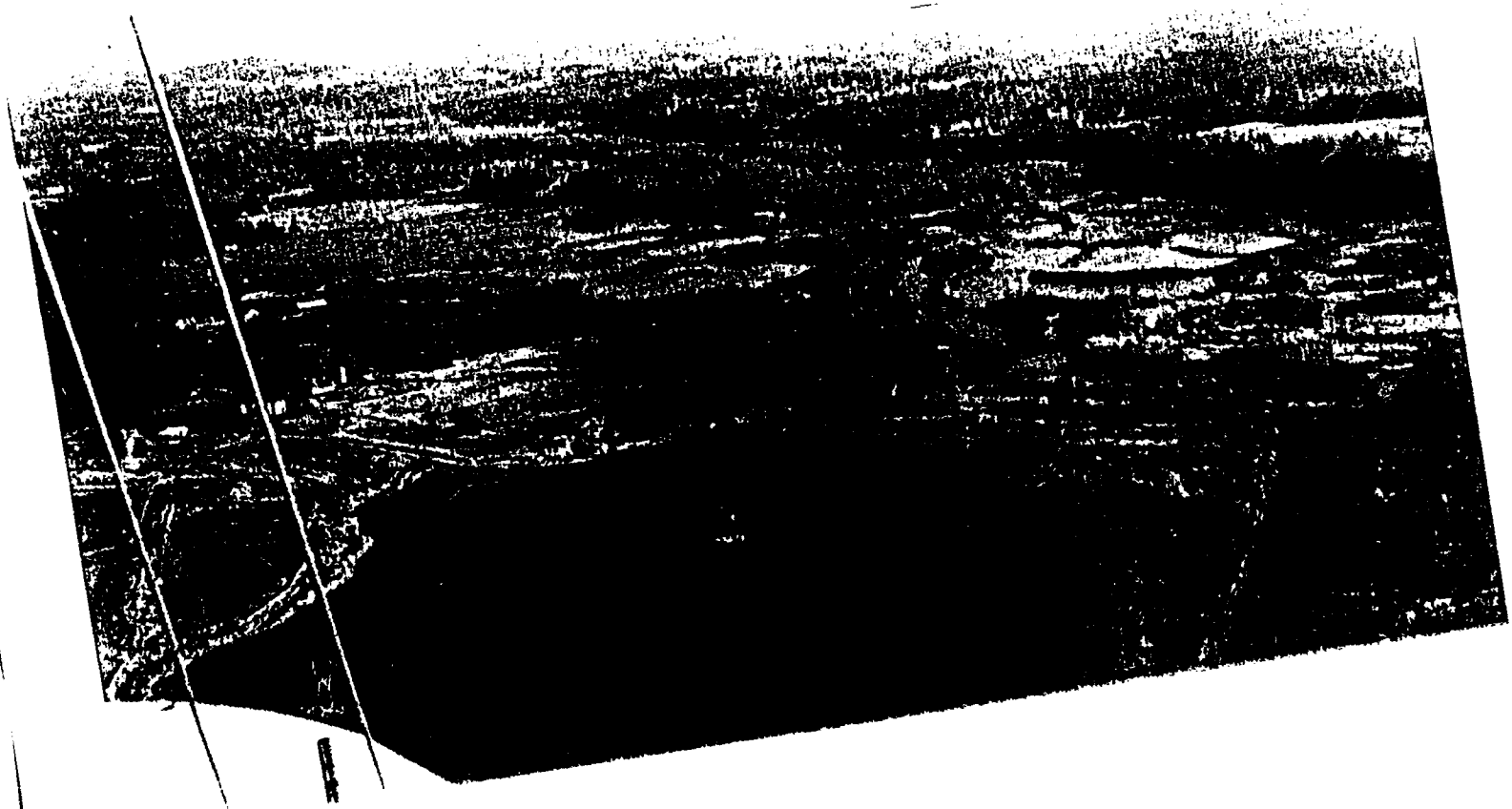
The placement in the 100 year floodplain of the conveyor belt to move multiple tons of sand and gravel from the 19 acre parcel to an existing sand and aggregate processing site also located in the 100 year flood plain constitutes mining in the 100 year floodplain and, under Clark County Mineral Policy 4.5.8, should be banned outright. Moreover, the placement and use of a conveyor belt constitutes "development" under RCW 90.58.030(3)(d) and has a total cost and/or fair market value that exceeds $2,500.00. Finally, if not a development and/or not mining, then the conveyor system in the floodplain is a conditional use and subject to the requirements of WAC 173-14-140 which requires the applicant to obtain a conditional use shoreline permit.

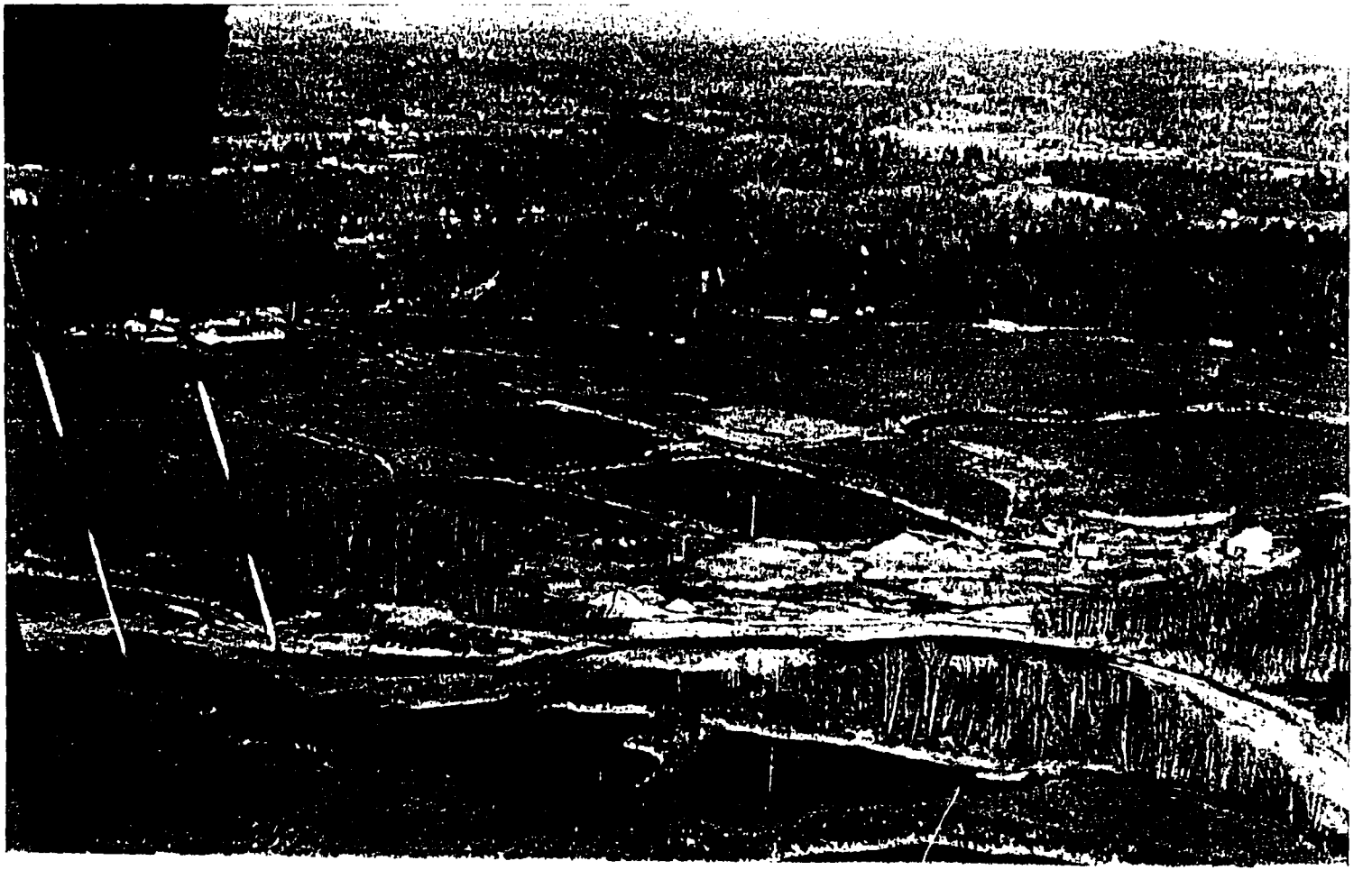
The county's failure to require a shoreline permit violates the Clark County Shorelines Master Program, the SMA and the Washington Administrative Code and should be reversed.

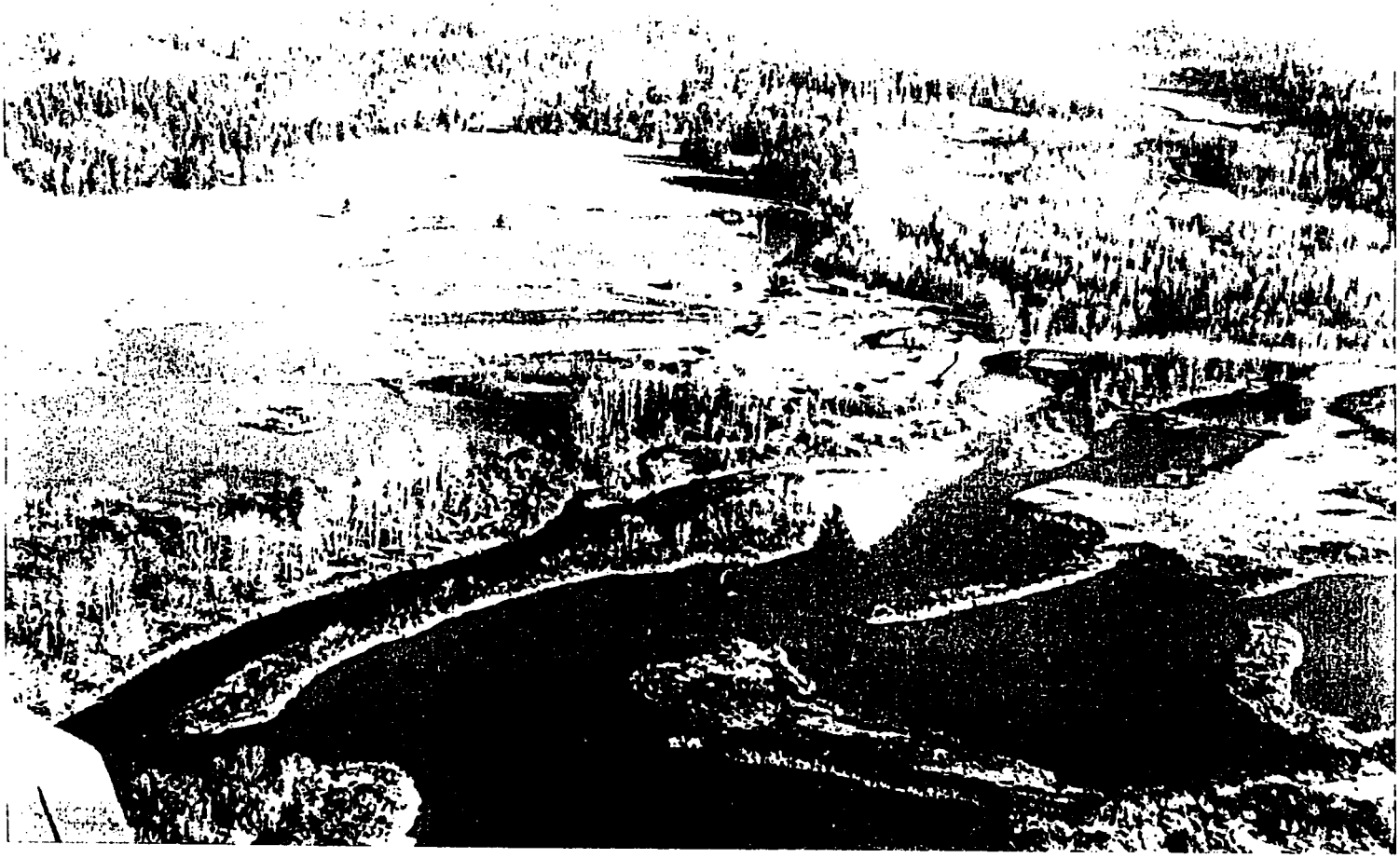
Sincerely,

David T. McDonald

Enclosure
cc: Lois Miller, Chair of the FOEF (without exhibits)
Richard S. Lowry (without exhibits)
Gary Fish, Clark County Planner (without exhibits)







PHL, AG

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

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APR 21 1997

SW REGION

April 18, 1997

Mr. Michael V. Butts
Clark County Community
Development Department
P.O. Box 9810
Vancouver, WA 98666-9810

RECEIVED
APR 23 1997
ATTORNEY GENERAL'S OFFICE
NATURAL RESOURCES DIVISION

Dear Mr. Butts:

RE: SPR #96-092/MDNS for Daybreak Resource Project

Thank you for the opportunity to comment on the MDNS issued for the Storedahl and Sons Daybreak Resource Project on the East Fork of the Lewis River. I have the following comments and concerns.

1. The Sepa checklist was incomplete and inadequate. The only attached site plan was titled "Structures/Operational Plan" Fig. 4. A vicinity map is lacking, as is any information on where the 100 year floodplain is located, the location of the proposed conveyor system, the location of the "offsite" processing plant, and information about where material mined from this proposed site will be stockpiled.

2. It is clear that this site was once, and perhaps still is, part of a larger proposal to mine over 300 acres, much of which is contained within the 100 year floodplain of the Lewis River. Given the fact that there is apparently a draft EIS in process, it is not clear what the basis is for segregating this portion of the proposal out and considering it as a separate proposal. This appears to be a piecemeal approach to allow surface mining to occur within proximity to the East Fork of the Lewis River without the appropriate environmental analysis of the overall impacts to the river system. It also conveniently appears to remove the requirement for a shoreline permit.

3. The Department of Ecology disagrees with the County's determination that a shoreline permit will not be required for this proposal. Mining in Rural shoreline environments requires a Shoreline Conditional Use Permit. There are no exemptions in the implementing regulations for activities which require a Conditional Use Permit. WAC 173-27-040 (formerly WAC 173-14-040) sets forth the criteria for those specific developments which may be granted exemption from the substantial development permit process. Exemptions are to be construed narrowly.

WAC 173-27-040(b) states in part that a "development or use that is listed as a conditional use pursuant to the local master program or is an unlisted use, must obtain a conditional use permit even though the development or use does not require a substantial development permit." (Emphasis added)

The proposal to place a conveyor system into the one hundred year flood plain of the Lewis River requires a Shoreline Conditional Use Permit.

4. The Department disagrees with the County's determination that the conveyor belt is considered equipment and not a structure. "Structure" is defined in WAC 173-27-030(15) as follows:

> "Structure" means a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels;

"Development" is defined, in part, in WAC 173-27-030(6) and RCW 90.58.030(3)(d) as "a use consisting of the construction or exterior alteration of structures" (emphasis added). The conveyor belt is clearly a "piece of work artificially built or composed of parts joined together in some definite manner".

The proposal to place a conveyor system into the one hundred year floodplain of the Lewis River requires a Shoreline Substantial Development Permit.

5. The Sepa checklist neglects to point out that processing of the material mined from this site will occur within the 100 year floodplain of the Lewis River. Active, unpermitted stockpiles are within approximately 100 feet of the Ordinary High Water Mark. In the absence of any information to the contrary, the Department assumes material from this proposal will be stockpiled within the 100 year floodplain of the Lewis River. A shoreline substantial development permit and shoreline conditional use permit are required for this activity.

6. In the absence of information, the Department is skeptical that mining can occur on this site that stays wholly outside the 100 year floodplain. A 20 foot buffer is minimal, and there is no information provided to show that it will adequately protect the 100 year floodplain and the Lewis River system from impacts associated with this proposal.

7. The Department strongly urges the County to withdraw the Mitigated Determination of Nonsignificance for this proposal and include this proposal as part of the larger proposed surface mine operation which is going through the EIS process.

8. The Lewis River is identified as a Shoreline of Statewide Significance under the Shoreline Management Act. As such, the Legislature has set forth use preferences in RCW 90.58 (which states in part) that recognize and protect the state-wide interest over local interest; preserves the natural character of the shoreline; results in long term over short term benefit; and protects the resources and ecology of the shoreline. The Sepa checklist lacks any discussion of how this proposal meets these goals.

9. The effort to piecemeal this project is inconsistent with the policies and regulations of the Shoreline Management Act and the Clark County Shoreline Master Program.

10. Any wells proposed to be abandoned must meet the minimum standards set forth in WAC 173-160 and must be done by a licensed well driller. The wells must be sealed below final grade due to the potential for contamination of the aquifer if the wells are deeper than the depth of the proposed mining operation.

If you have any questions regarding comments 1-9, please contact me at (360) 407-6520. If you have any questions regarding comment 10, please contact Chris Anderson at (360) 407-0272.

Sincerely,

Kim Van Zwalenburg

Kim Van Zwalenburg
Shoreline Specialist
Shorelands and Water
Resources Program

KVZ:cl

cc: Abbe White, Ecology
Scott Morrison, Ecology
Rex Hapala, Department of Natural Resources

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands

KALEEN COTTINGHAM
Supervisor

April 18, 1997

Clark County Planning
Attn: SEPA Coordinator
PO Box 5810
Vancouver, WA 98666-5810

SEPA No. 011696

Dear Mr. Butts:

Thank you for the opportunity to comment on the J.L. Storedahl & Sons Site plan review and approval to operate a surface mine for the purpose of extracting sand and gravel on approximately 20 acres (SPR #96-092/Daybreak Resource Project). The proposal also includes the placement of an electrically operated conveyor from the mining site to an existing rock crusher on an adjacent site. This site is known to the Department more commonly as the "Daybreak Pit" (SF70-010139) with Ray & Mary Woodside dba Sammamish Farms, the permit holder and J.L. Storedahl & Sons, the operator.

I have been asked to submit these comments on behalf of both DNR's Southwest Region and the Geology and Earth Resources Division. Due to time constraints, we have only touched a few of the many issues we believe need to be evaluated in a more detailed manner.

The first and most obvious comment that we have is that a Reclamation Plan will need to be submitted to the Department for review. The revised/modified Reclamation Plan must meet the requirements and standards set forth in RCW 78.44 and WAC 332-18. The Reclamation Plan needs to include all the areas that have been mined and that are to be mined. The SEPA Checklist indicates that "An application for a Surface Mining Reclamation Permit (Form SM-2) has been submitted to the Department of Natural Resources for this period." An application was submitted by the applicant but returned for its incompleteness on November 18, 1996 (See Attached Letter). In addition, on January 23, 1997, the Department reaffirmed that any reclamation plan submitted must be for the entire permit area and not portions of it (See Attached Letter). Since this issue is not addressed in documentation supporting the MDNS, we believe it should be treated as new information.

The second obvious issue concerns the interrelationship of the 20 acre parcel at issue, and the remaining adjoining acreage at the mine site. The Department has interpreted the Woodside's existing surface mining permitted area to be the full 349 acres, part of which is the proposed 20 acre parcel. As noted, in the Background section of the Draft Site Plan Review, Storedahl and the Woodsides have been in the process of developing their full plans for the 349 acre permitted area since 1991.

The pending proposal to mine 20 acres is clearly linked with other mining and mining-related activities on the adjoining 329 acres that have occurred in the past, will occur under this proposal, and are planned in terms of future proposals. First, this proposal clearly involves the movement and processing of tons of material through and on the floodplain, to the existing crusher, scale house, and stockpile area used for the prior mining activities. The impacts of these and other parts of the facility are not being considered. Mining is an all inclusive issue and by leaving that part of the project out, it would appear that some extremely important environmental issues are being ignored (noise, dust, surface and ground water, transportation, etc.). Shouldn't the effects of the reclamation and post-mining condition of these adjoining areas be considered in the context of the pending proposal to mine 20 more acres at the site? It would appear that the scope of the project should be all the areas where mining and mining related activities have occurred and will occur.

Second, more mining of the adjoining areas is clearly contemplated by the applicants. In the SEPA checklist, page two, question #7 (addressing plans for future additions, expansion, or further activity "connected" with this proposal), the applicant has affirmatively indicated that they plan to mine an additional adjacent 40 acre parcel. Is there any reason why the environmental review of these two linked proposals should be considered in this piecemeal fashion? The Department believes that all of the projects related to mining on the entire 349 acre permitted area are physically and functionally linked, and the environmental effects of all these activities should be assessed in one project document.

We have included three key definitions from the Washington Surface Mining Act, Chapter 78.44 RCW that may be of use when trying to better understand how the Department interprets mining operations.

> RCW 78.44.031(5) "Disturbed area" means any place where activities clearly in preparation for, or during, surface mining have physically disturbed, covered, compacted, moved, or otherwise altered the characteristics of soil, bedrock, vegetation, or topography that existed prior to such activity. Disturbed areas may include but are not limited to: Working faces, water bodies created by mine-related excavation, pit floors, the land beneath processing plant and stock pile sites, spoil pile sites, and equipment loading areas.
>
> RCW 78.44.031(8) "Operations" means all mine-related activities, exclusive of reclamation, that include, but are not limited to activities that affect noise generation, air quality, surface and ground water quality, quantity, and flow, glare, pollution, traffic safety, ground vibrations, and/or significant or substantial impacts commonly regulated under provisions of land use or other permits of local government and local ordinances, or other state laws.
>
> Operations specifically include:
>
> (a) The mining or extraction of rock, stone, gravel, sand, earth, and other minerals;
>
> (b) Blasting, equipment maintenance, sorting, crushing, and loading;
>
> (c) On-site mineral processing including asphalt or concrete batching, concrete recycling, and other aggregate recycling;
>
> (d) Transporting minerals to and from the mine, on site road maintenance, road maintenance for roads used extensively for surface mining activities, traffic safety, and traffic control.
>
> RCW 78.44.031(11) "Reclamation" means rehabilitation for the appropriate future use of disturbed areas resulting from surface mining including areas under associated mineral processing equipment and areas under stockpiled materials.

Clark County has indicated that the existing processing plant and stockpile area is pre-existing or "grandfathered" and thus does not need a Shorelines Permit. The issue of "grandfathering" of the existing processing area is questionable. On April 15, 1991, the DNR sent a letter to the Department of Ecology about this issue (See Attached Letter). The response from the Department of Ecology stated that *"There should be no grandfathering of the older mines, despite the fact that they may have pre-existed the Shoreline Management Act..."* (See Attached Letter). In addition, the determination not to require a Shorelines Permit for the conveyor is also questionable.

A major question that is not addressed and should be considered is that the excavation of this site (20 acres and 45 feet deep) directly adjacent to the floodplain may have the physical and legal effect of changing the location of the floodplain line. We believe that these issues need to be explored in the environmental review of this project.

One of the concerns that the Department has had for numerous years has been the issue of river avulsion. Section 3 of the Draft Site Plan Review Staff Report and Determination has some conflicting information about the potential for the river to invade the site. According to Dr. Bradley *"avulsion of the main channel of the East Fork of the Lewis River into the subject mining area is highly improbable."* Continued on the next page, G. Mathias Kondolf, Ph.D., indicates that *"the river does have the potential and will most likely flow into the proposed or the existing adjacent mining pits in the future (Kondolf, pp.5)."* We were unable to locate Dr. Bradley's January 9, 1997 letter/report in Response to County Concerns Regarding Effects on Floodplain and Avulsion or Dr. Kondolf's April 11, 1996 report on Effects of Aggregate Mining on River Floodplains. It is interesting to note that Dr. Bradley indicates that since 1935 the river has never approached within 1,300 feet of the site and has consistently moved to the south, away from the project site. It should be pointed out that from circa 1854 to circa 1937 the river showed classic features of a braided stream/channel. By 1937 or so, the braided stream/channel is replaced with a single channel that is probably unstable during major floods. This issue is by far the largest concern but little data or conclusions are provided to support the MDNS. The only mitigation measures identified are to move the conveyor if flooding threatens and seasonal drainage through the berm.

Daybreak Pit/#70-010139
April 18, 1997
Page 3

Some of the SEPA Mitigation measures identified are not clear:

-Number 1 of the SEPA Mitigation says no mining will occur as indicated on the site plan. No site plan was attached. What is meant when the word *"threatened"* is used? Who will make that determination? Does this mean the floodplain no longer functions as a floodplain? Avulsion is imminent or likely? This is vague. Is there a study that discusses this issue and defines thresholds?

-Number 4 of the SEPA Mitigation says that *"The conveyor shall be removed if flooding threatens to enter the location of the conveyor."* How and who will make the determination to move the conveyor?

-Number 5 of the SEPA Mitigation talks about expected flows into the mining site. What size of an event will it be looking at? How will these effect the channel morphology? Will avulsion result? Is new diking required?

-Number 6 of the SEPA Mitigation says mining shall not occur into the Troutdale Formation. Have test holes been drilled on the site to locate this formation and determine its exact location and depth throughout the site?

-Number 8 of the SEPA Mitigation shows that a 10 foot high berm will be built for noise. What specifications ... going to be constructed too? How long will this and other berms be in place? The material stored in berms plays a key role in reclamation, so this is of interest to the Department.

It is our opinion that a thorough Hydrogeologic Report should be required. That report should assess all effects and potential effects of mining activities occurring on this site (349 acres). Additionally, the Department's position is that a reclamation plan must be submitted for the areas where mining and mining related activities have occurred and will occur.

Once again, thank you for allowing us the opportunity to comment on this proposal. If you have any questions please feel free to call or write me at our Southwest Region office (360)577-2025.

Sincerely,

Rex J. Hepala
Geologist

Enclosures

cc: SEPA Center
SW SEPA File
Jan Gano, SW Region Manager
Neil Smith, SW Assistant Region Manager
Lloyd Handlos, District Manager
Phil Ferester, Assistant Attorney General
Kim Van Zwalenburg, Department of Ecology
Scott Morrison, Department of Ecology
Brian Cowan, Department of Fish and Wildlife
Geology & Earth Resources Division
File #10139
rcf

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

November 18, 1996

Virgil Barnett
J.L. Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

RE: Comments on September 26, 1996 Segment 2 & 3 Reclamation Plan for the Daybreak Mine (#70-010139)

Dear Mr. Barnett:

We have reviewed your most recent reclamation plan for the Daybreak Mine. It is extremely difficult to make a detailed list of the items that your reclamation plan is presently missing. I have tried to give a general list of the most obvious items below:

- A single/complete Application for Surface Mining Reclamation Permit (Form SM-2)
- A single/complete County or Municipality Approval for Surface Mining (Form SM-6)
- A single/complete Standard Reclamation Plan (Form SM-8A)
- A written narrative describing the proposed mining and reclamation scheme (RCW 78.44.091(1))
- River avulsion/flood plain issues not addressed (RCW 78.44.091(1)(i)(j))
- Topsoil/overburden management plans (RCW 78.44.091(1)(k))
- Cross-section maps (RCW 78.44.091(3))
- Maps that depict the entire permit boundary
- Maps as they relate to the flood plain (RCW 78.44.091(2)(a))
- Setbacks (RCW 78.44.121)
- The ponds presently do not show irregular shoreline configurations, sinuous bathymetry and shorelines, peninsulas, islands, etc. (RCW 78.44.141(4)(c)(iv))

It does not appear appropriate to split the proposal into different permits. As it stands, any reclamation plan submitted to the Department needs to be a single comprehensive plan for the whole permit area. Please note that due to the above needs the SEPA documents were not reviewed.

The Department can not approve the plan as it is presently submitted. I am returning the documents that you submitted.

Mr. Virgil Barnett/#70-010139
November 18, 1996
Page 2

It would appear that it may be necessary to sit down and review your plan and the issues that were not addressed. With the holiday season close at hand and various other scheduling conflicts, please keep in mind that meetings may not be easily scheduled with short notice. If you wish to go in this direction please contact me at our Southwest Region office so that we may make the necessary arrangements.

Sincerely,

Rex J. Hapala
Geologist

c: Ray & Merry Woodside
Monty Anderson, Clark County
Rich Hines, Clark County
Phil Ferester, AAG
Neil Smith, RP&S Assistant Manager
Lloyd Handlos, District Manager
Dave Norman, Geology Division
File #10139
r.f.

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

January 23, 1997

Virgil Barnett
J.L. Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

Dear Mr. Barnett:

This is a follow up to my November 18, 1996 letter and additional conversations dealing with the Daybreak Pit on the East Fork of the Lewis River.

The Department has reviewed and considered your proposal(s) to mine both the 20 and 60 acre parcels that are within the existing 349 acre permit area (#70-010139). We have decided not to accept those applications. Our position is that we will not split the permit area. This is based on the agreement with the permit holder in 1990 that the reclamation plan that would be submitted would cover the entire permit area.

Sincerely,

Rex J. Hapala
Geologist

c: Ray & Merry Woodside, Permit Holder
John Dentler, J.L. Storedahl & Sons Legal Counsel
Monty Anderson, Clark County
Rich Hines, Clark County
Melissa Remick, Clark County
Brian Carrico, Clark County
Phil Ferester, Assistant Attorney General
Bill Lingley, Geology Division
Dave Norman, Geology Division
Jan Gano, SW Region Manager
Neil Smith, SW Assistant Region Manager
Lloyd Handlos, District Manager
File #10139
r.f.

SOUTHWEST REGION ▮ 601 BOND RD ▮ PO BOX 280 ▮ CASTLE ROCK, WA 98611-0280 ▮ FAX: (360) 274-4196 ▮ TEL: (360) 577-2025

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

RECEIVED

April 26, 1991

Mr. David Norman
Department of Natural Resources
Division of Geology and Earth Resources
Mailstop PY-12
Olympia, WA 98504

Dear Mr. Norman:

You are correct in assuming that both old and new surface mines require shoreline permits. There should be no grandfathering of the older mines, despite the fact that they may have pre-existed the Shoreline Management Act, because any mining activities which may have been legal at the effective date of the Shoreline Management Act on June 1, 1971, were required to be permitted not later than June 1, 1973. The requirement to obtain permits for pre-existing developments is set out specifically by 90.58.140(10) RCW, which states:

> A permit shall not be required for any development on shorelines of the state included within a preliminary or final plat approved by the applicable state agency or local government before April 1, 1971, if: . . .
>
> (b) The development is completed within two years after June 1, 11. (Emphasis added.)

This requirement is reiterated by Ecology's implementing regulations at WAC 173-14-050, which exempt from permitting those substantial developments undertaken on the shorelines of the state prior to the effective date of the act "except . . . [w]here the development is not completed within two years after the effective date of the act." (Emphasis added.)

The surface mining is clearly an ongoing project, and as such requires a valid shoreline permit in order to continue operations lawfully. That mining operations constitute "development" under the Act is unquestioned, because the definition of development includes "dredging; drilling; dumping; filling; removal of any sand, gravel or minerals . . . ." 90.58.030(3)(d).

Finally, Clark County's own Shoreline Master Program spells out that in areas that have shoreline environment designations of Urban, Rural, and Conservancy, mining is a Conditional Use, and thus requires a Conditional Use Permit to be a lawful activity. These three designations are the predominant environment designations on the East Fork of the Lewis River. In those areas with an environment designation of Natural, mining is prohibited completely.

If you should have additional concerns regarding this matter, please feel free to contact me at 438-7468.

Sincerely,

Bonnie S. Shorin
Legal Liaison
Shorelands and Coastal Zone
Management Program

BSS:del

cc: Rich Hines

WASHINGTON STATE DEPARTMENT OF
Natural Resources

BRIAN BOYLE
Commissioner of Public Lands

Division of Geology & Earth Resources
Rowesix Bldg. 1, MS:PY-12
4224 6th Ave. SE
Lacey, WA 98503
(206) 459-6372

April 15, 1991

Tom Mark
Department of Ecology
Shorelands Management Section
Mailstop PV-11
Lacey, WA 98504

Subject: Grand fathering of the Shorelines Management Act

Dear Mr. Mark:

I have a question regarding the "grandfathering" of surface mines along shorelines. As an example, the East Fork of the Lewis River in Clark County has several sand and gravel mines located on the 100 year flood plain and also within 200 feet of the river. The active surface mine permits are:

SM Permit	Name	Location	Issued	Acres
11236	J.L Storedahl	Sec.13,24 T4N R1E	1974	70
10139	Ray Woodside	Sec.13,19,18,24 T4N R1,2E	1971	300+
10389	Clark County	Sec.19 T4N R2E	1972	100

There are currently two new proposed surface mines adjacent to the above surface mine permits which will require shoreline permits according to Clark County. However, none of the older surface mine permits are required to have shoreline permits because Clark County has determined that the mines are "grandfathered".

The question is, don't all of the older surface mines need a shoreline permit as well as the newer ones? If all of the above mines need a shoreline permit it would be appropriate to inform Clark County as they seem confused about their jurisdiction.

As we understand it the Shoreline Management Act can provide the best master plan for the river, further development, and the past and future mining.

Thank you for your assistance and please do not hesitate to call if you have any questions regarding surface mines on the floodplain of the East Fork of the Lewis River.

Sincerely,

David K. Norman
Geologist

RECEIVED
APR 17 1991
SW REGION

WASHINGTON CENTENNIAL

NOTICE OF APPLICATION
FOR A SHORELINE MANAGEMENT
SUBSTANTIAL DEVELOPMENT/CONDITIONAL USE PERMIT

#CC-245-91

Notice is hereby given that J. L. Storedahl & Sons, purchaser of the below described property, has filed an application for a shoreline management substantial development/conditional use permit to expand an existing surface mining operation, located immediately west of the Ridgefield Surface Mining Pit north of NE 259th Street at NE 45th Avenue, within the SW 1/4 of Section 13 and the NW 1/4 of Section 24, Township 4 North, Range 1 East of the Willamette Meridian in Clark County, Washington. Said development is proposed to be within the shoreline management jurisdictional area of the East Fork of the Lewis River. Any person desiring to express his views or to be notified of the action taken on this application should notify the Planning Director, Clark County Department of Public Services in writing of his interest within thirty (30) days of the final date of publication of this notice, which is January 16, 1991.

Written comments must be received by February 15, 1991.

SEPA

ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of proposed project:

   Daybreak Pit

2. Name of applicant:

   J.L. Storedahl & Sons, Inc.

3. Address and phone number of applicant and contact person:

   2233 Talley Way, Kelso, Washington 98626
   (206) 636-2420, Attn: Mr. Virgle Barnett

4. Date checklist prepared:

   May 13, 1991

5. Agency requesting checklist:

   Clark County, Planning Department, Washington

6. Proposed timing or schedule (including phasing, if applicable):

   Commence mining operations in the southeastern portion of the site as soon as possible, progressing to the north and west.

7. Do you have any plans for future additions, expansions, or further activity related to or connected with this proposal? If yes, explain.

   No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

"Reclamation Plan for Daybreak Gr: vel Pit, East Fork of the Lewis River", prepared by David J. Newton Associates, Inc., dated March 7, 1991.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No.

10. List any government approvals or permits that will be needed for your proposal, if known.

Reclamation Plan - Washington Dept. of Natural Resources

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site.

There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The 349-acre site (as described in question 12) is currently under permit for Surface Mining Permit No. 10139, issued in 1971. The proposed use is to mine the existing sand and gravel (resource) in this area in a phased approach. The initial operation would begin on the 20-acre parcel immediately southeast of the intersection of NE 61st. Street and Bennett Road. The operation will consist of mining, crushing and stockpiling the resource for transport offsite. The mined area would then be reclaimed for future recreational and waterfowl uses, as described in the attached reclamation plan.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including street address, if any, and section, township, and range, if known.

If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any applications related to this checklist.

See figures in attached reclamation plan. The project lands are located on

approximately 210 acres about 4 1/2 miles northwest of the town of Battle Ground, Wa., Clark County, near the East Fork of the Lewis River.

The lands are located on: W 1/2,NE 1/4, Sec. 19; and NE part of NW 1/4, NE 1/4, NW 1/4, Sec. 19; and E 1/2, NE 1/4, NW 1/4, Sec. 19; and S1 1/2, SW 1/4, Sec. 18 south of Moore Road; and S 1/2, NW 1/4, SW 1/4, Sec.18 south of Moore Road; T4N, R2E, W.M.; AND S 1/2, NE 1/4, SE 1/4, Sec. 13; and SE 1/4, SE 1/4, Sec. 13, N of Dean Creek Tributary, T4N, R1E, W.M.

B. ENVIRONMENTAL ELEMENTS

1. EARTH

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other_____.

b. What is the steepest slope on the site (approximate percent slope)?

Natural slopes - approximately 4 percent
Man-made slopes - approximately 25 percent

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soil, specify them and note any prime farmland.

Sand and gravel with very minor amounts of clay are present on the site. Soil Conservation Survey (SCS) soil types consist of four types; the Washougal loam (forestry, hay, and pasture), Washougal gravelly loam (hay and pasture), Riverwash (no farming value), Puyallup fine sandy loam (hay, pasture, and minor garden crops).
There is known prime farmland on the proposed project, as specified by the Clark County Planning Department - Comprehensive Plan.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

e.Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of the fill.

Grading would include excavation of the gravel resource in gravel pits as described in the attached reclamation plan. The final configuration would result in several pits that would serve as a natural lake/wildlife

habitat. Average depths of the excavations would be 20 feet to 25 feet.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Minor amounts of erosion would occur during the operation. The medium to coarse - grained nature of the soils inhibit erosion. Erosion will tend to occur in internally drained pits and should not pose an erosion/surface water runoff problem.

g. About what percent of the site will be covered with impervious surfaces after the project construction (for example, asphalt or buildings)?

There are no plans for impervious surfaces after project completion.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Berms currently exist along the property line in the southeastern portion of the site. These berms will serve to reduce the potential for inundation of any future flood waters. Additional berms may be necessary to protect inundation of the pits by water. These permanent berms would be designed to reduce the potential for erosion and for fish entrapment during periods of high water along the river, as described in the reclamation plan.

2. AIR

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when would the project be completed? If any, generally describe and give approximate quantities if known.

Dust and automobile emissions from the outgoing trucks and dust from the mining equipment will be similar to that of the existing gravel pit adjacent to the proposal.

Periodic watering of gravel access roads during the dry season will reduce the amount of dust from truck traffic.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

c. Proposed measures to reduce or control emissions or other

impacts to air, if any:

Periodic water trucks to wet gravel access roads to reduce dust during the dry season.

3. WATER

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Streams - Dean Creek (crosses site) eventually flows into the East Fork of the Lewis River, and small unnamed seasonal tributaries which cross the northern half of the site, flowing into Dean Creek. A creek which occurs in the northern portion of the site drains to the southwest into Dean Creek, and has been designated as a Type 3 water body. This designation of the Department of Natural Resources infers that the creek has moderate to slight use and is moderately important from a water quality standpoint.

Ponds - Two unnamed ponds associated with existing gravel operations immediately west and south of the central portion of the site. Two small, unnamed ponds resulting from previous mining operations by Clark County occur offsite, just west of the southwestern portion of the site.

Rivers - East Fork of the Lewis River, a minimum of 200 feet south of the site.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The project will encroach within 200 feet of Dean Creek in the north-central portion of the site. A buffer zone will be implemented on either side of the creek. A minimum of 25 feet will be maintained on either side of the creek, measured from the centerline of the creek (see attached reclamation plan). In addition, the project will encroach within 200 feet of the existing ponds created by the existing mining operations, and the County ponds. Berms ranging from 5 to 10 feet in height have been previously constructed near the County ponds.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands, and indicate the area of the site that would be affected. Indicate the source of fill material.

Approximately 2.5 acreas of palustrine emergent wetlands will be affected during the mining process, as described in the reclamation plan.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No surface water will be withdrawn or diverted.

5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

The proposal does lie in a 100-year flood plain, as presented on Figure 7 in the attached reclamation plan.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No waste material is anticipated to be discharged into surface waters.

b. Ground Water

1) Will ground water be withdrawn, or will water be discharged to ground after? Give general description, purpose, and approximate quantities if known.

No ground water will be withdrawn nor will water be discharged into the ground water system. The mining operation will initially be approximately 8 to 10 feet above the ground water table. Water for washing the material will be recycled through the existing pond created as a result of the existing mining operation. Once ground water is encountered within the proposed gravel pits, this water will be utilized for washing, and then recycled in the same manner back to the pit.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of animals or humans the system(s) are expected to serve.

One 1000 gallon concrete septic tank is present for collection of domestic sewage at the existing mining area for a maximum of 6 persons.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and the method of

collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The source of runoff would primarily be storm water. The area outside of the final gravel pit will be designed to divert surface waters away from the pits, towards existing tributaries, creeks, or the river.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No waste materials are anticipated to be generated from the mining operation.

d. Proposed measures to reduce or control surface, ground and runoff water impacts, If any:

To reduce surface water/runoff water impacts, sediment entrapment areas will be used to filter any particulate out of stormwater runoff, as neseccary.

4. PLANTS

a. Check or circle types of vegetation found on the site:
-deciduous tree: red alder, big leaf maple, black cottonwood
-evergreen tree: Douglas Fir, western red cedar
-shrubs: himalayan blackberry, swordfern, snowberry, holly
-grass
-pasture
-crop or grain: none
-wet soil plants: reed canary grass, red alder sapling, Agropyron sp. Douglas spiraea
-water plants: none

b. What kind and amount of vegetation will be removed or altered?

The project site consists of a diverse mixture of vegetation ranging from cultivated fields, wetlands and mixed woodland. The cultivated fields are dominated by various grass species, i.e. hay that are periodically harvested. The forested woodlands are dominated by Douglas fir (Pseudotsuga mensiesii), red alder (Alnus rubra), big-leaf maple (Acer macrophyllum) and black cottonwood.

The wetland areas are dominated by red alder saplings, reed canarygrass, douglas spiraea and Agropyron sp. Supportive trees and shrubs include red

alder, black cottonwood and big-leaf maple. The location of wetlands identified within the project boundaries is presented in Figure 6 (reclamation plan). Wetland #1 is represented by Dean Creek, which drains the upland areas notheast of the site. This creek is approximately 3'to 5'in width with an average depth of 2 feet. This narrow creek meanders across the site and is dominated by willow (Salix sp.), reed canarygrass and red alder saplings. Big-leaf maple was also observed along sections of the bankline. This riparian wetland corridor will be protected with an appropriate buffer to minimize impact from the proposed project.

Wetand #2 consists of a seasonal drainage that traverses the cultivated fields and constitutes a palustrine emergent wetland that is evident from historical photgraphs. This drainage represents a varying width with a depth of 1 to 2 inches that result from offsite surface drainage. The dominant species include reed canarygrass and Agropyron sp. A similar drainage area (#4) also is described as an emergent wetland with similar dominance of species. This site had been historically recontoured and modified, but the dominant drainage pattern was evident from historical photographs and site visitation. No ponding or drainage was evident within this area. Total amount of wetlands affected by the proposed mining operation is 2.5 acres.

The forested shrub wetland areas (# 3 and #5) are represented by small depressions and drainage areas that are subject to seasonal flooding from upland areas. Dominant species include red alder, black cottonwood, Douglas spiraea and reed canarygrass. These areas will not be directly impacted from the proposed operations. A buffer of 25 feet will be maintained in order to protect the indicated wetland function and value. The wetland drainage areas associated with the cultivated fields will be removed and will represent acres. It is anticipated that these wetland areas will be mitigated through on-site enhancement of existing wetlands.

c. List threatened or endangered species known to be near or on the site.

No threatened or endangered species were identified through a search by Department of Natural Resources Trax Report dated February 8, 1991.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Landscaping would consist of native plants appropriate to the site. It is anticipated that some of the excavated areas would be filled with water, recontoured and revegetated with native species. It is anticipated that grasses, shrubs and tress species will be mixed to blend with the surrounding vegetative landscape.

5. ANIMALS

a. Circle any birds and animals which have been observed on or near the site or are known to be on the site:

-birds: hawk, songbirds, geese
-mammals: black-tailed deer, opossum, spotted skunk, racoon, fox, Douglas squirrel.
-fish: salmon, trout

The wildlife habitats identified within the project area is presented in Figure 7. As indicated, the site consists of approximately 160 acres of cultivated fields that would be impacted from the project. The cultivated fields would be excavated during development and subsequently reclaimed for similar wildlife usage.

b. List any threatened or endangered species known to be on the site.

No threatened or endangered species were identified through a search by Department of Natural Resources Trax Report dated February 8, 1991.

c. Is the site part of a migration route? If so, explain.

The site does not appear based upon initial observation to represent a migration route for wildlife. The site is at a minimum of 200 feet from the East Fork of the Lewis River. A riparian corridor for wildlife exists along the Lewis River, However the distance of the proposed project form this area diminishes the impacts on it.

d. Proposed measures to preserve or enhance wildlife, if any:

Upon cessation of the proposed development, a revegetation plan would be implemented which would provide for the planting of native shrubs that may be utilized by wildlife. Pond areas will be created as a result of this development which will serve as an enhancement for waterfowl species.

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Gasoline and diesel will be used to power most of the excavation equipment at the site. Electricity will be used to power the gravel conveyor, crusher,

submersible water pump for wash water, and for the lighting and heating of the temporary office trailer.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No structures would be erected to a height that would shade adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Recycling of ground water will occur in the wash water operations.

Transporting gravel utilizing a conveyor belt system will reduce the amount of trucks necessary which in turn reduces the need for gasoline or diesel.

7. ENVIRONMENTAL HEALTH

A. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill or hazardous waste, that could occur as a result of this proposal? If so, describe.

Fuel spill, fire or explosion is possible with the earth moving equipment and associated trucks.

Dust and exhaust from the equipment is possible.

1) Describe special emergency services that might be required.

Fuel spill clean up.

Rural fire service, if needed, for fire or explosion.

2) Proposed measures to reduce or control environmental health hazards, if any:

Periodic wetting of gravel access roads utilizing water trucks during the dry season.

b. Noise

1) What types of noise exist in the area which may affect your project (for

example: traffic, equipment, operation, other)?

None exists.

2) What types and levels of noise would be created by or associated with the project on a short-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from that site.

Noise from truck traffic (approximately 150 loads per day at peak periods), and noise associated with the excavation equipment would be anticipated.

Normal hours of operation are 7am to 4:30pm, Monday through Friday.

3) Proposed measures to reduce or control noise impacts, if any:

Construction of temporary earthen berms along existing roads and residences, where the mining operations will encroach. These berms would decrease the level of noise from the operations significantly.

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties?

The existing property is being used for agricultural, dairy farming, and current mining operations.

Adjacent properties consist of agricultural farm lands, scattered residential structures, and a Clark County mining operation.

b. Has the site been used for agriculture? If so, describe.

Approximately 80% of the site has been used for agricultural practices, including grasses for hay.

c. Describe any structures on the site.

There is a shop building on the existing mining site and three homes.

d. Will any structures be demolished? If so, what?

Eventurally the shop building will be demolished or moved.

e. What is the current zoning classification of the site?

Ag-S - Agricultural/Surface Mining

f. What is the current comprehensive plan designation of the site?

Agricultural designation

g. If applicable, what is the current shoreline master program designation of the site?

"Rural", as designated by the "Shoreline Management Master Program - Clark County, Washington", dated August 1974.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

This area has been designated as "environmentally sensitive", based on its location within the 100 - year floodplain, as defined by Clark County Planning Department.

i. Approximately how many people would reside or work in the completed project?

Once the project is completed, no one would live within the project.

j. Approximately how many people would the project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

See attached reclamation plan.

9. HOUSING

a. Approximately how many units would be provided, if any? Indicate whether high, middle or low-income housing.

None provided.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle or low-income housing.

None eliminated.

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable.

10. AESTHETICS

a. What is the tallest height of any proposed structure(s) not including antennas: what is the principal exterior building material(s) proposed?

No permanent structures are proposed.

b. What views in the immediate vicinity would be altered or obstructed?

Not applicable.

c. Proposed measures to reduce or control aesthetic impacts, if any:

See attached "reclamation plan".

11. LIGHT AND GLARE

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No lighting is anticipated, except security lighting around the temporary office, at night.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No light will be utilized once the project is finished.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

Not applicable.

12. RECREATION

a. What designated and informal recreational opportunities are in the immediate vicinity?

Fishing along the East Fork of the Lewis River.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

See attached reclamation plan.

13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

There are no known places or objects of historic or archaeologic significance next to or on the site, as presented by Department of Natural Resources Trax Report, dated February 8, 1991.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific or cultural importance known to be on or next to the site.

Not applicable.

c. Proposed measures to reduce or control impacts, if any:

Not applicable.

14. TRANSPORTATION

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any:

As presented on Figure 3, Aerial photograpy of Site, in the attached reclamation plan, the site is accessed by County roads including Bennett Road, NE 61st Avenue, and Bevin Road. Proposed access to the site would consist of these streets, as necessary.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The site is not served by public transit. The closest transit stop is in La Center, Washington, approximately 5 miles northwest of the site.

c. How many parking spaces would the completed project have? How many would the project eliminate?

None, not applicable.

d. Will the proposal require any new roads, streets or improvements to existing roads or streets, not including driveways? If so generally describe.

Private temporary gravel/dirt roads on the property associated with the mining operation can be anticipated.

e. Will the project use (or occur in the immediate vicinity of) water, rail or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Once the project is completed, no vehicular trips will be generated, with the exception of those seeking recreational uses of the project.

g. Proposed measures to reduce or control transportation impacts, if any:

Not applicable.

15. PUBLIC SERVICES

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so generally describe.

Not once the project is completed. Additional fire services may be necessary should a need arise during the project.

b. Proposed measures to reduce or direct impacts on public services, if any.

Temporary needs, therefore no direct impacts on the public services.

16. UTILITIES

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Not applicable.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature Virgil O. Barnes

Date Submitted 5-14-91

BEFORE THE HEARINGS EXAMINER
CLARK COUNTY
STATE OF WASHINGTON

J.L. STOREDAHL & SONS INC., Appellant, v. CLARK COUNTY WASHINGTON, DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT, Respondent	NO. APPEAL OF NOTICE AND ORDER: FINDINGS OF FACT AND CONCLUSIONS OF LAW DATED FEBRUARY 29, 1996

This document, filed pursuant to Clark County Ordinance 32.08.040, embodies an appeal to the Hearings Examiner of Clark County requesting an appeal hearing of a notice and order issued by Mr. Craig Greenleaf, Director, Clark County Department of Planning and relating to certain findings of fact and conclusions of law regarding surface mining and related processing activities carried out on real property, owned by Ray and Merry Woodside in partnership with Virginia I. Woodside, comprised of a 349 acre parcel located in Sections 13, 24, T-4, R1E, EWM and Sections 18 and 19, T-4, R2E, located north of the East Fork of the Lewis River in northern Clark County. The following is submitted in support of this appeal.

1. Name and Address of Appellant. The appellant is J.L. Storedahl & Sons, Inc. The address of appellant is 2233 Talley Way, Kelso, Washington 98626. The telephone number of appellant is (360) 263-2965.

2. Action Appealed. The action appealed is the notice and order entitled In Re: Matter of J.L. Storedahl & Sons, Inc., dated "Mailed 2/29/96," issued by Mr. Craig Greenleaf, Director, Clark County Planning Department. A copy of the Notice and Order is attached.

3. Substance of Order Appealed The Notice and Order.

a) prohibits Storedahl from resuming mining in the 100-year flood plain until such time as the County issues a Shoreline Permit;

b) finds that with regard to the County's ban on mining in the 100 year flood plain nonconforming use rights attach only to 71 acres of the Woodside property;

c) embraces and recognizes the Diminishing Resources Doctrine as an exception to the general legal principle limiting the expansion of nonconforming uses, but fails to apply the doctrine and, therefore, finds that nonconforming use rights to engage in surface mining do not extend to the balance of the Woodside property;

d) finds that under the County's Shoreline Master Program, surface mining is a permitted conditional use and, therefore, the Diminishing Resources Doctrine has no application to surface mining on the Woodside property;

e) finds that Surface mining within the 100-year floodplain is a substantial development and Storedahl must obtain a shoreline permit regardless of nonconforming use rights with respect to mining in this area;

f) finds that because Storedahl submitted a shoreline permit application for mining the entirety of the Woodside property on May 12, 1991, Storedahl has vested rights to have the application processed under the pertinent regulations in effect at the time the permit application was submitted,

g) finds that surface mining may take place on those portions of the Woodside property outside of the 100-year floodplain, subject to site plan review; and

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c) embraces and recognizes the Diminishing Resources Doctrine as an exception to the general legal principle limiting the expansion of nonconforming uses, but fails to apply the doctrine and, therefore, finds that nonconforming use rights to engage in surface mining do not extend to the balance of the Woodside property;

d) finds that under the County's Shoreline Master Program, surface mining is a permitted conditional use and, therefore, the Diminishing Resources Doctrine has no application to surface mining on the Woodside property;

e) finds that Surface mining within the 100-year floodplain is a substantial development and Storedahl must obtain a shoreline permit regardless of nonconforming use rights with respect to mining in this area;

f) finds that because Storedahl submitted a shoreline permit application for mining the entirety of the Woodside property on May 12, 1991, Storedahl has vested rights to have the application processed under the pertinent regulations in effect at the time the permit application was submitted,

g) finds that surface mining may take place on those portions of the Woodside property outside of the 100-year floodplain, subject to site plan review; and

h) finds that material mined on a 71 acre parcel of the Woodside property material imported from outside this area may be processed without the necessity of obtaining a shoreline permit.

4. Statement of Facts and Errors Upon Which Appellant Relies to Sustain Statement of Error.

a) Factual Backdrop. Surface mining of sand and gravel has occurred on the Woodside property since at least 1968. Processing of sand and gravel on the Woodside property began in around 1970-1971. The vast majority of the Woodside property is denoted on various state and county maps as lying in the 100-year floodplain. Mining and processing has, however, occurred on the Woodside property on a continuous basis for over a quarter-century. As noted in the Notice and Order, as part of its Growth Management Plan, Clark County adopted, effective January 1, 1995, development regulations prohibiting surface mining in the 100-year floodplain. In the past, Clark County recognized historic mining and processing on the Woodside property as an established nonconforming use, in relation to zoning, land use planning and regulatory actions. However, on August 3, 1995, Clark County issued a stop-work order to J.L. Storedahl & Sons, Inc. to cease from engaging in mining activity until such time as a shoreline permit issued. In response thereto, Storedahl ceased mining activity.

b) Errors. Clark County erred, through an abuse of discretion, or arbitrary or capricious action, or an action which exceeded its statutory authority, or a misapplication of the law to the pertinent facts, or a combination thereof, in issuing said Notice and Order for the following reasons

i) By concluding that nonconforming use rights pertaining to mining and processing apply only to approximately 71 acres of the Woodside property;

ii) By concluding that a shoreline permit is required prior to the resumption of surface mining within the balance of the Woodside property falling within the 100-year floodplain,

iii) By not applying the Doctrine of Diminishing Resources as described in II.B. et seq. of the Notice and Order, to the facts in this particular instance;

iv) By concluding that site plan review is necessary prior to resuming mining and processing on the Woodside property,

v) By relying on and applying development regulation, Mineral Lands Policy #4.5.8 as referenced on p. 3, paragraph F of said Notice and Order, as pertinent to resolving rights to engage in surface mining and processing on the Woodside property; and

vi) By applying a regulation, Mineral Lands Policy #4 5.8, as referenced on p. 3, paragraph F of said Notice and Order, that violates substantive and procedural requirements applicable to the adoption of the same

5 Relief Sought. Appellant requests the Hearing Examiner to enter an order correcting the errors of the respondent, Clark County, by

a) finding that the aforenoted Mineral Lands Policy has no application in this instance and does not control surface mining and processing on the Woodside property;

b) finding that nonconforming and preexisting rights to engage in surface mining and processing apply to the entirety of the Woodside property;

SELLERS & JACOBS

By _____

James Sellers, WSBA #4770

Attorneys for J.L. Storedahl & Sons, Inc., Inc.

MAY 23 1996

SUPERIOR COURT OF THE STATE OF WASHINGTON
FOR THURSTON COUNTY

CLARK COUNTY NATURAL RESOURCES COUNCIL, a nonprofit corporation; FRIENDS OF THE EAST FORK, a registered nonprofit corporation, Petitioners, v DEPARTMENT OF NATURAL RESOURCES OF THE STATE OF WASHINGTON, JENNIFER M. BELCHER, Commissioner of Public Lands, RAY and MERRY WOODSIDE d/b/a SAMMAMISH FARM; J. L. STOREDAHL & SONS, INC.; and CLARK COUNTY, a municipal corporation, Respondents	NO. 96-2-01586-2 RESPONDENT'S MOTION TO DISMISS OR STAY PROCESSING OF PETITION FOR REVIEW AND COMPLAINT AND MEMORANDUM IN SUPPORT THEREOF

I. INTRODUCTION

This case is about whether, where, and when gravel mining may occur on real property owned by respondent Woodsides and located in Clark County. The petitioners appear to be neighbors who live near the site and do not wish to have a gravel operation as a neighbor, as well as members of organizations, the stated goal of which is the protection and use of the East Fork of the Lewis River. The petitioners are challenging agency action involved in granting a surface mining permit in 1971 and subsequent transfers of that permit, the last of

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which occurred in 1991. Respondent herein, J. L. Storedahl & Sons, Inc. ("Storedahl") holds a long-term lease authorizing gravel mining on the Woodside property and has engaged in gravel mining on this property from 1987 through mid-1995.

This motion is filed for two reasons. First, petitioners' legal claims are invalid because they (1) failed to timely file a petition for review, (2) apparently made no effort to seek administrative review of the agency actions that are the subject of their claims, and (3) are not harmed, even if their allegations are assumed to be true. Second, Storedahl seeks to avoid the cost and time involved in litigating this matter and responding to burdensome discovery requests when no surface mining is presently occurring and indeed may never occur depending on whether one or more permits issue. Moreover, Storedahl seeks to complete hearings before a hearing examiner in Clark County regarding gravel mining challenged herein prior to taking up petitioners' petition for review.

II. RELIEF REQUESTED

Pursuant to CR 12(b)(6), Storedahl requests that the Court dismiss petitioners' complaint in all respects due to petitioners' (1) failure to timely file the petition for review, (2) failure to exhaust administrative remedies, and (3) lack of standing in relation to the alleged agency action.

III. STATEMENT OF FACTS

A. Surface mining began on what is now the Woodside property, located in northern Clark County, as early as 1968. Shortly after enactment of Washington's Surface Mining Act, Ch. 78.44 RCW, Mr. Lawrence Edwards, Sr., in 1971, submitted a surface mining permit application to the Washington Department of Natural Resources ("DNR") to undertake gravel mining on the Woodside property. The DNR issued surface mining operating permit 70-10139 dated January 1, 1971. Gravel mining continued over the next

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quarter century on this property under several mining operators, but all gravel mining occurred under permit 70-10139.

B. In 1975, Mr. Paul Zimmerly took over Mr. Edward's mining lease and he applied to the DNR for a transfer of the permit, which was granted. In 1987, Storedahl took over the operation from Mr. Zimmerly through the purchase of an existing long-term lease to undertake gravel mining on the Woodsides' property. With the exception of a brief period, Storedahl continued to mine and process gravel on said property through mid-1995. After some confusion regarding who held permit 70-10139, in 1997 the DNR transferred the permit to respondent Woodsides and they continue to hold the permit.

C. Shortly after the transfer of surface mining permit 70-10139 to the Woodsides, a dispute arose regarding the aerial coverage of the permit and an informal administrative hearing was requested by the Woodsides. The DNR conducted an informal administrative hearing and concluded that permit 70-10139 encompassed some 340 acres of the Woodside property; however, the DNR also concluded that an updated reclamation plan should be submitted.

D. In 1991, Storedahl submitted to the DNR a new gravel mining reclamation plan for surface mining on the Woodside property. At around the same time, Clark County notified Storedahl that a shoreline permit was necessary if mining was to be extended beyond the area of historic operations within the area of shoreline jurisdiction. In 1991, Storedahl submitted to Clark County an application for a shoreline permit to undertake surface mining within the area of shoreline jurisdiction. Storedahl remains engaged in obtaining both a new reclamation plan and a shoreline permit and is completing a comprehensive environmental impact statement ("EIS") under the State Environmental Policy Act ("SEPA"), Ch. 43.21C

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RCW. A draft EIS will be submitted to Clark County, as lead agency in the EIS review process, within the next few days.

E. Storedahl terminated gravel mining on the Woodsides' property in 1995 in response to the issuance by Clark County of a stop-work order based on the necessity of obtaining a shoreline permit prior to any expansion in surface mining within the area of jurisdiction under the County's Shoreline Master Program. See Ch. 90.58 RCW. Due to a number of legal issues potentially impacting surface mining on the Woodside property, Clark County issued a Notice and Order raising several legal issues.[1] The Notice and Order apparently could not be issued without probable cause and, in the spirit of comity, Storedahl informed the County of the intent to initiate gravel mining in the future. With that notification, the Notice and Order issued and was appealed by Storedahl as well as one of the petitioners herein (Friends of East Fork).[2] The Notice and Order finds, among other things, that mining may not expand within the area of shoreline jurisdiction to areas outside of a 71-acre area previously subject to surface mining unless and until a shoreline permit issues. As a legal matter, Storedahl is appealing this particular finding; however, at the same time, all practical efforts are being made by Storedahl to obtain a shoreline permit.

F. Storedahl has not engaged in gravel mining on the Woodside property since approximately August of 1995 Aside from the processing of aggregate imported to the Woodside property from elsewhere or previously mined and stockpiled, Storedahl does not anticipate engaging in gravel mining on the Woodside property until such time as a new reclamation plan is approved by the DNR and a shoreline permit is issued by Clark County.

---

[1] Tab 1.

[2] Tab 2.

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Further, whether, when, and where future mining occurs on the Woodsides' property depends, in large measure, on (1) the outcome of the EIS process, (2) the approval or denial of the reclamation plan by the DNR, and (3) approval or denial of a shoreline permit by Clark County.

IV. STATEMENT OF ISSUES

1. Should petitioners' petition for review and complaint be dismissed for failure to file the petition within the time specified under Washington Law (RCW 34.05.542)?

2. Should petitioners' action for declaratory judgment be dismissed because the Surface Mining Act, Ch. 78.44 RCW, limits challenges to department determinations to actions under the Washington APA?

3. Should petitioners' petition for review and complaint be dismissed for failure to exhaust administrative remedies under Washington Law (RCW 34.05.534)?

4. Should petitioners' petition for review and complaint be dismissed for lack of standing?

V. EVIDENCE RELIED UPON

This motion is based upon the factual allegations contained in petitioners' complaint filed on May 1, 1996. For purposes of this motion only, all factual statements contained in the complaint are to be treated as if they were true. Lawson v. State, 107 Wn.2d 444, 448, 730 P.2d 1308 (1986). Other evidence relied upon is listed as follows:

1. Clark County Notice and Order dated February 29, 1996 (Tab 1);

2. Notices of Appeal of Notice and Order by Storedahl and petitioner (Tab 2); and

3. Affidavit of Virgle Barnett (Tab 3).

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VI. AUTHORITY

A. Petitioners' Petition for Review and Complaint Should Be Dismissed Because the Time Period for Filing Petitions for Review Has Long-Since Expired

The Washington Administrative Procedure Act ("Washington APA") establishes the requirements for judicial review of "agency action." The Washington APA plainly requires petitions for review of agency action to be filed within 30 days of the challenged action:

> A petition for judicial review of agency action other than the adoption of a rule or the entry of an order is not timely unless filed with the court and served on the agency, the office of the attorney general, and all other parties of record within thirty days after the agency action.

RCW 34.05.542 (emphasis added). Petitioners are not challenging the legality of gravel mining now occurring because no such action is occurring; rather, they challenge the issuance of a surface mining permit in 1971, subsequent transfers of that surface mining permit in 1975 and 1991, and alleged surface mining that may take place in the future.

Instead of pursuing an action in a timely manner, petitioners and members thereof were dilatory in pursuing informal, formal administrative, or legal actions to remedy alleged injury. Only now, over a quarter century after gravel mining first began at the site, do petitioners allege that they suffer actual, direct, and proximal injury sufficient to stimulate this action.

In the interim, Storedahl has spent thousands of dollars so as to be in a position to initiate surface mining under surface mining permit 70-10139. For example, Storedahl has (1) hired experts to testify before the Clark County Planning Commission and Board of Commissioners regarding zoning activities related to gravel mining, (2) at great cost hired experts to complete and submit (a) a shoreline permit application, RCW 90.58.140, (b) a reclamation plan to undertake surface mining under RCW 78.44.081, and (c) a related

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environmental impact statement under Ch. 43.21C RCW, (3) purchased, at substantial cost, a lease to undertake surface mining on the Woodside property, and (4) negotiated an option to purchase the Woodside property outright in order to undertake surface mining.[3]

Invalidation of the permits would mean that expenditures made by Storedahl will have been extraordinary, needless, and wasteful and, therefore, causing prejudice to Storedahl. Further, the complained-of "actions" occurred nearly a quarter century ago and many witnesses necessary to litigate this matter have likely disappeared and, if found, may be unable to accurately recollect facts underlying the permitting actions.

Storedahl requests the Court to dismiss the petition for review because the express 30-day time limitation for filing and serving the petition has long since expired.

B. Petitioners' Challenge to Agency Action Under the Uniform Declaratory Judgment Act and Civil Rule 57 Should Be Dismissed Because Challenges to Agency Action Under the Surface Mining Act Is Limited to Appeals Under the Washington Administrative Procedures Act

The sole avenue of challenging agency determinations under the Surface Mining Act, Ch. 78.44 RCW, is through the Washington APA:

> Appeals from department determinations under this chapter [Surface Mining Act] shall be made as follows:
>
> <u>Appeals from department determinations made under this chapter shall be made under the provisions of the Administrative Procedure Act</u> (chapter 34.05 RCW), and shall be considered an adjudicative proceeding within the meaning of the Administrative Procedure Act, chapter 34.05 RCW

RCW 78.44.270 (emphasis added).

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[3] Tab 3 (Affidavit of Virgle Barnett).

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The Surface Mining Act specifically limits such challenges to appeals under the terms of the Washington APA. Here petitioners attempt to dress their challenge to the DNR's actions in the clothing of an action for Declaratory Judgment. See petitioners' complaint at 3.

Assuming, arguendo, that petitioners may otherwise bring a challenge for declaratory judgment, in cases where a specific statute appears to conflict with a statute of more general application, the statute with more specific terms preempts the more general statute. E.g., Waste Management v. Utilities & Transp. Comm'n, 123 Wn.2d 621, 629-30 (1994) (A general statute would otherwise govern, "except that there is another, more specific provision which applies. A specific statute will supersede a general one when both apply." (Citations omitted.)), modified, 1994 Wash. LEXIS 319 (May 5, 1994). Similarly, the Surface Mining Act expressly and specifically limits challenges to the agency action, such as that in petitioners' complaint, to the terms of the Washington APA. Accordingly, the Court should dismiss the petitioners' action for declaratory judgment.

C. Petitioners' Petition for Review and Complaint Should Be Dismissed Because Petitioners Have Failed to Exhaust Administrative Remedies

The petition for review and complaint should be dismissed because petitioners have not sought administrative review of agency action. The Washington APA makes clear that

> A person may file a petition for judicial review under this chapter only after exhausting all administrative remedies available within the agency whose action is being challenged, or available within any other agency authorized to exercise administrative review, except:
>
> (2) A petitioner for judicial review need not exhaust administrative remedies to the extent that this chapter or any other statute states that exhaustion is not required; or
> (3) The court may relieve a petitioner of the requirement to exhaust any or all administrative remedies upon a showing that:
> (a) The remedies would be patently inadequate;
> (b) The exhaustion of remedies would be futile; or

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> (c) The grave irreparable harm that would result from having to exhaust administrative remedies would clearly outweigh the public policy requiring exhaustion of administrative remedies.

RCW 34.05.534 (emphasis added).

The Washington Courts have also underscored this rule time and again:

> [A]dministrative remedies must be exhausted before the courts will intervene: (1) "when a claim is cognizable in the first instance by an agency alone"; (2) when the agency's authority "establishes clearly defined machinery for the submission, evaluation and resolution of complaints by aggrieved parties"; and (3) when the "relief sought . . . can be obtained by resort to an exclusive or adequate administrative remedy."

State v. Tacoma-Pierce County Multiple Listing Serv., 95 Wn.2d 280, 284 (1980) (emphasis added); Dioxin/Organochlorine Center v. Department of Ecology, 119 Wn.2d 761 (1992) (requiring exhaustion of administrative remedies before challenging Ecology's issuance of waste discharge permits); South Hollywood Hills Citizens Association for the Preservation of Neighborhood Safety and the Environment v. King County, 101 Wn.2d 68, 73 (1984) ("the doctrine of exhaustion of administrative remedies is well established in Washington").

The Surface Mining Act, Ch. 78.44 RCW, requires that appeals

> from department determination made under this chapter shall be made under the provisions of the Administrative Procedure Act (chapter 34.05 RCW), and shall be considered an adjudicative proceeding within the meaning of the Administrative Procedure Act, chapter 34.05 RCW.

RCW 78.44.270. The Surface Mining Act thus adopts, by reference, the Washington APA's requirement that administrative remedies be exhausted prior to seeking further review. RCW 34.05.534, supra. Furthermore, a mechanism for administrative review is apparently available through the DNR under the Washington Administrative Code, Chapter 332-08 (providing for brief adjudicative proceedings).

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Petitioners claim that it would be futile to seek administrative review because:

> DNR has demonstrated that it does not intend to prohibit unlawful surface mining at the Daybreak Mine or otherwise redress violations of the SMA at the mine. In addition, Clark County has issued a Notice and Order which purports to allow surface mining activity pursuant to the permit in the area as a non-conforming use.

Petitioners' complaint at 14-15 (emphasis added). This argument should not be accepted for several reasons. First, no gravel mining is occurring. Second, Washington courts place a substantial burden on litigants who attempt to argue that exhaustion of administrative remedies would be futile. Here, assuming that petitioners have standing and are not otherwise time-barred, administrative remedies may be sought through the DNR. See WAC 332-08-005 to -545. Instead, the courts seek to achieve the purposes of the exhaustion doctrine. See Estate of Friedman v. Pierce Cy., 112 Wn.2d 68 (1989). Third, Washington courts "will not assume that an [administrative] appeal focused on specific issues might not have led to changes by the administrative agency." Citizens for Clean Air v. City of Spokane, 114 Wn.2d 20, 31 (1990) (rejecting the futility exception because appellant asserted "that exhaustion would be futile because the same officials who would rule on a formal appeal had already heard and rejected their complaints"). Here, like the appellants in Citizens, petitioners, to respondent's knowledge, have made no formal or informal appeal to the DNR. Fourth, the reference to the Clark County Notice and Order merely obfuscates the issues. Under the Surface Mining Act, as amended in 1993, local government is given primary authority to regulate surface mining operations on the basis of controlling noise, traffic, zoning, etc., while the DNR is given authority to control reclamation activity. See RCW 78.44.011, .031(8), .050. However, gravel mining may not take place without a valid reclamation plan. RCW

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78.44.081 ("After July 1, 1993, no miner or permit holder may engage in surface mining without having first obtained a reclamation permit from the department.").

The Notice and Order deals primarily with nonconforming use and vested rights with regard to Clark County's adoption of zoning maps and development regulations pursuant to the Growth Management Act, Ch. 36.70A RCW. If the Notice and Order has any relevance to this action, it is that this action should be dismissed or stayed pending disposition by the Clark County Hearing Examiner of the appeal of the Notice and Order.

Given that no active surface mining is occurring, the DNR cannot be, as asserted by petitioners, allowing unlawful surface mining to occur. Further, if mining is occurring illegally, the DNR may use its compliance authority to halt such surface mining. RCW 78.44.210 (authorizing orders to halt surface mining); RCW 78.44.250-260 (authorizing the imposition of civil and criminal penalties).

In conclusion, this Court should require petitioners to adhere to the express requirements of the Washington APA and prior binding precedent and dismiss the petition and complaint.

D. Petitioners' Petition for Review and Complaint Should Be Dismissed Because Petitioners Lack Standing Required Under the Washington Administrative Procedure Act and the Requirements of Washington Courts

The petitioners' action should be dismissed because they have suffered no harm and, therefore, lack standing to proceed under a petition for review or an action for declaratory judgment. Under RCW 34.05.530, only a person who is "aggrieved or adversely affected" by an agency action has standing to obtain judicial review of the agency action. To qualify as "aggrieved or adversely affected," a person must satisfy three conditions:

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> (1) The agency action has prejudiced or is likely to prejudice that person;
> (2) That person's asserted interests are among those that the agency was required to consider when it engaged in the agency action challenged; and
> (3) A judgment in favor of that person would substantially eliminate or redress the prejudice to that person caused or likely to be caused by the agency action.

RCW 34.05.530. The court should note with more than passing interest that, by petitioners' own words, standing in this case is predicated on the future allowance of surface mining within the 100-year floodplain:

> FOEF and its members are an aggrieved party and would be adversely impacted and substantially prejudiced by the allowance of surface mining activities on the Woodside property within the 100-year flood plain.
>
> ***
>
> CCNR and its members are an aggrieved party and would be adversely impacted and substantially prejudiced by the allowance of surface mining activities on the Woodside property within the 100-year flood plain.

Petitioners' complaint at 2 (emphasis added).

Petitioners have avoided mention of how granting and transferring permits nearly a quarter century ago have resulted in prejudice. Indeed, they cannot because no gravel mining is now occurring and none may occur until a new reclamation plan issues. Petitioners also cannot demonstrate how a judgment in their favor would eliminate or substantially redress prejudice caused to petitioners. Again, since no gravel mining is now occurring or is likely to occur until further agency action is taken, a judgment in petitioners' favor would not change the status quo.

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Further, the Washington courts have adopted federal law with respect to standing. See e.g., Snohomish County Property Rights Alliance v. Snohomish County, 76 Wn. App. 44 (1994), modified, 1994 Wn. App. LEXIS 440 (Oct. 28, 1994), and review denied, 125 Wn.2d 1025 (1995); Save a Valuable Environment (SAVE) v. Bothell, 89 Wn.2d 862 (1978); Trepanier v. Everett, 64 Wn. App. 380, 382, review denied, 119 Wn.2d 1012 (1992). Among the requirements for standing is that the petitioner, as an organization, "must show that it or one of its members will be specifically and perceptibly harmed by the action." SAVE, 89 Wn.2d at 866 (emphasis added) (citing United States v. SCRAP, 412 U.S. 669 (1973)). Further, "[a]n organization whose interest is only speculative or indirect may not maintain an action." Id. (citation omitted). Petitioners have not shown how they are harmed by DNR's permit issuance over a quarter century ago. Finally:

> when a person alleges a threatened injury, as opposed to an existing injury, he or she must show an immediate, concrete, and specific injury to him or herself. If the injury is merely conjectural or hypothetical, there can be no standing.

Trepanier, 64 Wn. App. at 382 (citations omitted) (emphasis added).

Here, by petitioners' own admissions, injury is predicated on hypothetical future events as opposed to an existing injury: "The allowance of surface mining activities on the Woodside property within the 100-year flood plain." Petitioners' complaint at 2 (emphasis added). In fact, no gravel mining is now occurring on said property within the 100-year floodplain. Further, no surface mining may occur until such time as a new reclamation plan is approved by the DNR. Petitioner has not alleged any illegal mining activity at this time. Rather, surface mining is not now occurring, nor is it likely to occur unless and until (a) a shoreline permit issues or is determined not to be required and (b) a new reclamation plan is approved. When petitioners' complaint is distilled, it renders only allegations of future, hypothetical, remote,

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and speculative injury and such allegations are insufficient to meet the requirements of the standing doctrine as required by the Washington APA as well as Washington courts.

In conclusion, the agency action complained of has not and does not cause petitioners any palpable injury-in-fact. Further, any controversy is moot until such time as the noted permits issue or, are denied. Until such time as there is an action causing an injury-in-fact, cognizable under law, the petition for review and complaint should be dismissed.

VI. CONCLUSION AND PROPOSED ORDER

For the reasons set forth above, Storedahl respectfully requests that petitioners' complaint be dismissed with prejudice in all respects. In the alternative, Storedahl requests a stay of further processing of this cause until such time as: (1) the appeal of the Notice and Order before Clark County is properly disposed of, (2) the DNR and Clark County rule on Storedahl's applications for a new reclamation plan and shoreline permit, respectively, and (3) the petitioners exhaust available administrative remedies. Proposed orders to such effect are filed herewith.

DATED this 21st day of May, 1996.

PERKINS COIE

By Charles B. Roe

Charles B. Roe, Jr., WSBA #648
John L. Dentler, WSBA #24310
Attorneys for Respondent
J. L. Storedahl & Sons, Inc

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SUPERIOR COURT OF THE STATE OF WASHINGTON
FOR THURSTON COUNTY

CLARK COUNTY NATURAL RESOURCES COUNCIL, a nonprofit corporation; FRIENDS OF THE EAST FORK, a registered nonprofit corporation, Petitioners, v. DEPARTMENT OF NATURAL RESOURCES OF THE STATE OF WASHINGTON; JENNIFER M. BELCHER, Commissioner of Public Lands; RAY and MERRY WOODSIDE d/b/a SAMMAMISH FARM; J. L. STOREDAHL & SONS, INC., and CLARK COUNTY, a municipal corporation, Respondents.	NO. 96-2-01586-2 AFFIDAVIT OF VIRGLE BARNETT

STATE OF WASHINGTON)
) ss
COUNTY OF THURSTON)

Virgle Barnett, being first duly sworn on oath, deposes and states

1. My name is Virgle Barnett, and I reside at 12316 N.E. 13th Ave., Vancouver, Washington 98685.

2. This affidavit is prepared in conjunction with a law suit filed in Thurston County Superior Court in which J. L. Storedahl & Sons, Inc. (hereinafter "Storedahl") is named as a defendant

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3. Storedahl has been in the sand and gravel mining business for some 20 years and operates in Northwest Oregon and Southwest Washington. I have worked in the sand and gravel and construction business for approximately 33 years and I currently hold the position of Clark County Representative with Storedahl where I have worked in that capacity since 1988. I have worked for Storedahl for nearly eight years at the Woodside property, also known as the "Daybreak," beginning at that site in 1988. I have been charged by Storedahl with the task of ensuring that all permits necessary to engage in gravel mining on the Woodside property have been obtained.

2. In the course of my duties on behalf of Storedahl, I have (a) hired, at great expense, experts to testify before the Clark County Planning Commission and Board of Commissioners regarding zoning activities related to gravel mining of the Woodside property and (b) hired, at great cost, experts to complete and submit shoreline permit applications under RCW 90.58.140, reclamation plans to undertake surface mining under RCW 78.44.081, and related environmental impact statements under Ch. 43.21C RCW.

3. Storedahl has also, at great expense (a) purchased a lease to undertake surface mining on the Woodside property and (b) negotiated and obtained an option to purchase the Woodside property outright in order to undertake surface mining on said property.

Virgle Barnett

SUBSCRIBED and SWORN to before me this 17th day of May, 1996, by Virgle Barnett.

NANCY J. HAWKINS
COMMISSION EXPIRES
NOTARY
PUBLIC
MARCH 9, 1999
STATE OF WASHINGTON

[Print name] NANCY J. HAWKINS
Notary Public in and for the State of Washington,
residing at THURSTON COUNTY
My commission expires: 3/9/99

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CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

STAFF REPORT

TO: Clark County Planning Commission

FROM: Craig Greenleaf, Planning Director

PREPARED BY: Jerri Bohard, Long Range Planning Supervisor, ext. 4112
File# CPT 96-007

SUBJECT: GMA Remand - Mining in the 100-Yr Floodplain

DATE: March 11, 1996

Summary

This staff report summarizes the recommended County response to the recent Western Washington Growth Management Hearings Board decision as it relates to the prohibition of mining within the 100-yr floodplain. The Hearings Board noted that the record indicated what was done but not why mining should be excluded from the 100-yr floodplain and questioned why the Shoreline Management Act and SEPA do not provide adequate protection.

Staff recommends no changes to the policy prohibiting mining in the 100-yr floodplain because information provided by the Mineral Focus Group and the identification of mining sites throughout the county which are not in such highly sensitive areas indicate adequate resources for the planning horizon. Also, while there are regulatory processes in place, ones such as the Shoreline Master Program adopted in 1974 do not adequately address potential cumulative impacts , nor recognize the increased knowledge and studies regarding the impacts which has occurred during the last 20 years.

Analysis

Order A-2 states: *Eliminate the prohibition of mining within the 100-yr floodplain or adopt an analysis which substantiates the prohibition.*

This order came in response to policy 4.5.8 which states:

> *Surface mining other that Columbia River dredging shall not occur within the 100-year floodplain.*

The Mineral Focus Group, which was a subgroup of the Rural and Natural Resources Advisory Committee originated the policy prohibiting mining in the 100-year floodplain and which can be found in the Mineral Focus Group Final Report. The Mineral Focus Group was composed of a variety of individuals, including members of the aggregate industry. The purpose of the Focus group was twofold; one to identify future potential and existing mining sites and to develop comprehensive plan policies. Both of which the group completed using consensus throughout the process. This included reaching consensus on the inclusion of this policy as well as identifying potential new site. The group also recognized that all potential sites may not have been identified and therefore provided a process by which new mining sites could be designate, beyond the five year update of the plan.

Through the minimum guidelines established in the WACs, the focus group identified sufficient mining sites. The planning horizon that was used was 50 years rather than 20 because of the difficulty of siting mining areas. Based on information provided by the Department of Natural Resources and assuming a population of 500,000 there was determined to be a need for 3800 acres if one assumes only a 25 foot deposit of aggregate. The recently adopted Comprehensive Plan identifies a total of approximately 7900 acres of potential mining areas. This was felt to be sufficient designation of the resource. There was also recognition that the use of round rock in aggregate products is changing; and state specifications for aggregate means that aggregate found within the 100-year floodplain is not necessarily superior to other aggregate.

A number of studies were reviewed and copies provided in the *Mining Background Information* which raises concerns about the cumulative impacts associated with mining on river systems and one study (Kondolf, 1994) noted that mining within the floodplain can over decades lead to the pits becoming potentially instream. This became evident in the recent flooding that took place along many of the streams within the county, in particular the East Fork Lewis River. The photographs and report provided by Friends of the East Fork illustrate the changes that have occurred to the river due to mining activities and the recent flooding, which lead to movement of the channel.

The study completed by the Oregon Division of State Lands regarding gravel disturbances also raised concerns about the cumulative impacts associated with excavation within the floodplain and the insufficient understanding of cause-effect interactions especially in relation to indirect impacts.

There has also been a number of studies done regarding the use of a buffer strip along riparian corridors to address many of the concerns of sedimentation, water quality impacts, etc. However, this work is far from complete and often times a fixed minimum width is used which usually does not address the unique aspects of either the site or the project being proposed. To date much of the information and studies on buffers has been based on their function and design and not on the potential of buffer strips as filters or storage areas for nutrients and chemicals.

Response

1. The Shorelines Management Master Program was established by the County in 1974. There was also an amendment in 1992 dealing with residential development to address setbacks for residential development. The Master Program has broad goal elements addressing economic development, public access, circulation, recreation, shoreline use, conservation, historic/cultural issues, revitalization and floodplain issues. Program regulations apply to lands within 200 feet of the ordinary high water mark of all rivers where flow exceeds 20 cubic feet per second, all lakes of 20 acres or more, and any associated wetlands or floodplains.

   However, it should be noted that the County has not revised its Master Program since 1974 and that the overall goals of the program are generally addressed through policy statements rather than specific regulations, which can lead to problems of interpretation and regulation. It should also be noted that under the recently passed legislation HB 1724, the county's Shoreline Master Program has become an element of the Comprehensive Plan. The county is therefore mandated to update its Shoreline Master Program for consistency with the adopted Comprehensive Plan. At this time, the Department of Ecology is in the process of developing revised rules and regulations associated with the Shoreline Management Plan and upon completion of the state's work, the county will have a year to update its Shoreline Master Program.

   Due to the inconsistency with the Shoreline Master Program from 1974 and the recently adopted Comprehensive Plan regarding the issue of mining within the 100-year floodplain; an additional policy is recommended for inclusion:

   4.5.20 *Clark County's Shoreline Master Program shall be reevaluated for consistency with the Growth Management legislation and Clark County's 20 year Comprehensive Growth Management Plan. Any areas of inconsistency shall be reviewed and resolved with either modification of the Shoreline Master Program or Comprehensive Plan policies, which ever is more appropriate.*

2. While there is a great deal of concern about mining in the 100-year floodplain, this is especially prevalent along the East Fork of the Lewis River. There has been a great deal of commitment by the county to protect and enhance the shoreline area of the East Fork Lewis River. This emphasis can be found in two major studies/reports recently completed by the County. The first is the Open Space Commission report which was completed in August 1992. The Executive Summary of this report is attached for your review. After three years of committee work to define open space, the commission identified the riverine corridors as those areas with the greatest benefit due to their resource-based functions and passive recreational values. It should be noted that the top three project priorities were located along the East Fork of the Lewis River. Also, throughout the commissions' work there was an awareness that aggregate resources was an economic function of open space and recognized that additional work was needed to the Shoreline Management Program, the Floodplain permit process and surface mining laws and policies to recognize sensitive open space areas and therefore strengthen these laws and policies as appropriate.

The county recognized the importance of this report by incorporating the policies found within the Open Space Commission report into adopted policies found within Chapter 8 (Parks, Recreation and Open Space) of the Comprehensive Plan.

An additional study completed by the county is entitled the *East Fork Lewis River Watershed Action Plan* which was completed to develop a comprehensive workable solution to the watershed's nonpoint source pollution problems. The project also include an East for Lewis River Advisory Committee which provided input about the direction of the project. Committee members included interest groups, private citizens, industry and government. The plan addresses several categories of nonpoint sources including surface mining. The study noted that mining impacts on water quality can be severe, often due to high sedimentation or heavy metals. Some of the recommendations included:

- Prohibit/severely limit any extraction within 75 feet of preexisting or current natural waterbodies/ wetlands unless site specific conditions provide sufficient protection of riparian corridors
- Discourage mineral processing within floodplain including asphalt/concrete batching
- Reclamation should include documented/detailed hydrologeologic evaluation if mine is in stream channel/floodplain/ wellhead protection area or critical recharge area.

Given the concerns raised by a variety of studies regarding the potential cumulative impacts associated with mining in the 100-year floodplain; the extensive work of the Mineral Focus group regarding the availability of the resource in other areas and the consensus reached to forward on the policy regarding the prohibition of mining in the floodplain; the additional studies completed by the county regarding other benefits associated with the riparian corridors;

the requirement by the county to review and update the county's Shoreline Master Program; and the need to balance the growth management goals #8 (maintain and enhance natural resource industries), #9 (retention of open space and conservation of fish and wildlife habitat), and #10 (protect the environment including air and water quality); it is appropriate at this time to continue the prohibition of mining within the 100-year floodplain.

Recommended Planning Commission Action

1. To retain the existing policy prohibiting mining within the 100-year flood plain.

2. To add the Comprehensive Plan policy 4.5.20 as identified above.

Attachments:

- Open Space Commission Executive Summary
- Mining Background Information (provided earlier under separate cover)
- Additional Background Information
  - Effects of February 1996 Floods on Ridgefield Pit and Daybreak Gravel Mines

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ıcts to Bays' firing

declares to be an emergency is an emergency.

Sellers advised council members that a section of the ordinance requiring council of firings was not legal.

Some citizens present at the meeting called for better communication between Fields and council members to keep harmony in the city.

Following discussion and legal comments from both Sellers and Pat Brock, Kelso city attorney, who attended the meeting at Field's request, council members passed the ordinance.

With that decision, Fields indicated that she may veto the ordinance which went into effect immediately. She has ten days to initiate a veto.

Councilman Pat Rychel reminded Fields that the council could override her veto.

Councilman Chuck Blum told the council that a special audit is now underway at an expected cost of $9,000. Such audits are required by the state when there is a change in the city clerk-treasurer.

Fields said that help wanted ads for the position already had been sent to local newspapers. Additional notifications will be sent to papers in Portland and Seattle.

In the interim the council agreed to seek help from Fran Crone, former city clerk-treasurer in Woodland who now holds that position in Kalama.

The meeting was continued to Jan. 27 so the council could review an updated job description for the new clerk-treasurer. Fields set Feb. 5 as the deadline for applications and Feb. 10 to review applications with the council.

During the session Fields assured the council that severance details are being finalized for Bays'.

Fields refused further comment about Bays' termination. In a phone interview before the meeting, Bays expressed concern about what is happening to the city because "I care about the people and the business of the city being disturbed due to confusion and controversy."

Storedahl told to quit Daybreak rock mining

Dairy farmer Ray Woodside has told the operators of a rock mining and processing facility on his property to stop digging rock, but it doesn't appear on the face of it as if that will silence the drone of the rock crusher on site or the trucks that pass through the area.

J.L. Storedahl and Sons has a contract with Woodside that allows them to stay on the Daybreak-area farm until 2005. Storedahl can dig another 20 acres under that contract, but the start of digging on that 20 acres has been stymied by a dispute over the allowability of it with Clark County.

Woodside said he has nixed any further digging of his property, despite the fact it brought him about $200,000 in royalties last year, for several reasons.

One is because Storedahl and Sons won't pay him the price he wants for the rock. Woodside said he is also tired

Cont. on page A-8

growth--for now

nd to Captain Strong and acolt primary schools would ve up 19 portables for use sewhere. Still, district offials estimate that 14 more rtables will be needed to

Bob Risinger, assistant superintendent for business and operations, said all of the existing portable classrooms could be moved because of their age and condition.

EXHIBIT H PAGE 5

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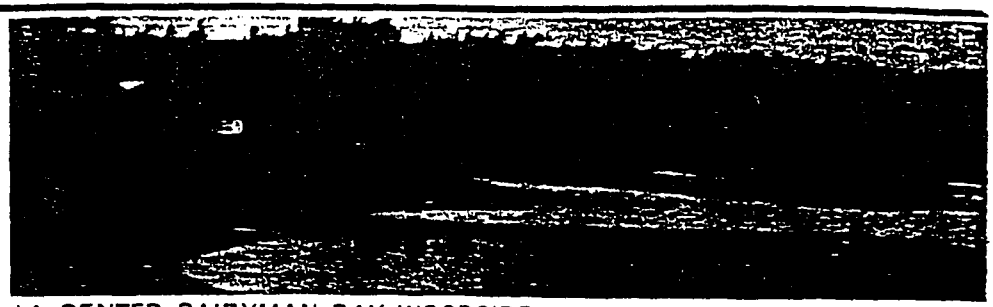

LA CENTER DAIRYMAN RAY WOODSIDE has asked the Storedahl company to discontinue mining gravel on his La Center property.

Photo by Mike Schultz

Decision leaves Storedahl only processing rock

Cont. from page A-1

of having neighbors retaliate against him because they don't like having the operation nearby. And finally, he says, he doesn't like some of the practices Storedahl has undertaken while operating the facility.

Calling a halt to rock mining on site will not necessarily mean rock processing will stop.

Woodside said Storedahl and Sons has purchased SmithRock Quarry in Woodland and has plans to haul the rock from the Woodland site to his farm to wash and process the rock.

Virgil Barnett, supervisor of the Daybreak operation for Storedahl, declined to comment on anything dealing with the facility.

Woodside said Storedahl has been mining rock in a field near the main operation that is not covered in the contract.

Woodside questions why work on the nearby 20 acres in question was shut down but mining was allowed to continue farther into his pasture field near the main operation without any permits. He credits the total shutdown on the 20 acres to have come as the result of neighbor complaints.

The Department of Natural Resources considers surface mining to be allowed outright on all of Woodside's property either inside or outside of the 100-year floodplain. But Clark County officials don't see it that way.

County planner Rich Hines said future operations and even the existing operation must have a shoreline permit for areas of it that are within 200 feet of the river or within the 100-year floodplain. To gain that shoreline permit, Storedahl is being required to develop a environmental impact statement.

> "I lived fine before they ever came in, and I'll live fine after they're gone."

Barnett did say Storedahl was in the process of developing an EIS for the permit.

Work on the 20 acres remaining in Storedahl's contract was mixed because, according to county information, that land is zoned agriculture and does not have a surface mining overlay. Hines said they are requesting that evidence be provided in the EIS to show that the 20 acres should have the mining overlay.

No longer mining rock from the site and instead hauling it in will present an interesting situation, Hines said.

"The intent of a surface mining/combining district is for the extraction of gravel and inherent is the processing and crushing," he said. "It's not the intent of the district to allow aggregate processing on the site when no mining is done in conjunction. So that issue will have to be addressed."

Hines said he believes a shorelines permit would still be needed if only rock processing is done at the site.

The operation is being allowed to continue without a permit, Hines said, because a permit has been applied for and is being pursued.

With only rock processing on site, Wooside will be taking a cut in his proceeds.

For each ton of rock taken out of his land, Woodside said he gets 50 cents. He only gets a nickel per ton when offsite rock is brought in and processed.

While as much income won't be coming in, Woodside reasons the rock will always be there for the future.

"I lived fine before they ever came in, and I'll live fine after they're gone," he said. "I just won't have as much play money."

ARE YOU PAYING

from the center. No one was seriously injured in the incident.

At about 11:30 a.m., maintenance workers had poured sulfuric acid down a drain in an

Disaster 5, American Medical Response/Medix Ambulance, and Care/American Ambulance.

Fourteen residents were taken

This could have been a lot worse if it had not been for the quick action of the convalescent home staff and the rapid re-

scene for over five hours clearing the fumes and standing by in the event any other residents needed assistance.

REFLECTOR AUGUST 9, 1995

Storedahl told to stop work in Daybreak

#10-34

AUGUST 9, 1995

Clark County has issued a stop work order on Storedahl's Daybreak mining operation, effectively immediately.

Rich Hines, Clark County planner, said Storedahl officials have been in the process of removing topsoil in preparation for resumption of mining at the facility.

The manager of the Daybreak operation did not return phone calls from The Reflector.

The stop work order was issued Aug. 3. If Storedahl does not comply with the order, the county will apply for injunctive relief through the courts, said planner Monty Anderson.

About six weeks ago Hines said Storedahl officials notified the county that they planned to resume mining activities at Daybreak.

Mining stopped there about three years ago when Ray Woodside, owner of the property, called a halt to the digging. The facility was still used for screening and stockpiling of rock, Hines said.

Plans to start mining apparently stem from an option to purchase that the Storedahl company has on the Woodside property.

The new comprehensive land use plan adopted by Clark County prohibits mining within the 100-year flood plain. Storedahl's current operation is located in the flood plain, and the county contends the company must gain a shoreline permit for future mining there.

Storedahl officials believe they should be allowed to continue to mine because of grandfather rights, Hines said.

A flyer has been circulating in the Daybreak area, claiming that Storedahl plans to create a 300-acre industrial mine, operate 24 hours a day and generate unlimited traffic through neighborhoods. The flyer urges residents to call or write their county commissioner.

The only identification available on the flyer is a Battle Ground post office box.

The prohibition against mining in the 100-year flood plain has been appealed by land owners, Hines said.

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GET READY FOR FALL!
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ALSO IN STOCK

R-19x15" Kraft Insulatio
$8.49
49 sq.

90 lb. Concrete Mi
$1.69 BAG
LIMIT 20 BAGS PER CUSTOME
2000 BAGS IN STOCK

½" CLADWOOD SHOP T1-11	$6.99
2"x10"x6' #2 OR BETTER	$2.99
2"x2"x42" CEDAR PICKETS	39¢ EA
1"x4"x6' CEDAR FENCING	39¢ EA
1"x6"x6' TREATED #2 FENCING	75¢ EA
1"x4"x6' MILL RUN ROUGH FENCING	39¢ EA
1"x4"x8' MILL RUN ROUGH FENCING	59¢ EA

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3 - 3"x3" PICTURE W/GRIDS	$40.00
1 - 4"x3"x0 SLIDER W/GRIDS	$65.00
1 - 4"x3"x0 SLIDER	$65.00
1 - 2"x4" SGL HUNG ALMOND	$75.00

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COUPON

County questions Storedahl mining operation

Clark County officials are again at odds with mining activities taking place at J.L. Storedahl and Sons' Daybreak operation.

A meeting has been scheduled for Sept. 5 to determine if the company has the right to mine in an area where mining had previously been allowed.

Clark County had issued a stop work order to the company Aug. 3. The order was issued as a result of grading being done to prepare a previously unused area for mining.

Clark County code enforcement officer Richard Landis said the stop work order covered areas of Storedahl's operation outside a 71-acre radius.

Recently, the company has been removing rock from an existing pond. This pond is located within a 71-acre radius that the company had been allowed to mine in the past. Landis estimated that 15,000-18,000 cubic yards of rock has been removed.

At issue Sept. 5 will be whether Storedahl has the proper zoning and needed shorelines permit to operate in this old area. Current county zoning does not allow mining where the digging was taking place.

To continue in this area, the company must be granted a rezone or show that they have historic rights allowing continued mining, said Clark County deputy prosecuting attorney Chris Horne.

The manager of the Daybreak operation could not be reached for comment.

Landis said Storedahl officials feel they are entitled to mine within the 71 acres, an area that was not covered by the Aug. 3 stop work order.

"Their feeling was that if the county insists that all activities cease, than a work order should have been issued to that affect," Landis said

No stop work orders or fines were issued during the county's latest visit, Landis said.

Horne said Storedahl and Sons has been told it must comply with county code. But Horne would not go so far as to say that the company had been told to stop its current activities

EXHIBIT H PAGE 8

DK → Nord Stephanie
6/21/91

LOCAL/WASHINGTON

Gravel pit expansion is sought

349 acres are along East Fork of Lewis

By LORETTA CALLAHAN
The Columbian

Plans for a 349-acre expanded m[illegible] operation along the north side of the East Fork of the Lewis River could radically change the landscape near Daybreak Park and add to local gravel controversy.

J.L. Storedahl & Sons has applied for shoreline management and conditional-use permits to expand its gravel pits across Ray and Merry Woodside's dairy farm, west of Northeast 61st Avenue and southeast of La Center.

If the permits are approved and the company's proposed reclamation plan accepted by the state Department of Natural Resources, the farm some day would become a mass of lakes and islands.

Clark County planners have determined that Storedahl's request must first undergo a full environmental review. At issue is the project's likely effect on the river, fish, noise, dust, ground water, wetlands, wildlife habitat and nearby property values.

Neighbors organized last year in opposition to other Storedahl pits on the south side of the river, not far from the dairy farm where the company wants to expand operations.

The residents point to failing dikes and huge ponds at the old gravel site off Northeast 45th Avenue — known as the Old Ridgefield Pit — as an example of how intensive mining has desecrated the river.

But the area is also one of the richest sources of rock and sand, important ingredients for buildings and roads in a high-growth area. And gravel operators say the resource needed to meet that demand has to come from somewhere.

Storedahl's current operation on the Woodside's dairy farm covers about 70 acres. The land is zoned for agricultural use, but is also designated as a mining district.

In May, Storedahl sent the DNR a revised reclamation plan for about 300 acres.

The state agency hasn't approved that reclamation plan yet, and won't until the environmental review started by the county is complete.

Storedahl's preliminary application to the county details the new project and how it would evolve. The company wants to work the southeastern portion of the 349-acre site as soon as possible, then progress to the north and west in phases.

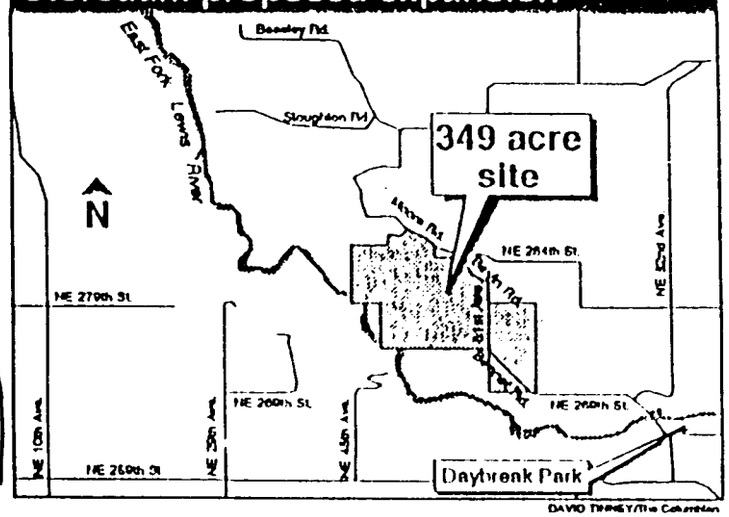
According to the company's permit application, work would begin on a 20-acre parcel southeast of the intersection of Northeast 61st Avenue and Bennett Road. That operation would consist of mining, crushing and stockpiling the gravel for transport. Once exhausted, the resulting pits would be reclaimed as lakes for future recreational and waterfowl uses, and no one would live on the 349-acre site.

The overall project would come within 200 feet of Dean Creek, a tributary of the East Fork of the Lewis River. Storedahl has said it would maintain a 25-foot-wide buffer zone, measured from the stream's center, on each side of Dean Creek.

The application also makes the following claims:

- Normal hours of operation would be from 7 a.m. to 4:30 p.m. Monday through Friday.
- Needed measures to reduce impacts to nearby housing are "not applicable."
- The proposed access to the site would be Bennett Road, Northeast 61st Avenue and Bevin Road "as necessary." Gravel access roads would be washed down in dry season. But the application says proposed measures to reduce or control transportation impacts are "not applicable."
- Noise and traffic would be generated by about 150 trucks per day at peak periods. Earthern berms would be constructed along existing houses and roads to reduce noise levels.
- Mining operations would be about 8 to 10 feet above the ground-water table. About 2.5 acres of wetlands would be affected by the project.

Storedahl proposed expansion



DAVID TINNEY/The Columbian

COPY AND COMMENTS: Storedahl's application may be viewed at the Department of Public Services, 1408 Franklin St., Vancouver. Written comments must be submitted by June 28 to Glenn Gross, planning and development review manager, P.O. Box 5000, Vancouver, Wash. 98668.

EXHIBIT H PAGE 3

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A perspective on stream-catchment connections

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Abstract. Ecological study of the hyporheic zone is leading to recognition of a need for additional hydrologic understanding. Some of this understanding can be obtained by viewing the hyporheic zone as a succession of isolated boxes adjacent to the stream. Further understanding, particularly relevant to catchment-scale ecology, may come from studies focussed on the fluid mechanics of the flow-path connections between streams and their catchments.

Key words: hyporheic zone, alluvium, flow path, transient storage, solute transport, catchments, streams.

Within the literature of stream ecology the 'hyporheic zone' is now generally understood to be part of the landscape that contains water of both subsurface and stream channel origin. During the 1980s the ecological significance of this zone became well-established. The significance of also understanding the hydrology of this zone is considerably less well-established. The purpose of this note is to discuss one developing view of hydrologic processes in the hyporheic zone as processes influencing the biogeochemistry of streams in the context of their catchment.

This specific point-of-view has developed in a succession of studies (represented by Jackman et al. 1984, Bencala 1984, Triska et al. 1989, Zellweger et al. 1989, McKnight and Bencala 1990, Kim et al. 1992, and Harvey and Bencala 1993) in which interdisciplinary groups have worked to develop concepts of the hydrologic connections between streams and their catchments. Duff and Triska (1990) have discussed the need for water flux from both groundwater and streamwater sources to maintain certain microbial processes in the hyporheic zone of Little Lost Man Creek (Redwood National Park, California). Cerling et al. (1990) have proposed that significant underflow in White Oak Creek (Oak Ridge, Tennessee) is a factor in sediment retention of ^{137}Cs. Studies such as these suggest that one integration of hydrology and ecology in the hyporheic zone might focus on the flows that make streams integral parts of the catchment system. Recent studies (Harvey and Bencala 1993) of hydraulic gradients and paths of tracer movement have suggested that the flow paths of solute transport in the hyporheic zone may be visualized as 'substreams'. These substreams are envisioned as subsurface water, flowing near the stream—at some points flowing along the catchment's overall downvalley direction and at other points interacting with the stream. A more developed understanding of the ecological function of these flows at the catchment scale will benefit from studies at the finer scales at which the fluid mechanics of flow in environmental systems is resolved into an understanding of pressure and viscous force relationships.

Contrasting views of the stream-catchment connection

One view of a stream's function within its catchment is that of essentially a pipe receiving nutrients (or other solutes) from the catchment (Fig. 1A). This pipe functions solely as the conduit for transport (possibly with some biogeochemical transformation occurring within) from the catchment. Integration of hydrology and ecology might then be characterized as a coupled succession of boxes for soil water, ground water, and channel water with unidirectional flow between boxes and possibly with various biogeochemical transformations in each box. In a strict adherence to this view, water moves from subsurface sources to the channel, the water carries solutes, and neither the hydrology nor the ecology of the channel influences any subsurface box. This view can be extended somewhat to include an additional box labeled 'the hyporheic zone'. For many studies of stream

ecology these ideas of compartmentalized zones and processes may provide a sufficient context for interpretation.

A contrasting point of view places streams as integral parts of the catchment system and focuses on the dynamic, bidirectional nature of connections within the system (Fig. 1B). The key contrasts are in both form and process. The first contrast is to view streams as neither well-delineated nor static, but rather as continually adjusting in response to other variations occurring within the catchment. The second contrast is to view streams not as pipes but rather as part of the catchment's downvalley and downgradient transport of water and solutes. The extension of this catchment-transport view leads to a hyporheic zone seen not as an isolated box receiving solutes in unidirectional transport from the stream, but rather as consisting of multiple flow paths which act as active, bidirectional links. Such flow paths can be along substreams of water moving in the subsurface and interconnecting with the stream.

These concepts are relevant to studies of biogeochemistry and physical solute transport. McKnight and Bencala (1990) have discussed solute concentrations in streams as resulting from the integration of simultaneous catchment and in-stream processes. Castro and Hornberger (1991) have discussed a range of physical settings causing solute storage. They have then shown that at least two time-scales can be identified for storage of stream solutes in subsurface environments. For studies of the hyporheic zone, adopting this view moves studies away from the concept of there being a physical spatial 'zone' defined and identified as 'the hyporheic zone'. The part of the landscape that contains water of both subsurface and surface origin now becomes the hydrologic connection between streams and catchments, and this connection is dynamic with flowing water. This view remains primarily conceptual. In fact, both papers referred to above (McKnight and Bencala 1990, and Castro and Hornberger 1991) ultimately used compartmentalized zones in presenting models of solute transport influenced by subsurface storage. Further, three efforts to simulate reactive solute transport (Jackman et al. 1984, Bencala 1984, and Kim et al. 1992) have attempted to account for the influence of subsurface storage. In each of these three efforts, the reactive models do not extend the simulation of physical transport to include flow paths within the hyporheic zone.

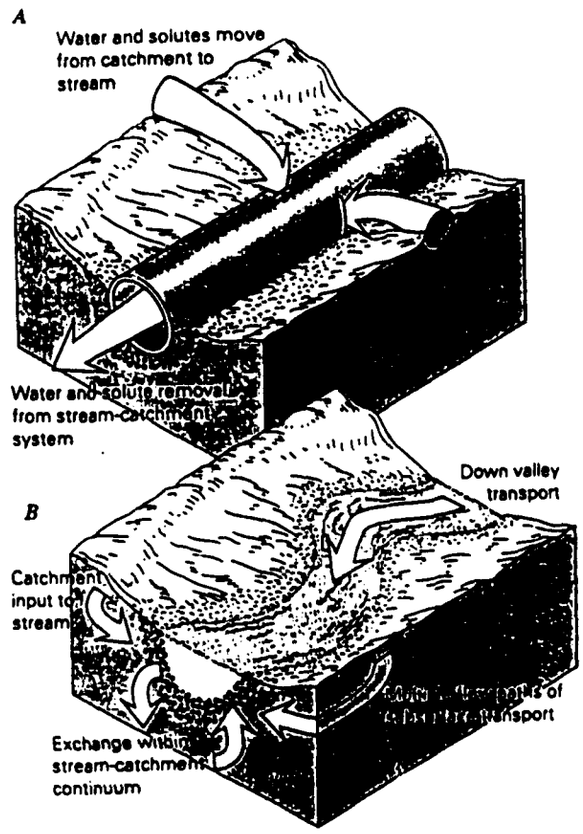

FIG. 1. A.—The stream's function in its catchment is viewed simply as that of a pipe. B.—A contrasting view of the steam's function places the stream as an integral part of the catchment system.

Characterizing the hydrology of the hyporheic zone

To date, work on the hydrology of the hyporheic zone has been limited. Thus, the hydrology lacks a widely recognized or standardized approach for characterization. Because the hyporheic zone functions within the catchment as a connection to the stream, appropriate approaches to hydrology for a specific study will be determined in large measure by the physical locus of the study. The following discussion suggests two such distinct hydrologic approaches.

One approach to characterizing the hyporheic zone is to determine the influence of the zone on nutrient (or other solute) transport at individual sampling locations along the stream. The hyporheic zone can be viewed as contributing to the observed in-stream phenomenon

of 'transient storage' (Bencala 1984). In detailed solute transport experiments, it has not been unusual to observe long periods of time in which low concentrations of solute continue to move through a stream after the expected travel-time of the water. In effect, the solute has been stored within the stream system, but the storage is only transient in nature, and eventually the solutes are returned to the flowing stream. Flow into and out of the hyporheic zone could contribute to this storage. Numerous authors have discussed formulations of stream solute transport with 'dead zones' of slowly moving water (see references in Fischer et al. 1979, Jackman et al. 1984, and Harvey and Bencala 1993). This idea can be extended to characterize the hyporheic zone effectively as dead zones. A formulation such as that given in Bencala (1984) includes two parameters, one being the extent of the area involved in storage, and the second being a rate parameter for exchange between the stream and storage. Parameters obtained for this formulation are operationally defined. They have utility in making comparisons among reaches of a stream or between streams, but ultimately their meaning is in the context of in-stream solute transport.

A second approach is to consider the transport of solutes over the catchment-wide downvalley gradient with the hyporheic zone viewed as a continuation of the porous media throughout the subsurface of the catchment. The hydrology and solute transport characterization of porous media in the environment are discussed in textbooks such as Freeze and Cherry (1979). Rigorous characterization of the physical properties of the porous media would be a useful, long-term goal for studies of specific hyporheic zones. A variation for the study of the hyporheic zone as a subsurface flow phenomenon may be to extend the 'underflow' concepts quantitatively presented in Jackman et al. (1984). The extension is to delineate (Harvey and Bencala 1993) distinct, well-defined flow paths along substreams which connect segments of the stream with flow through the subsurface.

Future research

One possible direction for future research is to place an increased emphasis on connections between streams and their catchments, as shown in Figure 1B. A need for basic measurements can be found in the stream gaging studies of Zellweger and his co-workers (1989, 1991), which show that significant volumes of water may be flowing out of a catchment in subsurface areas not part of the open stream channel. Beyond ensuring that basic measurements account for stream connections to the catchment, research will need to define the process links to hydrologic parameters. Work by Harvey and Bencala (1993) is a beginning to the description of flow within the hyporheic zone in terms of measurable hydrometric quantities. This work involves monitoring networks on a scale of 5–50 m to measure local hydraulic gradients. This scale of measurement is needed to quantify the role of substreams in the hyporheic zone. Beyond this, the goal is to identify the processes of fluid mechanics that occur at the interface of catchment and stream hydrology. A clearer understanding of the processes operating at the stream–catchment interface of specific systems will provide a basis for a broader vision of a general characterization of hyporheic zones. Ultimately, continued work on hyporheic zone ecology needs to be accompanied by study of the processes of fluid mechanics resolved to the fine scale of specific biogeochemical processes.

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Geomorphic and environmental effects of instream gravel mining

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Abstract

Instream gravel mining involves the mechanical removal of gravel and sand directly from the active channel of rivers and streams. Active channel deposits are desirable as construction aggregate because they are typically durable (weak materials having been eliminated in river transport), well-sorted, and frequently located near markets or on transportation routes. Instream gravel mining commonly causes incision of the channel bed, which can propagate upstream and downstream for kilometers. As a result, bridges and other structures may be undermined, spawning gravels lost and alluvial water tables lowered. In analyzing the effects of instream gravel mining, a sediment budget analysis sheds light on the relative magnitude of gravel supply, transport and extraction. Computer models of sediment transport are simplifications of complex natural processes; they can be useful components of a sediment budget analysis but should not be relied upon alone. A historical analysis of channel change and sediment supply is needed to understand the underlying processes responsible for present conditions. While instream gravel mining can be a useful tool in flood control and river stabilization in aggrading rivers, most rivers in the developed world (certainly the vast majority below reservoirs) are not aggrading and are more prone to incision-related effects of instream gravel mining.

Introduction

Sand and gravel are used for a variety of construction activities including roads and highways (base material and asphalt), pipelines (bedding), septic systems (drain rock in leach fields) and concrete (aggregate mix) for highways and buildings. In many areas, aggregate is derived primarily from alluvial deposits, notably from active river channels, their floodplains, and older terrace deposits (Sandecki, 1989).

Instream gravel mining involves the physical removal of sand and gravel from riverbeds with heavy equipment, which directly alters channel geometry and bed elevation. Depending on the situation, extensive clearing, diversion of flow, stockpiling of sediment and excavation of deep pits may be involved. Active channel deposits are particularly desirable as aggregate because river transport eliminates weak materials by abrasion and attrition and the resulting deposits are of high quality: durable, rounded, well-sorted and relatively free of interstitial fine sediment. Consequently, this gravel requires less processing than gravel from other sources. Moreover, suitable channel deposits are often located near the markets for the product or on transportation routes, reducing transportation costs. In the gravel mining industry, the extraction and processing of the material itself has a relatively low cost, while product price doubles with each 40 km of transport (Randy Sater, Teichert Construction Company, personal communication, 1991).

The environmental costs of instream gravel

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extraction have generally not been factored into production costs, making instream sources more economically attractive than alternatives such as dry terrace mines (where additional processing is often required to remove fine sediment), quarries (from which rock must be crushed, washed and sorted) or distant sources, such as reservoir deltas (involving greater transportation costs).

Depending on the type and amount of mining, the physical effects of instream gravel mining may include improved flood control and channel stability in rapidly aggrading rivers. Instream mining also results in the destruction of aquatic and riparian habitat through large changes in channel morphology (Sandecki, 1989). Impacts described in the literature include: bed degradation; bed coarsening; lowered alluvial water tables; and channel instability (Sato, 1971, 1975; Bull and Scott, 1974; Anonymous, 1986; Peiry, 1987; Harvey and Schumm, 1987; Todd, 1989; Stevens et al., 1990). These physical impacts result in degradation of riparian and aquatic ecology and undermining of bridges and other structures.

The purpose of this paper is to summarize the geomorphic and environmental effects of instream gravel mining and to review approaches to environmental impact analyses. Instream mines are widely viewed as blemishes on the landscape, but the nature of their geomorphic effects are not widely appreciated. While those effects are manifest throughout the world, this paper draws largely upon data for California rivers. Regulation and management of instream gravel mining in California is reviewed by Kondolf (1994).

Types of mining in alluvial systems

The three types of instream gravel mining are dry-pit and wet-pit mining in the active channel and bar skimming. In-channel pit mining involves the excavation of a pit below the thalweg (lowest point in the stream cross section). Dry-pit refers to pits excavated on dry ephemeral stream beds with conventional bulldozers, scrapers and loaders. Wet-pit mining requires the use of a dragline or hydraulic excavator to extract gravel from below the water table level

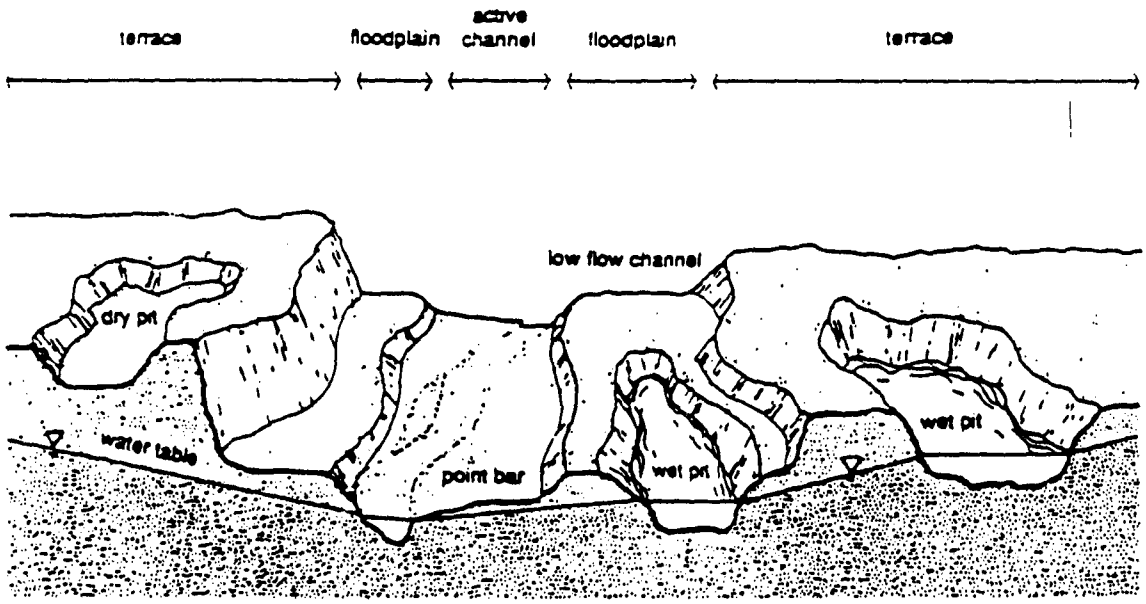


Fig. 1. Alluvial deposits exploited for aggregate depicted in relation to river channel morphology and alluvial water table.

or in a perennial stream itself. Bar skimming involves scraping off the top layer (of variable thickness) from a gravel bar without excavating below the summer water level.

Another important method of gravel mining is the excavation of pits on the current floodplain or adjacent river terraces (Fig. 1). These pits can be located above the water table (dry pits) or below (wet pits), depending on the elevation of the floodplain or terrace surface relative to the baseflow water elevation of the channel.

The effects of terrace and floodplain mining isolated from the active channel are beyond the scope of this paper, but this isolation may be short-term only. In many cases these pits are constructed adjacent to the active channel, separated only by a small levee. During a sudden shift in channel course during a flood (avulsion) or more gradual migration, the channel may shift into the gravel pits. During a major flood in 1971, the Yakima River breached levees and shifted its course to flow through gravel pits near Yakima, Washington (Dunne and Leopold, 1978). Capture of the river channel by gravel pits was observed at 12 of 25 floodplain gravel mines in northern Alaska studied by Woodward–Clyde Consultants (1980). Because floodplain pits can become part of the active channel, they should be considered as being potentially instream when viewed on a time scale of decades. In cases where large upstream reservoirs can completely control even large floods (such as the 100-year flood), floodplain mining could be considered geomorphically isolated from the active channel because the risk of avulsion is greatly reduced.

Effects of instream mining

The geomorphic effects of instream mining are best understood in the context of sediment transport throughout the entire river system. In general terms and on a large scale, many drainage basins can be broken into three zones: the rugged headwaters dominated by erosion and sediment production; a middle zone of sediment transport; and the downstream zone of deposition below sea level (or in lakes or internally drained basins above sea level) (Fig. 2) (Schumm, 1977). This scheme emphasizes the role of the river in moving material eroded from the continental uplands to depositional sites in the ocean. The river bed in the zone of transport acts like a conveyor belt, moving sediment and adding or subtracting sediment from temporary storage sites such as gravel bars, floodplains and terraces. This implies that rivers are dynamic in ways commonly not recognized. For example, the location and form of a gravel bar may be determined by constraints such as bedrock outcrops or other features that control the local reach hydraulics and thus induce deposition in the same site year after year. A gravel bar may be a persistent feature from year to year, but the actual gravel particles may be eroded and replaced every few years by new particles transported from upstream.

The transport of sediment through the river system is continuous on a geological time scale but episodic on a human time scale. Sediment transport occurs as a power function of discharge, so high flows transport proportionately greater sediment loads than moderate flows. On rivers with a wide range in discharge, as is the case for most California rivers, most sediment transport is accomplished by flows that occur a small percentage of the time. On an average basis, 97% of sediment transport on the Santa Clara River occurs in 1.2% of the time, or an average of about 4 days year^{-1} (Envicom, 1979). Moreover, because discharge is highly variable from year to year in California rivers, their sediment loads vary widely from year to year (Fig. 3). Thus, the sediment transport regime in these rivers can be likened to long periods of boredom interrupted by brief moments of terror. Average annual values of sediment transport are statistical artifices more than they are representative of any year.

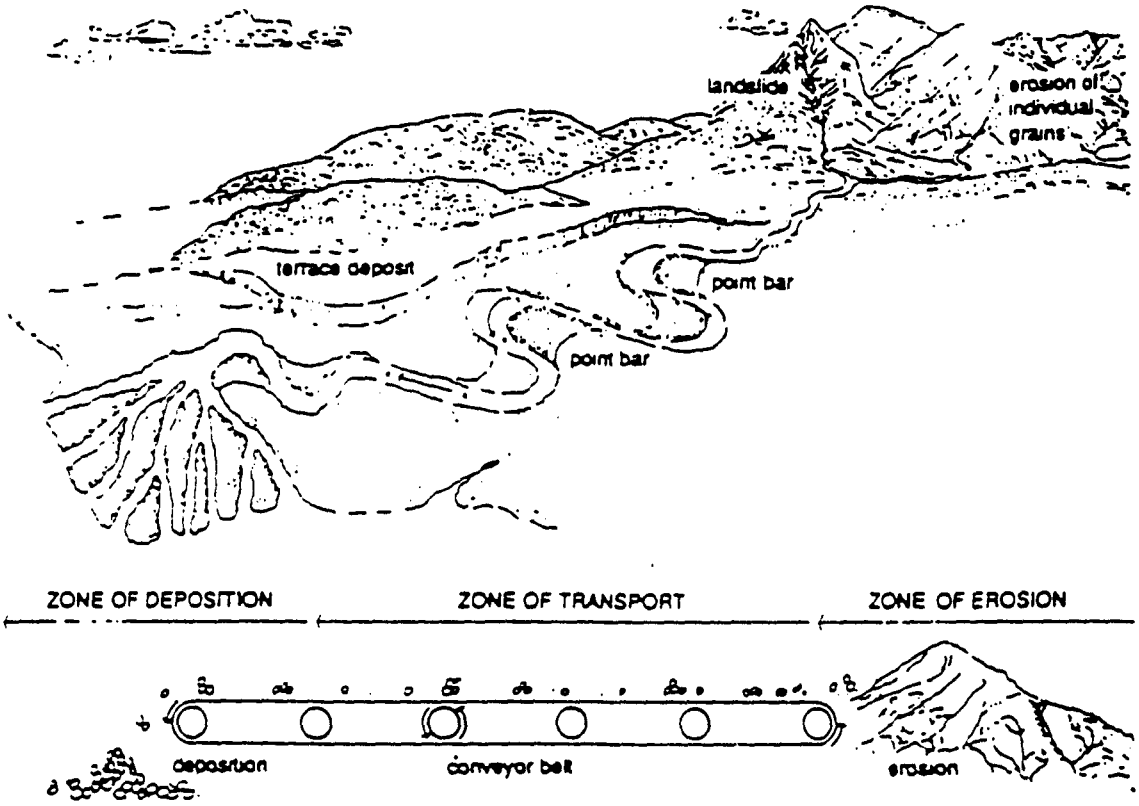


Fig. 2. Diagram of zones of sediment production, transport and deposition illustrating the conveyor belt analogy for the zone of transport.

One implication of this large inter-annual variability in discharge and sediment load is that a river may need to be monitored for years before sediment transport is observed. Because channel adjustments to changes in sediment supply (natural or human-induced) involve sediment transport, many of these adjustments may not take place until significant sediment transport occurs, which could be years after the event to which the channel is responding.

Incision produced by instream mining

The rate of bedload transport depends on the supply of coarse sediment from the watershed and the transporting power of the river, resulting in transport rates that vary over space and time. The size and shape of the stream channel reflects its prevailing flow and sediment load (Leopold et al., 1964). If the bedload transport rate is altered, the river channel adjusts to the changed conditions. By removing sediment from this continuum, instream gravel mining disrupts the existing balance between sediment supply and transporting power.

The most dramatic effects of instream mining occur when pits are excavated in the active channel. The equilibrium profile of the streambed is altered and the channel must adjust to the locally steeper gradient upon entering the pit (Fig. 4). This steeper gradient produces increased stream power and results in bed erosion. This process is known as headcutting or knickpoint migration, and the effects may translate upstream for kilometers (Scott, 1973; Stevens et al., 1990). Incision can proceed up tributaries when instream mining low-

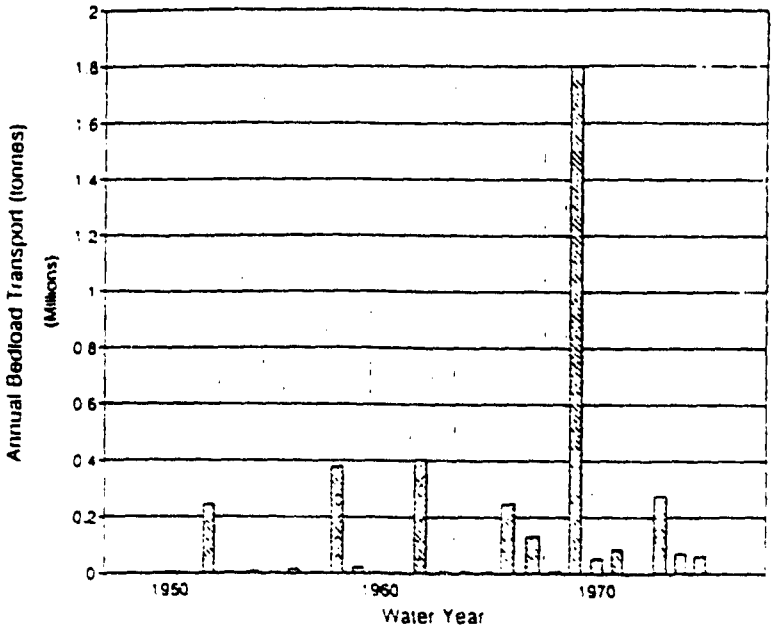


Fig. 3. Computed annual rates of bedload transport in the Santa Clara River at Montalvo, California, for the period 1950–1975 (Data from Brownlie and Taylor, 1981.)

ers the bed of the mainstem, thereby lowering the base level for the tributary (Harvey and Schumm, 1987). Continued extraction may also cause the entire streambed to degrade to the depth of excavation. In severe cases, the degradation will continue until bedrock or older substrates under the recent alluvium are uncovered. In many gravel bed rivers, the stream bed becomes armored, limiting further incision (Dietrich et al., 1989). A dramatic example of knickpoint migration upstream of a gravel pit was documented by Scott (1973) on Tujunga Wash near Los Angeles. During the flood of February 1969, a gravel pit captured first one, then both threads of the active channel, initiating a knickpoint that migrated upstream, ultimately causing a bridge to fail from undermining (Fig. 5).

Pit excavation will also induce incision downstream. Because much of the incoming sediment load will be trapped in the pit, water deprived of its sediment load will exit the downstream end of the pit. The bedload-free 'hungry water' has excess energy and typically erodes its bed and banks to regain at least part of its sediment load (Fig. 4).

Direct effects of incision include undermining of bridge piers and other structures and exposure of buried pipeline crossings and water supply facilities. Incision can also induce channel instability, triggering bank erosion and channel migration in formerly stable reaches. This channel instability can result in widespread loss of riparian vegetation, resulting in direct loss of wildlife habitat, loss of shade and cover to the channel, and other indirect ecological impacts. Channel incision may induce a decline in the alluvial water table, since the banks are effectively drained to a lowered level, potentially affecting riparian vegetation and water supply wells. The Lake County, California, Planning Department (Lake County, 1992) estimated that the range of potential reduction in alluvial aquifer storage from incision in small river valleys with instream mining was 1–16%, varying according to local geology and aquifer geometry. Lowering water tables has also been documented along the

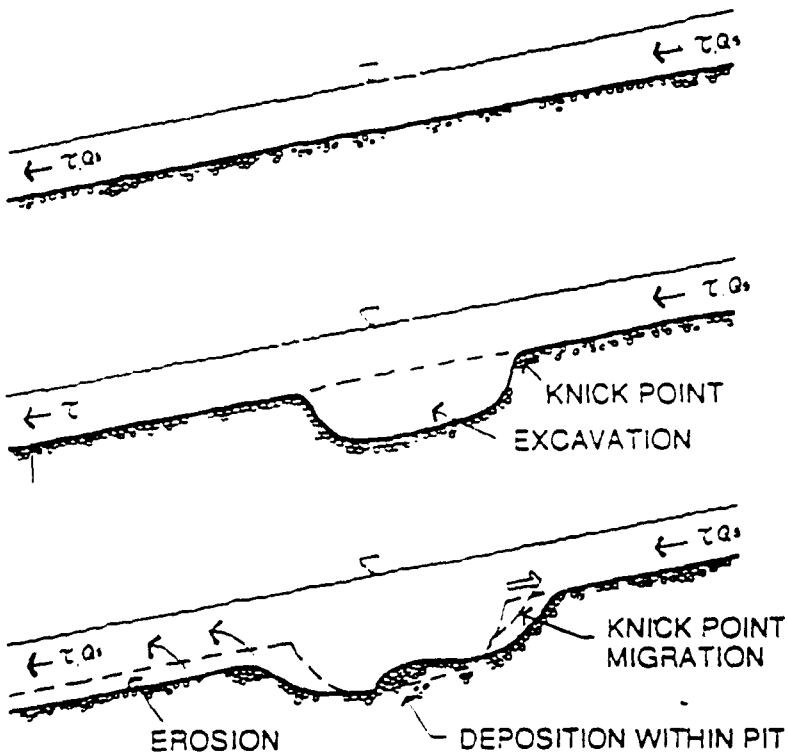


Fig. 4. Incision produced by instream gravel mining. (a) The initial, pre-extraction condition, in which the river's sediment load (Q_s) and the force available to transport sediment, the shear stress (τ), are continuous through the reach. (b) The excavation creates a knickpoint on its upstream end and traps sediment, interrupting the transport of sediment through the reach. Downstream, the river still has the capacity to transport sediment (τ) but has no sediment load. (c) The knickpoint migrates upstream and hungry water erodes the bed downstream, causing incision upstream and downstream.

Russian River (Sonoma County, 1992).

Among the best known examples of channel incision resulting from instream gravel extraction is the Russian River near Healdsburg, where extensive wet pit mining in the active channel in the 1950s and 1960s caused channel incision in excess of 3 m over an 11 km length of river, with a maximum incision of 6 m. As a result, the form of the river has been changed from a wide, braided channel to a deeply incised channel with a straighter course. By the mid-1960s, channel pit mining was abandoned and replaced by bar skimming and floodplain pits (Collins and Dunne, 1990). Most of these floodplain pits are located adjacent to the active channel. Levees designed to prevent the river from capturing the pits have thus far prevented the river from migrating naturally across its floodplain and maintaining the diversity of successional stages associated with an actively migrating river (Sonoma County, 1992). However, these levees have finite strength and may fail during a sufficiently large flood.

Another well known case is Cache Creek, in Yolo County, a source of over 80 million tonnes of aggregate from 1905 to 1983. Channel incision of up to 8 m has been documented by changes in the stage–discharge relation at a USGS gaging station and repeat surveys of longitudinal profiles and bridge cross sections (Woodward–Clyde Consultants, 1976). The future management of this reach remains highly controversial and was the subject of a

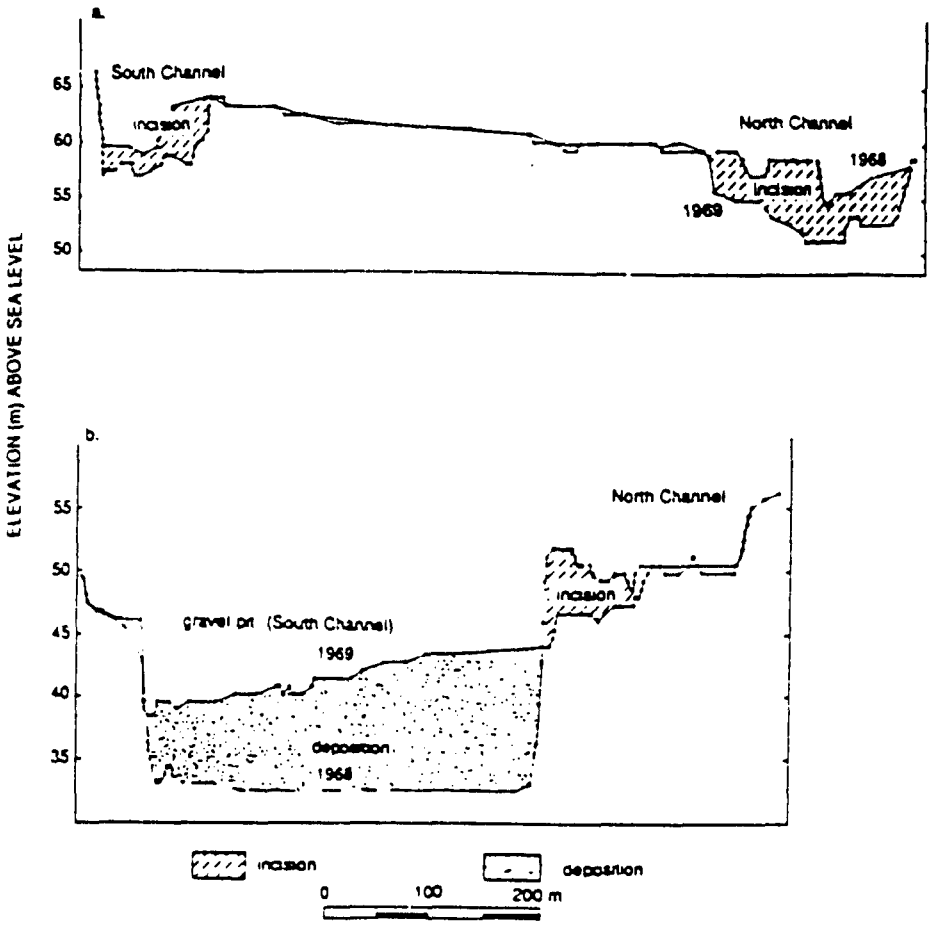


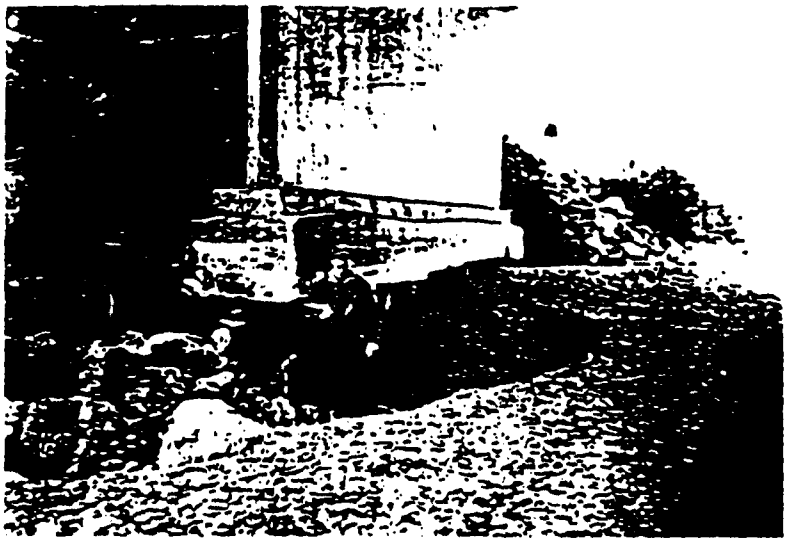
Fig. 5. Channel cross sections of Tujunga Wash in southern California in June 1968 and March 1969, showing changes produced by the flood of February 1969, when both threads of the channel were captured by a gravel pit. (a) Cross section 50 m upstream of the Foothill Boulevard Bridge, showing incision of up to 4 m in the thalweg. (b) Cross section 500 m downstream of the Foothill Boulevard Bridge, showing filling of the gravel pit after capture of the south and north channel. (Adapted from Scott, 1973.)

recent Environmental Impact Report (EIR) and protracted public hearings (Dames and Moore, 1991). The incision of Cache Creek has probably played some role in the loss of alluvial groundwater storage potential, but overdraft is a confounding factor (Yates, 1989).

It may be difficult to distinguish the role of instream mining in causing the incision of a specific channel because of other factors (such as adjustments to reservoir construction) operating simultaneously in the channel. However, temporal and spatial patterns of incision may permit reservoir effects to be distinguished from instream mining effects, as illustrated on Stony Creek (Kondolf and Swanson, 1993). Moreover, in many California rivers, the role of instream mining is apparent because the volumes extracted vastly exceed the rate of supply, commonly by an order of magnitude.

Incision below bridges

The California Department of Transportation (Caltrans) has compiled a partial list of



g. 6 Undermining of the Highway 32 bridge over Stony Creek, near Orland, California. The channel incised 5 m, necessitating airs costing over US $1.5 million. (Photograph by the author, May 1990.)

idges identified as potentially threatened by cision related to nearby instream mining. eview of sequential bed profiles under many these bridges (from soundings or surveys reded in Caltrans bridge files) and compilan of data from more thorough studies, sugst that incision is a serious problem tewide, deserving of systematic study ondolf and Matthews, 1993).

Studies of the causes of incision under dges must account for local scour caused by draulic adjustment to bridge piers, whichically occurs within a few years of construc-, until the bed stabilizes. The spatial and poral relation of incision to mining and er potential causal factors may provide the evidence for cause and effect. At many ges, after an initial adjustment to bridge s, the bed remained stable until comcement of instream mining.

he costs of repairing structures undered by incision from gravel mining, such as pipelines, canal crossings and highway bridges, have not been systematically compiled. A partial inventory of repair costs for state highway bridges through 1984 attributed by Caltrans staff to instream extraction indicated costs of over $6 million. However, this figure was hastily compiled to provide background information for legislation; with further research, the figure for costs through 1984 would probably double (R. Hackett, Caltrans Division of Structures, unpublished memo, 1984). Intensive extraction on the Santa Clara River in Ventura County resulted in failure of the California Highway 118 bridge during the 1969 flood, resulting in repairs costing $730,000 (in 1969 dollars). The California Highway 67 bridge over the San Diego River was completely replaced in 1981 (at a cost of $3.3 million) as a result of extraction-related undermining. Incision on Stony Creek has necessitated bridge repairs costing in excess of $1.5 million (Fig. 6) (Kondolf and Swanson, 1993).

Bed coarsening

Instream mining has selectively removed gravels suitably sized for salmonid (salmon and trout) spawning from many rivers. Direct removal of gravel and sand by mining, as well as winnowing of gravels and sands from an incising bed, can result in armoring, the development of a lag deposit of cobbles and boulders on the bed. However, bed coarsening from instream mining is commonly difficult to document because grain sizes for initial conditions were not documented for most rivers. Bed coarsening is of particular concern on rivers supporting salmonids because these fish require freshwater fluvial gravels for spawning (Allen, 1969). The maximum size of gravel movable by the spawning fish is a function of fish size, with fish being able to move gravels with a median size up to about 10% of their body length (Kondolf and Wolman, 1993). If smaller gravels are transported from the reach, the remaining lag gravels may be too coarse to be used for spawning by the species present.

One of the best documented examples of bed coarsening is the Upper Sacramento River, in which the impacts of upstream dam construction were compounded by intensive in-channel extraction (for construction of the dam) and subsequent intensive extraction from tributaries (Parfitt and Buer, 1980). Construction of Shasta Dam (completed in 1944) required 5.4 million m^3 of aggregate, which was derived from two large gravel bars in the Sacramento River downstream of the dam site. The entirety of one bar was excavated, locally to a depth of 15 m (Parfitt and Buer, 1980). The gravel remaining in the channel after this massive removal was subsequently transported downstream by clearwater releases from the dam, leaving only a lag of cobbles, boulders and bedrock in the reach near Redding.

With continued urbanization of the northern Sacramento Valley, extensive gravel extraction occurred in tributary channels. On Clear Creek, the combination of intensive mining and subsequent flood flows has resulted in a channel scoured to bedrock in many places and armored with coarse material elsewhere (Parfitt and Buer, 1980). Bed coarsening on these tributaries has eliminated potential spawning grounds in the tributaries themselves and has greatly reduced the remaining gravel supply to the mainstem Sacramento River below Shasta Dam. These tributary effects have contributed to coarsening on the mainstem.

The California Department of Fish and Game and Department of Water Resources has invested in artificial replenishment of spawning gravel in the Upper Sacramento since 1979. By the year 2000, nearly 800 000 m^3 of gravel will have been emplaced in the mainstem and in artificial side channels, at a total cost of over $22 million (Kondolf and Matthews, 1993). Despite these efforts, few would argue that the natural spawning potential of the reach has been restored. Gravels emplaced in the mainstem are subject to scour and loss during high flows, so efforts are now concentrated on construction of side channels with favorable spawning conditions. Ironically, the gravel used in these emplacement projects is typically derived from floodplain or instream mines on tributaries to the Sacramento River.

An example of bed coarsening at a smaller scale is San Simeon Creek in San Luis Obispo County, where bar skimming over a 30 year period has resulted in development of a coarse cobble lag and incision to hardpan over a reach of about 1 km upstream of the extraction (Matthews and Associates, 1991).

Effects of gravel bar skimming

Gravel bar skimming withdraws sediment from the transport system and thus alters supply to downstream reaches, but the volumes removed are typically smaller than those removed for pit mining. Even when rates are small relative to gravel supply, bar skimming can have a profound impact on aquatic habitat

or floodplains) and losses by export from the basin (Dietrich and Dunne, 1978). The basic sediment budget equation is

$$I \pm \Delta S = O$$

where I is inputs, ΔS is change in storage and O is output. For a given system, various components may be classified under input, storage and output, depending upon how the system is defined.

Sources of information on rates of erosion and sediment yield are reviewed by Collins and Dunne (1990). It is particularly important that historical changes in channel configuration and rates of sediment supply be documented so that current processes are understood in context, as discussed below. A sediment budget can typically indicate whether extraction rates approach or exceed annual bedload transport rates through the extraction reach. Collins and Dunne (1989) developed sediment budgets for three rivers on the Olympic Peninsula of Washington and found that extraction rates exceeded replenishment rates by more than tenfold. The difference between supply and extraction could be accounted for by incision of about 0.03 m year^{-1} (Collins and Dunne, 1989).

Kondolf and Swanson (1993) developed a sediment budget for Stony Creek from Black Butte Dam to its confluence with the Sacramento River near Hamilton City (Fig. 7). Stony Creek is a particularly good case study because of the high natural bedload sediment yield, the magnitude of impacts of dam construction and instream mining, and the fact that the study reach (downstream of Black Butte Dam) traverses an alluvial fan so that there are no tributaries to complicate the picture. Prior to closure of Black Butte Dam in 1963, an annual average of about 100 000 m^3 of gravel was transported from the drainage basin to the study reach. Since closure of the dam, the reach below the dam has incised and laterally migrated, cannibalizing its earlier deposits and regaining through bank erosion about 20% of its pre-dam sediment load. Using extraction volumes reported by the opera-

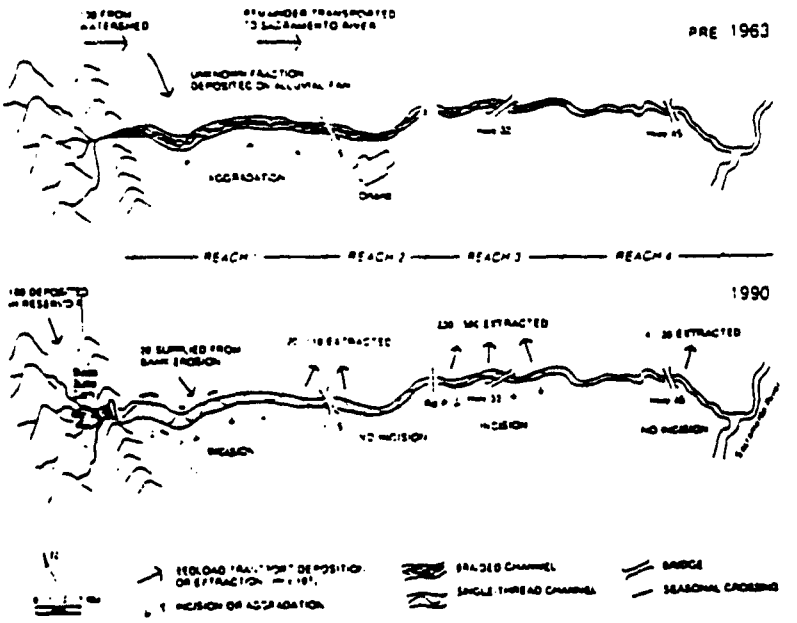


Fig. 7. Sediment budget for Lower Stony Creek, showing situation prior to construction of Black Butte Dam in 1963 (top) and in 1990 (bottom). All values of gravel flux are in m^3 × 10^3. (From Kondolf and Swanson, 1993; permission from Springer Verlag.)

tors, an estimated 260 000–730 000 m^3 is removed annually along the entire length of Stony Creek, of which about 80–90% is concentrated in a 5 km reach centered on the Highway 32 bridge. As a result of the intense mining upstream and downstream of the Highway 32 bridge, the channel degraded up to 5 m between 1974 and 1990 under the bridge (Kondolf and Swanson, 1993).

Complexity of natural sediment transport processes

The processes of bedload sediment transport in streams are still poorly understood. This is due, in large part, to limitations on direct observations and measurements of bedload sediment transport, at least during periods of greatest sediment transport. As a result, there is still basic disagreement about processes of sediment transport in gravel-bed channels. The rate of sediment transport is a function of both transporting energy available and the sediment volume and grain size. However, bedload transport is conventionally predicted as a function of the transporting energy (flow) only, without changes in supply taken into account. Standard procedures rely on development of a sediment rating curve, a best-fit line through often widely scattered data to predict the dependent variable (sediment transport) from the independent variable (flow) (Fig. 8). Total annual sediment transport is computed by applying the sediment rating curve to the annual hydrograph. The inherent imprecision of this 'rating curve' approach to computation of total suspended sediment transport has been discussed by Walling (1977). Glysson (1987) documented errors from 0% to 1760% using this approach.

One reason why sediment transport is so difficult to understand is the tremendous spatial and temporal variability in the processes of sediment production from the watershed, sediment delivery to the channel, transportation within the channel, and deposition in and along the channel. In gravel-bed rivers, the nature of bedload transport changes with increasing flow when the force per unit area applied to the bed (the bed shear stress) becomes sufficient to disrupt the coarse surface layer (the pavement), liberating finer grained particles from below. As a result, the rate of bedload transport at a given flow may be greater on the recession limb of a flood hydrograph than the rising limb. On the rising limb, the pavement is not disrupted and thus it 'protects' the underlying fine-grained sediment. When the river drops back to the same flow on the recession limb, the pavement is not yet reformed, resulting in greater sediment transport.

In addition, the supply of sediment available for transport may change over the course of a flood (as fresh landslides or bank erosion contribute new material to the channel) or over a period of years. On the Carmel River, for example, massive bank erosion in 1980, 1982 and 1983 delivered large quantities of sediment to the channel. Since then, a number of bank stabilization projects have been undertaken and sediment input from this source (the largest source term in the sediment budget) has been reduced. Sediment transport measurements in 1992 show that the rate of sediment transport at low flows has decreased from values measured in 1982 and 1983 (Fig. 8).

Even when the sediment supply and flow can be considered to be steady, large variations in bedload transport over time have been observed (Carey, 1985; Pitlick, 1988). On sand-bedded streams, variations in transport rate are associated with the passage of dunes and related bedforms. Similarly, large-scale bedforms known as 'gravel waves' (about 1 m high and 1 km long) have been observed on the Waimakariri River near Christchurch, New Zealand, moving downstream at about 1 km $year^{-1}$ (Griffiths, 1979). Bedload transport rates also vary substantially across the channel, with transport concentrated in zones. If these zones migrate across the channel, bedload transport rate at a point will vary.

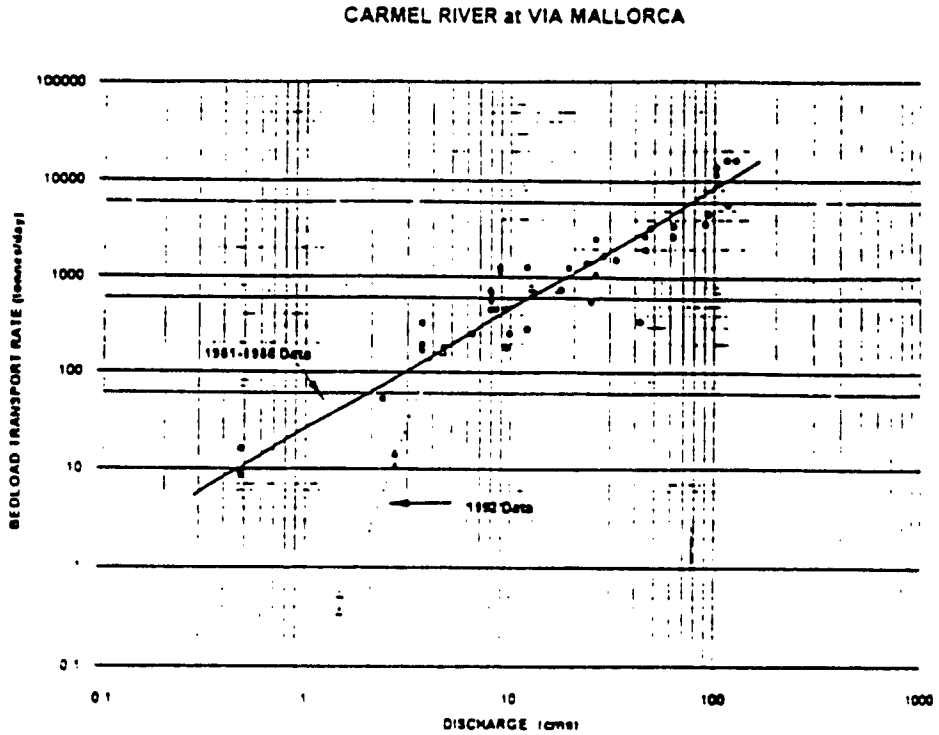


Fig. 8. Bedload rating curve for the Carmel River near Carmel. (Adapted from Matthews and Kondolf, 1993.)

Limitations and use of sediment transport models

Sediment transport models can be useful tools in analysis of river systems, but it is unrealistic to treat model predictions as anything more than attempts to represent, in a very simplified fashion, an exceedingly complex natural system which is still poorly understood. For their input values, sediment transport models must simplify river channel geometry and bed material size. For computation of sediment transport, the models must simulate flows in the river and use one of many conflicting sediment transport equations. Given the above, the results of a state-of-the-art sediment transport model are simply not good enough to accept without sufficient observations of rivers in the region to verify the general nature of the results.

Existing equations to predict sediment transport were developed using imperfect field data (or laboratory data that may not reflect field conditions). The equations are unlikely to be better than the measurements on which they were based. The American Society of Civil Engineers compared numerous sediment transport equations with each other and with field data and concluded "... it is clear that sediment discharge formulas, at best, can be expected to give only estimates," and recommended that "... the selection of a formula ... be based on checking calculated sediment discharge against any observed values of the stream under consideration or on similar ones. Finally, after reasonable checks have been made one can then make some kind of judgement of the reliability of the calculations that should be kept in mind in using them in the planning works." (Vanoni, 1977.)

The National Research Council tested six sediment transport models, including HEC-6 and FLUVIAL-11, and concluded that use of

existing models "... cannot be justified in flood insurance studies" because of unreliable formulation of the sediment discharge capacity of flows and the variable friction factor, and inadequate understanding and formulation of coarsening and the mechanics of bank erosion (National Research Council, 1983). Any sediment transport model is only a simplification and generalization of complex field conditions. In this process of simplification, information essential to prediction of sediment transport in field situations may be lost.

Sediment transport models have their greatest value when used to model the effects of proposed alternative management strategies or other changes in controlling variables. For example, Li and Simons (1979) modelled changes in bed elevation in San Juan Creek near San Juan Capistrano, California, under four alternatives. Given the uncertainty in sediment transport modelling, all such models should be calibrated with surveys of actual channel change over floods and, where possible, with sediment transport measurements collected over a range of flows. The inherent difficulty in modeling these river processes should be borne in mind when interpreting the results.

Uncertainty in geomorphic and sediment transport predictions

Uncertainty is inevitable in the study of channel change and sediment transport owing to: (1) numerous independent watershed variables (e.g. precipitation, rock type, land use) that combine in many different ways to produce different flow and sediment regimes; and (2) numerous dependent channel variables (e.g. width, depth, bedforms, sediment transport) that adjust in many different combinations to any given regime (the "indeterminate hydraulics" described by Maddock, 1970). Given the impossibility of exact prediction from science and engineering, geomorphic understanding assumes increasing importance. Although computer models are limited, there is often much historical evidence available to provide insights into the response of a river to particular types of events.

Historical channel studies

Given the complexity of natural sediment transport, the indeterminate nature of channel hydraulics, the inability of simplified models to predict river behavior adequately and the variety of human influences upon river systems, the best guide to a river's future behavior is often gleaned from analysis of its past behavior. Moreover, a historical perspective is essential for placing the present condition in context. In California, large infrequent floods may reshape the channel, stripping the riparian zone of vegetation, transporting boulders, and eroding or depositing large quantities of sediment. The catastrophic channel changes occur suddenly, but recovery may take decades. A stream may seem to behave differently depending on whether it is observed for 2 or 20 years following a big flood. Knowledge of the channel's history of flood response and recovery is essential in order to understand the current conditions and possible responses.

Sources of data for historical channel analysis include historical aerial photographs (coverage extends back to the 1920s or 1930s for much of North America and Europe), historical maps, engineering surveys of some river reaches, surveys at newly constructed bridges, computed bed elevations from gaging station records, narrative accounts and geomorphic evidence (Kondolf and Sale, 1985).

Changes in land use in the drainage basin can produce changes in sediment yield, as illustrated in the Yuba River basin, where hydraulic mining in the 19th century resulted in massive increases in sediment yield. A 'debris plain' covering 100 km^2 was deposited east of Marysville, where the river debouched from the Sierra Nevada onto the floor of the Sacramento Valley. After hydraulic mining was

halted in 1884, a wave of sediment continued to pass through the Yuba River, raising bed elevations at the stream gage at Marysville to a peak in 1905 (Gilbert, 1917; Adler, 1980). The Yuba River then incised for decades, as the river gradually flushed out aggraded sediment, a process reinforced by channel training works and construction of Englebright Dam in 1940 upstream of the debris plain. In 1911, the Highway 20 bridge was built over the Yuba River without recognition of this long-term trend, and, as the channel continued to incise over the subsequent decades, the bridge piers were undermined (Kondolf, 1988). An instream gravel mine operating upstream of the bridge probably contributed to the incision at the bridge, but it would be erroneous to attribute all the incision to the gravel mine. Historical evidence suggests that the largest factor was gradual recovery from the historic influx of hydraulic mining debris.

Historical analysis can provide essential insights for understanding and calculating the sediment budget of a reach (Dietrich and Dunne, 1978). For example, the middle reach of the Russian River near Healdsburg was estimated to have a 'safe yield' of about 1 million tonnes based on calculated bedload transport rates, total gravel extraction and the change in storage in the channel bed effected by incision (Simons, Li and Associates, 1980). However, the analysis did not consider the artificially high rates of sediment delivery from Dry Creek, a tributary, from 1946 to 1972. Dry Creek incised in response to lowered base level and headcutting caused by gravel mining in lower Dry Creek and the Russian River mainstem (Harvey and Schumm, 1987). As Dry Creek incised, the sediment formerly stored in its channel bed was transported downstream, replenishing the Russian River mainstem and limiting its incision. Without the temporarily increased influx of sediment from Dry Creek, the Russian River would have incised more and the computed 'safe yield' would have been less.

Instream gravel mining as a flood management tool

Instream gravel mining can serve as flood control and prevent avulsion on rapidly aggrading rivers. Sediment removal is frequently required from river and flood control channels to increase or maintain channel capacity. On the River Usk at Brecon, Wales, 5000–8000 tonnes of gravel are removed annually from a flood control channel that was artificially overwidened and thus acts as a sediment trap (Brookes, 1988). In some cases, commercial extraction has been promoted on the basis of increased channel capacity and consequent flood control benefits (e.g. Bissell and Karn, 1992). However, such claims require objective evaluation, for mining-induced incision can also undermine flood control works, as occurred on the Otaki River, New Zealand (Anonymous, 1985).

The potential benefits of instream gravel mining for river control are illustrated on the Waimakariri River, near Christchurch New Zealand, a braided river draining the rapidly eroding, glaciated Southern Alps. The Waimakariri River transports approximately 150 000 m^3 of bedload annually (Carson and Griffiths, 1989). The river is aggrading in its lower reaches, largely as a result of bank erosion and bed degradation upstream, which has resulted in the downstream migration of gravel waves evident from survey data (Griffiths, 1979). A gravel budget for the lower Waimakariri River shows the 15 km reach near Christchurch (3–18 km above the mouth) aggraded 2.9 m (average over the reach) from 1929 to 1973 (Fig. 9). However, during this period another 5.9 m (average over the reach) of gravel and sand were extracted by instream mining. Without the mining, further aggradation would almost certainly have occurred, potentially leading to channel avulsion by filling the current channel with sediment and causing it to adopt a new course, probably through the city of Christchurch (Basher et al., 1988).

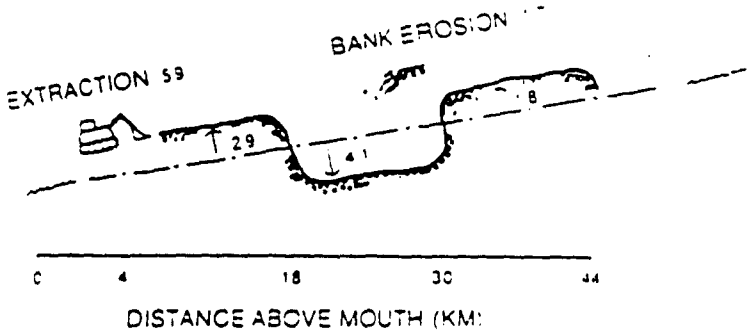


Fig. 9. Gravel budget for the Waimakariri River near Christchurch, New Zealand, 1929–1973. All values in $m^3 \times 10^6$. (Data from Griffiths, 1979.)

Instream gravel mining in this reach has been encouraged by the North Canterbury Catchment Board (and its successor, the Canterbury Council). A recent report by government geomorphologists urged "The Board's policy of encouraging gravel extraction must continue in the future, but we note that the rate of extraction has never kept pace with the supply for any significant period. To be an effective measure in the long term, extraction must get ahead." (Basher et al., 1988.)

Rivers experiencing rapid aggradation, such as the Waimakariri, are less common than rivers experiencing degradation due to a gravel deficit. Even in New Zealand, with high bedload sediment yields from its rapidly uplifting and eroding mountains, there are more reports of rivers with degradation problems (from instream mining, dam construction or channelization) than rivers with aggradation problems (Pemberton, 1974; Williman, 1977; Anonymous, 1985, 1986; Page and Heerdegen, 1985). In alpine rivers of France and Germany, instream gravel mining and upstream reservoir construction resulted in widespread channel incision; instream gravel mining is now prohibited in most of these drainages and grade control structures have been installed to limit incision (Weiss and Mangelsdorf, 1982; Peiry, 1987). In addition, gravels have been artificially added to some rivers, such as the Rhein (Weiss, 1991) and the Saalach in Bavaria (Weiss, 1991) to prevent bed incision. Aggradation of gravel is relatively rare in rivers below dams, occurring only when tributary derived gravel cannot be transported by reduced mainstem flows (Parker, 1980). Given the extent to which rivers in North America and Europe have been impounded, it can be fairly said that, in these areas, a deficiency in gravel supply is far more likely than an excess.

Summary and conclusions

Instream gravel mining has significant effects on channel form, notably by causing incision upstream and downstream of the extraction site. As a result, bridges and other structures may be undermined, spawning gravels lost, riparian habitat lost and alluvial water tables lowered. Because of the complexity of sediment transport processes in natural channels, it is often difficult precisely to determine the relative roles of instream gravel mining, upstream reservoir construction and other factors in causing incision in a given channel. A sediment budget analysis can indicate relative rates of sediment supply, transport and extraction. A historical analysis is essential to understand the long-term context for current conditions. Computer models of sediment transport can be used to evaluate different alternative management strategies, but only after

being calibrated with data from the river under study.

In rapidly aggrading rivers, instream mining can be a tool for flood control and channel stability. However, aggrading rivers are less common than incising rivers in Europe and North America, because numerous reservoirs have eliminated upstream sediment supply.

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CHRONOLOGY OF EVENTS

WOODSIDE/DAYBREAK SURFACE MINE,

1968 - 1995

Department of Community Development

CLARK COUNTY, WASHINGTON

December, 1995

LIST OF EXHIBITS

Exhibit A	Woodside Property Legal Description and Site & Vicinity Maps
Exhibit B	Aerial Photographs, 1968 through 1995
Exhibit C	Legal Constraints on Local Regulation of Surface Mining
Exhibit D	Site Mining Application Forms and Related Documents
Exhibit E	General Correspondence
Exhibit F	Annual Mining Reports and Department of Natural Resources Inspections
Exhibit G	Selected Regulations Applicable to the Site
Exhibit H	Site Mining-Related Newspaper Reports
Exhibit I	Western Washington Growth Management Hearings Board Documents
Exhibit J	Site Photographs and County Code Enforcement Documents

CHRONOLOGY OF EVENTS
WOODSIDE/DAYBREAK SURFACE MINE

Format notations: Key facts and figures are presented in **bold** face type, and legal constraints or regulatory issues are shown in *Italics*.

Apr 1968 — A real estate contract was recorded on 4/25/68 under Auditor's File No. G512905 for the purchase of property by Stuart and Virginia Woodside and Raymond and Merry Woodside from William and Rilda Smith, consisting of approximately **290 acres** as documented in Exhibit A, pages 1 through 5. It should be noted that the northerly 40 acres located east of NE 61st Avenue and now owned by the Woodsides was not included in this original purchase but, according to Auditor's File #G621538, was purchased by the Woodsides in November of 1972 (Exhibit A, page 5; Serial No. 225169000).

Jul 1968 — Aerial photography dated 7/1/68 showed the course of the Lewis River East Fork (including an overflow channel) in relation to the Woodside property, and that no apparent ground disturbance related to mining had occurred on the property as of this date (Exhibit B, page 1).

Oct 1970 — *A legal opinion issued by the State Attorney General on 10/27/70 addressed the State's preemption of surface mining regulation, concluding that after the effective date of the new Surface Mining Act (Chapter 64, Laws of 1970) it will not be legal to engage in surface mining solely on the basis of a local permit without also obtaining a permit from the State, <u>and</u> that a local government may not prohibit an operator to whom a state permit is issued from engaging in surface mining* (Exhibit C, pages 1 through 7).

Jan 1971 — *The Surface Mining Act (RCW 78.44) became effective, requiring an operating permit to engage in surface mining after January 1, 1971.*

An application for a Surface Mining Operating Permit dated 1/10/71 was submitted to the Department of Natural Resources (DNR) by Lawrence Edwards, Sr. of Daybreak Sand & Gravel Company for mining **10 acres** to an estimated maximum depth of **15 feet** for **150,000 cubic yards**(?) of mineral, including **screening and crushing** on property owned by the Woodsides; the application described "all gravel deposits on **Sec. 13, 19 and 24** along the East Fork Lewis River **lying Southerly of the North or Northerly bank of river**", meaning largely <u>within</u> the river (see SM-2 Form, Exhibit D, page 1).

Jan 71 cont The site plan accompanying this application outlined an area of approximately **25.7 acres** (800' x 1400') as "Boundary for Gravel Pit", all within **Section 19** (Exhibit D, page 2); an old river channel existing within this area apparently forms, in part, what is referred to as the "north or northerly bank" on both the application and in the legal description dated 1/18/71 and signed by the Woodsides (Exhibit D, page 3). An area outlined to the south of this channel, together with an area outlined and labelled as "Gravel Bars" along the main river channel in **Sec. 24**, appear to mark the proposed excavation area (totaling approximately **4 acres**), while a plant site and settling pond are identified on inland portions of the site plan. The legal description itself contains an obvious error, but appears to describe approximately **17 acres** (as mapped for this chronology in Exhibit D, page 4), all within **Sections 19 & 24**.

The related SM-6 Form, which described "River gravel and material removed for consumer uses from deposits along river and banks and inner areas of property from shore line" in **Sections 24 and 19** only, was reviewed and signed by the Regional Planning Director as to consistency with zoning, indicating that no local permit was required (Exhibit D, page 5).

Surface Mining Permit **#10139** was issued by DNR for mining of "a **71 acre** portion of **Section 19**, Township 4 North, Range 2 East, W.M., and **Section 24**, Township 4 North, Range 1 East, W.M.", stipulating that no operation occur within 200 feet of Lewis River East Fork without a valid shoreline permit (Exhibit D, pages 6 & 7). **The permitted 71 acres has apparently never been specifically identified on a map.**

Apr 1971 Aerial photography dated 4/26/71 showed ground disturbance of approximately 3 acres largely within 200 feet of the Lewis River East Fork in **Sections 19 & 24**, including what appears to be a **rock crusher** and conveyor system in this shoreline area; the old river channel in Sec. 19 also appears to be partially realigned in this phototgraph (Exhibit B, page 2).

Jun 1971 *The Shoreline Management Act (RCW 90.58) became effective on 6/1/71, requiring a permit for any "substantial development" undertaken within 200 feet (or on the flood plain) of jurisdictional waters*; the definition of "development" at RCW 90.58.030(3)(d) specifically includes "removal of any sand, gravel, or minerals". As designated by the Department of Ecology (DOE), a **jurisdictional area of 200 feet** was originally applied along the East Fork Lewis River (Exhibit A, page 6). The Act did not include a provision requiring a shoreline permit for activities undertaken prior to the Act, except for development within an approved plat not completed within two years of the effective date of the Act [RCW 90.58.140(10)].

Feb 1972 A letter dated 2/11/72 from the Department of Fisheries and Department of Game placed a hold on hydraulic project applications for gravel removal submitted by Daybreak Sand & Gravel Company due to flooding and salmon spawning concerns (Exhibit E, page 1).

Mar 1972 The Daybreak Sand & Gravel Co. annual report (SM-7 Form) to DNR on the first year of operation described "All gravel deposits on Sec. **13, 19 and 24**, along East Fork Lewis River lying Southerly of the North or Northerly bank of river", and indicated the disturbance of **2 acres** during the past 12 months with an estimate of **2 acres** to be disturbed over the next 12-month period (Exhibit F, page 1).

Apr 1973 The Daybreak Co. annual report for 1972 reflected the same area description and disturbed acreages as the preceding year (Exhibit F, page 2).

Jul 1973 The Department of Ecology issued a revised shoreline management area map for the vicinity, placing the entire valley floor under shoreline jurisdiction, as the flood plain had not been mapped at this time (Exhibit A, page 7).

Oct 1973 *The Department of Ecology adopted WAC 173-14-050(3), requiring a shoreline permit for any pre-existing substantial development not completed within two years of the effective date of the Shoreline Management Act, meaning June 1, 1973*; as suggested by a Code Reviser's note on Exhibit G, page 1, however, this amendment was apparently not published until October of 1975.

Feb 1974 The Daybreak Co. annual report for 1973 continued to reflect the same area description and disturbed acreages as in preceding years (Exhibit F, page 3).

Jun 1974 Aerial photography dated 6/13/74 showed ground disturbance of approximately 6 acres in **Sections 19 & 24** (Exhibit B, page 3). A comparison of this aerial photo with that of 1968 shows that the main river channel shifted some 600 feet westerly near the subject site during this period, as illustrated on the photo overlay map in Exhibit A, page 8. This is not to imply that mining caused the river to shift, but merely to illustrate the natural dynamics of this river system.

Dec 1974 *The Clark County Shoreline Management Master Program was adopted by the Department of Ecology as WAC 173-19-140*, applying specifically to the entire flood plain of the Lewis River East Fork; designating the subject site as a Rural Shoreline Environment; providing several policies for mining; and requiring a shoreline conditional use permit for mining within a Rural Environment (Exhibit G, pages 2-4).

Jan 1975 The Daybreak Co. annual report for 1974 (representing the final report submitted by this operator) refers to the same 3 sections, but changes the description to merely "along the East Fork Lewis River", while indicating that **3 acres** were disturbed during 1974 and that **3 acres** would be disturbed in 1975 (Exhibit F, page 4).

Jun 1975 A DNR letter of 6/30/75 to Lawrence Edwards advised that "you may increase the size of this pit by submitting for approval, the additional acreage each year", but recommending an update to the reclamation plan "with maps and a sequence of reclamation for the next five years" (Exhibit E, page 3).

Jul 1975 An internal memo of the Clark County Regional Planning Council addressed the applicability of the shoreline permit requirement to a change in operators and possible increased activity on the subject site, indicating that a permit would not be required provided that expansion beyond the DNR-approved limits of the mine does not occur, but concluding that this determination must be based upon a review of the approved reclamation plan (Exhibit E, page 4). There is no record in County or DNR files as to any follow-up on this issue.

Sep 1975 In an apparent transfer of operators for Surface Mining Permit #10139, Paul Zimmerly Rock Products applied for an Operating Permit to mine **25 acres** to an estimated depth of **30 feet** for **500,000 yards or depletion of**....."All gravel deposits on Section 13, **18**, 19 24 on land owned or under control by the Woodsides" (Exhibit D, page 8). This permit was issued the same month under the same permit number, and subject to the same conditions; i.e., **71 acres**, Sections **19 & 24**, no mining within 200 feet of river (Exhibit D, pages 9-11).

Jan 1976 *Amendments to WAC 173-14 (Permits for Substantial Developments on Shorelines of the State) adopted by DOE became effective on 1/2/76*, and were published with a notation indicating that Section .050 - addressing substantial development undertaken prior to the Act - was inadvertently deleted from the printing of these amendments (Exhibit G, page 5).

The Zimmerly Rock Products annual report for 1975 to DNR described "all gravel deposits on Sect. 13, 18, 19, 24 on lands owned or under control by the Woodsides", and that **10 acres** were disturbed during the past 12 months and estimating 5 acres to be disturbed in the next 12 months (Exhibit F, page 5).

Jan 1977 The Zimmerly annual report for 1976 reflected the same area description and disturbed acreages as the preceding year (Exhibit F, page 6).

Oct 1977 Aerial photography dated 10/11/77 showed approximately **15 acres** of ground disturbance, partially within 200 feet of the river but progressing landward in Sections 19, & 24 and, for the first time, into **Section 13** (Exhibit B, page 4).

Dec 1977 Preliminary maps of detailed flood studies became available from the U.S. Army Corps of Engineers based on aerial photography dated 4/12/73, showing the area of operation at that time to be within the 100-year flood plain (Exhibit B, page 5); this essentially revised the area of shoreline management jurisdiction pursuant to WAC 173-22-055: i.e., where the DOE designation maps and criteria conflict, the criteria prevails (Exhibit G, page 6).

Jan 1978 The Zimmerly annual report for 1977 continued to reflect the same 4 sections, changing only the reference to control or ownership "by Paul Zimmerly"; this report also indicated **15 acres** disturbed by mining, with an estimate for 10 acres to be disturbed over the next 12 months (Exhibit F, page 7).

Jan 1979 The Zimmerly annual report for 1978 continued to describe the same 4 sections "contracted by Paul Zimmerly or the Woodsides" and the same disturbed acreages as the preceding year (Exhibit F, page 8). However, a DNR aerial photo overlay work sheet attached to the report identified only **Sections 19 & 24** (Exhibit F, page 9).

Apr 1979 A DNR letter of 4/16/79 to Paul Zimmerly raised the issue of the possible need for a shoreline permit from Clark County for mining within the flood plain (Exhibit E, page 5). A note on the letter indicates that the County was contacted, but there is no record of any follow-up correspondence or determination.

Sep 1979 A Flood Insurance Work Map based on 1973 aerial photography was revised by the Corps of Engineers, showing the area of Zimmerly operations to be largely **outside the 100-year flood plain** and, thus, further revising the area of shoreline management jurisdiction pursuant to WAC 173-22-055 (Exhibit B, page 6).

Jan 1980 The Zimmerly annual report for 1979 (on a revised SM-7 Form) indicated a total of **50 acres** disturbed since the permit was issued, **20 acres** disturbed during 1979, and estimating another 20 acres to be disturbed over the next 12 months; the area description continued to identify the 4 subject sections, while one of two DNR aerial photo work sheets referenced only **Sections 19 & 24**; these were the first photo work sheets to show the creation of ponds (Exhibit F, pages 10-12).

Jul 1980 *County-wide rezoning to implement the 1979 Comprehensive Plan applied the Surface Mining overlay zone to virtually all existing mining operations and to parcels that owners or operators indicated were intended for mining.* This action applied the Agricultural-Surface Mining Combining District (AG-S) to approximately **250 acres** of the Woodside property, leaving 80 acres east of 61st Avenue zoned as AG only (Exhibit A, page 9).

Jan 1981 The Zimmerly annual report for 1980 continued to describe all 4 sections and "all gravel deposits on land owned by Paul Zimmerly or Woodside" (while the DNR aerial photo work sheet continued to identify **Sections 19 & 24** only), and that no additional acreage was disturbed during this period even though reporting that mining occurred "all year"; the report estimated 5 acres would be disturbed in the next 12 months (Exhibit F, pages 13-14).

Dec 1981 The Zimmerly annual report for 1981 (and DNR aerial photo work sheet) reflected the same information as the preceding year, except that a total of **55 acres** had been disturbed since the permit was issued - even though reporting that no additional acreage had been disturbed during this reporting period (Exhibit F, pages 15-16).

May 1982 Aerial photography dated 5/21/82 showed approximately 40 acres of ground disturbance, with expansion occurring to the east in Section 19 and to the northwest in **Section 13** (Exhibit B, page 7).

Aug 1982 *The Clark County Flood Insurance Maps issued by the Federal Emergency Management Agency became effective on 8/2/82*, officially designating the area of Zimmerly mining operations to be largely **within the 100-year flood plain** and establishing more fixed boundaries of shoreline management jurisdiction (Exhibit A, page 10).

Feb 1983 The Zimmerly annual report for 1982 (and DNR aerial photo work sheet) continued to reflect the same area description as in most previous years, and indicated a total of **60 acres** disturbed, **5 acres** disturbed during the reporting period, and estimating an additional 5 acres to be disturbed in the next 12 months (Exhibit F, pages 17-18).

Feb 1984 The Zimmerly annual report for 1983 (no DNR aerial photo work sheet) continued to reference the same 4 sections and area description, indicating **65 total** acres disturbed, **5** acres disturbed during the reporting period, and estimating 5 additional acres to be disturbed in the next 12 months (Exhibit F, page 19).

Sep 1984 Aerial photography dated 5/27/84 showed approximately **60 acres** disturbed, including about 10 acres in **Section 24**, 30 acres in **Section 19**, and 20 acres in **Section 13** (Exhibit B, page 8).

Jan 1985 The Zimmerly annual report for 1984 (on yet another revised SM-7 Form) identified **total acres permitted as 458**; **total acres disturbed as 70**; 5 acres disturbed in the last 12 months; and 5 acres estimated to be disturbed in the next 12 months (Exhibit F, page 20).

Jan 1986 The Zimmerly annual report for 1985 continued to identify **458 acres** as permitted, with a total of **75 acres disturbed**, 5 acres disturbed in the last 12 months and 5 acres estimated to be disturbed in the next 12 months; a DNR aerial photo work sheet dated 3/7/86 continued to identify **Sections 19 & 24** only (Exhibit F, pages 21-22).

May 1986 *The Department of Ecology adopted WAC 173-14-055, providing that nonconforming development lawfully established prior to the Act "may be continued provided that it is not enlarged, intensified, increased, or altered in any way which increases its nonconformity"* (Exhibit G, page 7).

Jan 1987 The Zimmerly annual report for 1986 continued to identify **458 acres** permitted, with a total of **80 acres disturbed**, 5 acres disturbed in the last 12 months, and "unknown" as to estimated acreage of disturbance in the next 12 months (Exhibit F, page 23).

Jun 1987 A Zimmerly Rock Products letter of 6/24/87 to DNR requested transfer of Mining Permit #10139 to Daybreak Rock, indicating the imminent sale of the operation and noting that the new owners "anticipate operating the crusher where it now is" (Exhibit E, page 6).

Jul 1987 A letter of 7/1/87 from Daybreak Rock to DNR requested transfer of Permit #10139 from Zimmerly Rock Products to Daybreak Rock, "a partnership of Miles Sand and Gravel Company, Columbia Wire and Iron Works, Inc., and Scott and Associates, Inc." (Exhibit E, page 7).

A Zimmerly Rock Products letter of 7/8/87 "TO WHOM IT MAY CONCERN" advised that Zimmerly Rock Products had been sold as of this date to Daybreak Rock (Exhibit E, page 8).

Oct 1987 A Daybreak Rock letter of 10/20/87 to DNR requested transfer of Permit #10139 from Daybreak Rock to Les Darr Trucking Co. "to be owned and operated by J.L. 'Jerry' **Storedahl**" (Exhibit E, page 9).

Nov 1987 A Les Darr Trucking Co. letter of 11/2/87 to DNR advised of the sale of Daybreak Rock to Les Darr Trucking Co and requested transfer of Permit #10139 accordingly (Exhibit E, page 10).

A DNR letter of 11/17/87 to Jerry Storedahl acknowledged receipt of the foregoing letter and provided instructions and information requirements for transferring a permit; this letter also noted that the permit "allows mining on **71 acres**", that any expansion over the original 71 acres requires an environmental checklist and may need County approval, and that the County should be contacted (Exhibit E, pages 11-12). **There is no record to show that the County was contacted by the new operator during this time frame.**

May 1988 *In Valentine v. Kittitas County, the Washington Court of Appeals Division Three affirmed on 5/10/88 a Superior Court ruling that DNR has exclusive jurisdiction to regulate surface mining* (Exhibit C, pages 8-12).

Aerial photography dated 5/20/88 showed approximately **75 acres** disturbed, with substantial expansion to the east in Section 19 and limited expansion to the northwest in Section 13 (Exhibit B, page 9).

Jun 1988 A DNR letter dated 6/21/88 to Jerry Storedahl again advised of information needed to transfer Permit #10139 from Daybreak Rock, and provided necessary forms and instructions (Exhibit E, page 13).

Sep 1988 [illegible] letter dated 9/1/88 to Jerry Storedahl indicated that information needed [illegible]er the subject permit had not been received, and that failure to provide such information by 9/30/88 may result in a "shutdown" (Exhibit E, page 14).

Apr 1989 A statement of agreement with the transfer of Permit #10139 from Daybreak Rock to J.L. Storedahl and Sons, Inc. was signed by Jeannie C. Storedahl on 4/12/89, and by Raymond R. Woodside on 5/2/89 (Exhibit E, page 15).

Jun 1989 Infrared aerial photography dated 6/25/89 showed essentially the same 75± acres of disturbed area as the 1988 aerial photo, with no apparent expansion of excavation areas (Exhibit B, page 10).

Aug 1989 A DNR letter dated 8/18/89 to J.L. Storedahl advised of two additional items needed to transfer the subject permit: (1) a letter of agreement from Zimmerly; and (2) an updated operating and reclamation plan "by completing the enclosed SM-8a form" (Exhibit E, page 16).

A letter of 8/28/89 from Judy Zimmerly to DNR provided concurrence with the transfer of the subject permit to Storedahl (Exhibit E, page 17).

Oct 1989 A letter of 10/16/89 from Judy Zimmerly to DNR expressed concern that Permit #10139 was still in the name of Paul Zimmerly Rock Products, and requested that the permit be transferred "this time, in its entirety to Raymond R. and Merry S. Woodside, the property owners" (Exhibit E, page 18).

The Standard Reclamation and Operating Plan Form SM-8A was signed by Raymond and Merry Woodside on 10/16/89 (Exhibit D, pages 12-19).

Nov 1989 A DNR letter of 11/27/89 to Ray and Merry Woodside advised that the updated reclamation plan (SM-8A Form) was insufficient and that a detailed and engineered plan would be required, recommending that this be developed by a hydraulic engineer (Exhibit E, page 19).

A second DNR letter of 11/27/89 to Ray and Merry Woodside indicated an intent to transfer Permit #10139 from Zimmerly Rock Products to the Woodsides, contingent upon completion of reclamation of "the southern segments of the pit", submission of a $10,000 bond, and "submission of evidence to the effect that the area owned by Ray and Merry Woodside in 1971, when the permit was initially issued, equals or exceeds the **458 acre area** you are claiming as the permitted area" (Exhibit E, page 20).

Dec 1989 A Department of Fisheries memo of 12/27/89 to DNR provided comments on the Woodside Reclamation and Operating Plan, suggesting that existing stockpiles should be relocated away from the river and noting that the sediment pond outlet "illegally established to Dean Creek in 1988" should be sealed "or another pond constructed to contain all the sediments" (Exhibit E, page 21).

Jan 1990 The Woodside annual report for 1989 (the first such report submitted since that one for the year 1986) indicated **total acres permitted as 350 (hand-corrected to 40 acres)**, approximately **30 acres** disturbed to date, no acreage disturbed in the last 12 months, and estimated 5 to 8 acres to be disturbed in the next 12 months (Exhibit F, page 24).

May 1990 *In an unpublished opinion filed on 5/4/90, the Washington Court of appeals Division Two concluded in Fjetland v. Pierce County Council that the County does not have concurrent authority to regulate surface mining subject to the State Surface Mining Act* (Exhibit C, pages 13-20).

An application for an operating permit dated 5/24/90 was submitted by Ray and Merry Woodside to DNR, initially indicating an intent to mine "**All gravel deposits on Sections 13, 19, 18, & 24 on our land**", i.e., **300 acres to an estimated depth of 30 feet for 14,520,000 cubic yards of mineral**; this SM-2 Form was then hand-corrected (apparently by DNR) with strikeouts and insertions as follows: "**~~All~~ a portion of the gravel deposits on Sections ~~13,~~ 19, ~~18,~~ & 24 on our land**", i.e., **~~300~~ 71 acres**, with no change in the estimated depth or quantity (Exhibit D, page 20).

Jul 1990 Aerial photography dated 7/15/90 showed approximately **83 acres** disturbed, with virtually all mining since 1988 occurring in **Section 19**; this photo also showed that mining had not yet occurred in **Section 18** (Exhibit B, page 11).

Sep 1990 A DNR letter of 9/11/90 to Ray Woodside responded to a request for a review of permitted acreage for Permit #10139, concluding that the mine is permitted for "**71 acres only**" in **Sections 19 and 24**, and advising of appeal opportunities (Exhibit E, pages 22-23).

By signature dated 9/21/90, DNR approved the Reclamation and Operation Plan in the SM-8A form signed by the Woodsides on 10/16/89 (Exhibit D, page 19).

A DNR letter of 9/24/90 to Ray Woodside issued and transferred Operating Permit #10139 to the Woodsides, attaching the original conditions stipulating **71 acres "on a portion of Sections 19 and 24"** and no operations within 200 feet of the East Fork of the Lewis River without a valid shoreline permit (Exhibit D, pages 21-23).

Oct 1990 A DNR letter of 10/12/90 to Ray Woodside referenced mining an additional 20 acres southwest of Bennett Road, advising that any mining beyond the original 71-acre site would require an operating and reclamation plan, County approval of the subsequent land use, and an expanded SEPA checklist; the letter also advised that an appeal may be filed and a hearing date set (Exhibit E, pages 24-25).

A letter of 10/30/90 from attorney Philip G. Marshall to State Geologist Ray Lasmanis appealed the above DNR determination of permitted acreage and reclamation plan requirements (Exhibit E, page 26).

Nov 1990 A DNR letter of 11/5/90 to Philip G. Marshall acknowledged receipt of the subject appeal, advising that an adjudicatory proceeding would be scheduled and an associated notice of proceeding issued (Exhibit E, page 27).

A DNR letter of 11/21/90 to Ray and Merry Woodside addressed "Results of **Informal** Hearing On Surface Mine Permit No. 10139", indicating that the following decisions were rendered by the State Geologist:

> **1. The acreage under permit for Surface Mining Permit No. 10139 is all lands owned by yourselves in Sections 13, 18, 19, & 24, Township 4 North, Ranges 1 - 2 East, W.M., as stated in the permit issued in 1971.**
>
> **2. A new operation and reclamation plan for the above-permitted area is required....**

This letter of 11/21/90 also advised that a request to stop the adjudicatory proceedings should be provided as soon as possible, but that this would forfeit any right to appeal the request for new operation and reclamation plans (Exhibit E, pages 28-29).

A letter of 11/20/90 from attorney Philip G. Marshall requested that the subject appeal and hearing be cancelled (Exhibit E, page 30).

Nov 1990 *In Musa v. Clark County, a final partial summary judgement by Clark County Superior Court ruled that the County's authority to regulate the operation and reclamation of plaintiff's surface mine has been preempted by the State Surface Mining Act, and that such authority is vested exclusively with DNR* (Exhibit C, pages 21-25).

Dec 1990 The SM-2 form referenced in May 1990 above was resubmitted on 12/4/90 by Ray Woodside as originally prepared; i.e., **all** gravel deposits in the referenced sections covering **300 acres** (Exhibit D, page 24).

A letter of 12/14/90 from attorney Michael J. Wynne to the Clark County Planning Manager (Exhibit E, pages 31-32) requested verification that portions of the Woodside property zoned as Agricultural (AG) without the Surface Mining Overlay (-S) could be mined as a legally nonconforming use under Chapter 18.412 of the Clark County Code (Exhibit G, pages 8-9), as well as under the doctrine of diminishing resources; although the key exhibits referenced in this letter cannot be located, the County's response of 1/22/91 clearly refers to mining on that portion of the subject property located to the southwest of Bennett Road (Serial No. 225167, Exhibit A, page 5).

Jan 1991 The Woodside annual report for 1990 continued to identify **350 acres permitted**, and a total of **71 acres disturbed**, with 8 - 10 acres disturbed in the past 12 months and estimating 10 acres to be disturbed in the next 12 months (Exhibit F, page 25).

A letter of 1/22/91 from the Clark County Planning Manager to attorney Mike Wynne advised that, based on consultation with County legal counsel, surface mining on that portion of the subject property

> **lying southwest of Bennett Road is permitted under Surface Mining Permit No. 10139, issued by the DNR and application of the diminishing resource doctrine. Therefore, it will not be necessary to rezone this site from Agricultural (AG) to Agricultural/Surface Mining Combining District (AG-S) prior to commencing mining activity on this site.**

The letter also advised that mining of this flood plain site would be subject to issuance of a **shoreline permit**, for which an **environmental impact statement** (EIS) would likely be required (Exhibit E, pages 33-35). It should also be noted that this opinion occurred at a point in time when the County, based on the previously mentioned court rulings, lacked authority to otherwise regulate surface mining.

The Columbian published a news article on 1/29/91 addressing limitations on County authority over the J.L. Storedahl mining operation along the Lewis River East Fork due to the doctrine of diminishing resources and certain Washington case law (Exhibit H, page 1).

Feb 1991 A letter of 2/1/91 from attorney Mike Wynne to the Clark County Planning Manager acknowledged receipt of the County letter of 1/22/91 but disagreed with the requirement for a shoreline permit, noting that mining would not occur within 200 feet of the river and that the original mining permit was issued in 1971 (Exhibit E, pages 36-37).

A letter of 2/12/91 from Clark County to attorney Mike Wynne confirmed that a "shoreline substantial development/conditional use permit will be required for this operation", citing the authority for this determination (Exhibit E, pages 38-41).

A Department of Ecology letter of 2/22/91 to Clark County Planning advised of a possible violation of the Shoreline Management Act relating to "gravel mining operations in the East Fork of the Lewis River without proper permits, by J.L. Storedahl and Sons" (Exhibit E, page 42).

Mar 1991 A DNR letter of 3/14/91 to Clark County Planning advised that a new reclamation plan for the Daybreak Gravel Pit "was presented to the department on March 7, 1991 by J.L. Storedahl & Sons, Inc., operator for the permit holder Ray and Merry Woodside" (Exhibit E, page 43), and provided a copy for review and comment.

A DNR letter of 3/20/91 to J.L. Storedahl & Sons, Inc. confirmed that, since a shoreline permit is required, Clark County is the lead agency under the State Environmental Policy Act (Exhibit E, page 44).

Apr 1991 A DNR letter of 4/8/91 to J.L. Storedahl & Sons provided a critical evaluation of the submitted operation and reclamation plan (Exhibit E, pages 45-48).

The Columbian published a news article on 4/11/91 providing a brief history of mining on the subject site, while focusing on the dilemmma presented by Woodside's contractual obligation to allow mining on an additional 20 acres versus Storedahl's obligation to complete the lengthy shoreline permit process, and quoting Woodside as saying Storedahl had only "a week or two of rock left" on the original 71-acre mining site (Exhibit H, page 2).

A DNR letter of 4/15/91 to the Department of Ecology (DOE) inquired as to whether "older surface mines need a shoreline permit as well as the newer ones", noting that Clark County seemed "confused about their jurisdiction" (Exhibit E. page 49).

Apr 91 cont A DOE letter of response to DNR dated 4/26/91 confirmed that "there should be no grandfathering of the older mines, despite the fact that they may have pre-existed the Shoreline Management Act, because any mining activities which may have been legal at the effective date of the Shoreline Management Act on June 1, 1971, were required to be permitted not later than June 1, 1973" ; this letter then cited the authority for this conclusion, noting that the Act requires a shoreline permit for any development within an approved plat not completed within 2 years after the effective date of the Act (RCW 90.58.140), and that this requirement was reiterated and broadened to apply to all substantial development pre-dating the Act by DOE's adoption of WAC 173-14-050(3) (Exhibit E, pages 50-51).

An internal memo dated 4/29/91 from the Clark County Director of Public Services to the Planning Manager inquired as to whether we should be requiring shoreline permits "from grandfathered gravel excavators along our streams" and, if so, "why aren't we?" (Exhibit E, page 52).

May 1991 A DNR letter of 5/2/91 to Clark County provided a copy of DOE's shoreline permit determination letter, and advised that the County is therefore the SEPA lead agency for the pending Storedahl operation and reclamation plan (Exhibit E, page 53).

A DNR letter of 5/2/91 to J.L. Storedahl & Sons, Inc. advised of DOE's determination and that Clark County is the SEPA lead agency for the reclamation plan revisions (Exhibit E, page 54).

An internal memo dated 5/6/91 from the Clark County Chief Civil Deputy Prosecuting Attorney responded in the affirmative to a Planning Division request for a legal opinion as to whether a shoreline permit should be required for surface mining undertaken prior to adoption of the Shoreline Management Act (Exhibit E, pages 55-56).

An application for a shoreline substantial development/conditional use permit was submitted to Clark County by J.L. Storedahl & Sons, Inc. on 5/14/91 Exhibit D, pages 25-27).

An internal memo dated 5/17/91 from the Clark County Planning Manager to the Director of Public Services as to why shoreline permits had not been required for pre-existing mining opertions explained that staff had been relying upon WAC 173-14-055(2) (Exhibit G, page 7), which provides that nonconforming development established prior to the effective date of the Act "may be continued provided that it is not enlarged, intensified, increased, or altered in any way which increases its nonconformity", noting that "enlarged" was construed to mean expansion beyond the DNR operating permit boundaries (Exhibit E, page 57).

Jun 1991 A letter of 6/5/91 from J.L. Storedahl & Sons, Inc. to DNR requested that an area of approximately 10 acres adjacent to the river within the approved 71-acre reclamation plan area be exchanged for a site of equal acreage in a less environmentally sensitive area to the north (Exhibit E, pages 58-59).

Clark County issued a **Determination of Significance** and Scoping Notice on 6/7/91 for the shoreline substantial development/conditional use permit application filed by Storedahl, requiring preparation of an EIS addressing the following issues (Exhibit D, pages 28-29):

> land use impacts in terms of compatibility, aesthetics, noise, dust, loss of agricultural productivity and site reclamation; protection of ground water quality and quantity, including possible drawdown of nearby domestic wells; impacts on the flood plain and hydrology of the river, including bank erosion, sedimentation, channel movement, water quality and fish stranding; and impacts on wetlands and wildlife habitat.

The Columbian published a news article on 6/21/91 as a result of the referenced scoping notice, addressing the plans of J.L. Storedahl & Sons to mine 349 acres and the needed environmental reviews and permits (Exhibit H, page 3).

A DNR letter of 6/25/91 to Clark County transmitted a copy of the "Reclamation Plan for the Daybreak Gravel Pit (State SMP#70-10139) submitted for J.L. Storedahl & Sons, Inc.", and advised that Clark County is the SEPA lead agency for the proposal (Exhibit E, page 60). Selected figures from that plan are presented in Exhibit A, with Figure 5 identifying an area of "EXISTING MINING OPERATIONS (70 ACRES)", which actually encompases in excess of 120 acres (Exhibit A, page 11).

Jul 1991 A DNR letter of 7/2/91 to Clark County responded to the SEPA scoping notice by commenting that "Before the reclamation plan is approved by DNR it must go through the SEPA review process as part of the EIS being required by Clark County", and advising that this process may necessitate revisions in the reclamation plan prior to final approval (Exhibit E, page 61).

A DNR letter of 7/2/91 to J.L. Storedahl & Sons, Inc. advised that the request to trade 10 acres within the approved reclamation plan area for 10 acres of less sensitive ground outside the plan boundary cannot be approved out of concern that the SEPA process not be compromised, as "we cannot allow operations to move beyond the current reclamation plan area until new plans are approved, which includes going through the SEPA process" (Exhibit E, page 62).

Aug 1991 A letter of 8/22/91 from J.L. Storedahl to Clark County requested a date-specific by which the scope of the EIS would be addressed in outline form (Exhibit E, page 63).

A letter of 8/28/91 from Clark County to David J. Newton Associates (EIS consultant for J.L. Storedahl) provided a log of comments received on the scoping notice and a 20-page outline providing guidance on the contents of the EIS for each affected element of the environment (Exhibit E, pages 64-65).

Oct 1991 The Columbian published a news article on 10/7/91 revealing that Clark County "hired out public workers and equipment to pave a private driveway into a controversial gravel pit west of Daybreak Park last August", noting that a State Auditor's report recommends that no action be taken against the County since J.L. Storedahl & Sons will fully reimburse the County for the $8,080.35 paving project (Exhibit H, page 4).

Jan 1992 The Woodside annual report for 1991 continued to show **350 acres** permitted, and a total of **50 acres** disturbed to date, with 7 acres disturbed in the last 12 months and estimating "0 - 20" acres to be disturbed in the next 12 months (Exhibit F, page 26).

The Reflector published a news article for the week of 1/27/92 reporting that "**Ray Woodside has told the operators of a rock mining and processing facility on his property to stop digging rock**", and noting that Storedahl & Sons "has plans to haul the rock from the Woodland site to his farm to wash and process the rock"; the article also quotes a County employee as saying that a shoreline permit is still needed if only rock processing is done at the site, and that the operation is being allowed to continue "because a permit has been applied for and is being pursued" (Exhibit H, pages 5-6).

Feb 1992 A DNR employee's field notes provided the first evidence that the rock **crusher** had been removed from the site, as an entry into a Daily Record of Events dated 2/7/92 states "I wonder where crusher went?" (Exhibit F, page 27).

Jan 1993 The Woodside annual report for 1992, showing J.L. Storedahl as the operator for the first time, indicated **350 acres** permitted, a total of **60 acres** disturbed to date, with **no acreage disturbed** in the last 12 months or estimated to be disturbed in the next 12 months (Exhibit F, page 28).

Apr 1993	A DNR annual inspection report and aerial photo overlay worksheet dated 4/14/93 indicated **9 acres disturbed** during the past 12 months (Exhibit F, pages 29-30); since this seems inconsistent with the 3 immediately preceding events, it is uncertain whether this mining occurred during or prior to 1992.
Jul 1993	*Amendments to the Surface Mining Act (Engrossed Second Substitute Senate Bill No. 5503) became effective on 7/1/93, specifically providing authority in RCW 78.44.020 for local governments to regulate land use and operations related to surface mining* (Exhibit G, page 10).
Jun 1993	Aerial photography dated 6/18/93 showed approximately **92 acres disturbed** by mining, including additional excavation and/or ponding in Section 19 and the 9 acres referenced in the DNR inspection report of April 1994, representing **the first mining to occur in Section 18** (Exhibit B, page 12).
Aug 1993	A DNR letter of 8/3/93 to Ray Woodside provided a caution as follows: "After noting activities at the above-mentioned site, the department would like to remind you that mining outside the existing mined area without an approved reclamation plan is not acceptable"; the letter also advised that DNR cannot approve the reclamation plan until the environmental review process is completed and a County shoreline permit is issued (Exhibit E, page 66).
Jan 1994	The Woodside annual report for 1993, pre-printed by DNR to indicate a total of **71 acres permitted**, reported the most recent date of mining as "**1991**", that a total of **71 acres** had been disturbed to date, 0 acreage disturbed in the last 12 months and, in response to the revised question as to acres to be disturbed in the next **36** months, answered "none planned at this time" (Exhibit F, page 31).
Mar 1994	A DNR inspection report on a new format dated 3/1/94 represented the first comprehensive documentation of site observations, noting (among other things) that "Berm along river is falling into river"; "stockpiles are within 200' of river"; and "distance from center of berm to river is 15'" (Exhibit F, pages 32-34, comment #6).
Nov 1994	A letter dated 11/28/94 from Ray and Merry Woodside to the Clark County Board of Commissioners requested that the entire Woodside property "be included as a mining area on the Comprehensive Plan map being developed at this time", claiming that rock removal was occurring before they bought the property in 1968 and that "The total property including **350 acres** has been officially permitted by the Department of Natural Resources since approximately 1970" (Exhibit E, page 67).

Dec 1994 The Woodside annual report for 1994 showed that the pre-printed **71 acres permitted** was hand-corrected to "**350 acres**", and noted the following: "**no activity this year**", date of most recent mining as "**1991 approx.**", and total acres disturbed to date as **71** (Exhibit F, page 35).

A DNR inspection report dated 12/29/94 noted "**no activity, gate closed, no one on site**, screening plant set up, **no crusher on site**, used drag line since last year is in pit, and **Scotch broom taking over**" (Exhibit F, pages 36-37, comment #6 & #7).

Jan 1995 *The Clark County 20 Year Comprehensive Growth Management Plan became effective on 1/1/95*, including Mineral Lands Policy #4.5.8, as follows: "**Surface mining other than Columbia River dredging shall not occur within 100-year flood plain**" (Exhibit G, page 11); concurrent implementation of this plan included rezoning of the Woodside property such that the Surface Mining Combining District was removed from approximately 230 acres previously zoned as AG-S, while being added to 40 acres previously zoned only as AG, resulting in a total of approximately **60 acres** being currently zoned for surface mining - all located outside the original 71-acre site (see current zoning map, Exhibit A, page 14).

A letter of 1/10/95 from Clark County to DNR provided a map showing the two parcels of the Woodside property designated for mining under the new comprehensive plan (Exhibit E, pages 68-69).

A DNR letter of 1/30/95 to J.L. Storedahl provided a number of comments on the proposed reclamation plan of 1991, making reference to the two parcels designated for surface mining by the County and suggesting that the plan "should only reflect those areas to be mined"; comment #22 also noted that, while a crusher was probably on the site at the time of the report, "my **site visits show no crusher**" (Exhibit E, pages 70-73).

Feb 1995 A Petition for Review was filed on 2/27/95 by Raymond and Merry Woodside before the Western Washington Growth Management Hearings Board, appealing the change in zoning of the petitioners' property from Agriculture/Surface Mining Combining District (AG-S) to Agriculture (AG), and claiming that "the entire 350 acre property....has been fully permitted for surface mining by the Department of Natural Resources since 1971 and that rock removal was occurring for some time before 1968 (Exhibit I, pages 1-4).

Mar 1995 Aerial photography dated 3/26/95 showed additional ponding, but no more disturbed acreage than the 1993 aerial photo (Exhibit B, page 13).

May 1995 A letter of 5/16/95 from attorney Charles T. Mertsching to Clark County and DNR advised of the intent of J.L. Storedahl & Sons, Inc. "to continue their mining operation at their Daybreak Facility on approximately May 22, 1995 (Exhibit E, page 74).

A Clark County letter of 5/22/95 to attorney Charles Mertsching summarized existing zoning and Comprehensive Plan provisions applicable to the subject site, indicating that the new Comprehensive Plan prohibits surface mining within the 100-year flood plain, advising that new zoning allows for mining on only about 60 acres of the site, and noting the following requirements for resumption of mining activities on the site: a) site plan approval for mining; b) conditional use permit for rock crushing; c) shoreline permit for any activity within the 100-year flood plain; and d) SEPA compliance for all of the above (Exhibit E, pages 75-76).

A DNR letter of 5/22/95 to J.L. Storedahl & Sons, Inc. responded to the letter from attorney Charles Mertsching, advising that only a 71-acre reclamation plan has been approved and any additional mining outside the scope of that plan must first be approved by DNR (Exhibit E, page 77).

Jun 1995 A meeting held in Clark County offices on 6/12/95 was attended by Virgle Barnett of J.L. Storedahl & Sons; his attorney, Charles B. Roe, Jr.; Deputy Prosecuting Attorney Chris Horne; Senior Planner Rich Hines; and Code Enforcement Officer Linda Maddy. This meeting essentially reconfirmed the requirements set forth in the County letter of 5/22/95, subject to consideration of evidence to be submitted by the proponent demonstrating that mining activities on the site have been continuous since operations were assumed by J.L. Storedahl in 1987.

A letter of 6/16/95 from Virgle Barnett to Chris Horne provided a breakdown of materials sold from the site by tonnage for specific periods between 1990 and 1995, but offered **no evidence that this material was actually mined from the site** during the same periods, rather than being imported from the Woodland pit (Exhibit E, page 78).

A Memorandum in Support of Petition for Review filed by the Woodsides, and consolidated with that filed by David R. Becker, was submitted on 6/16/95 by attorney Richard T. Howsley, requesting the Western Washington Growth Management Hearings Board to remand the matter of prohibiting mining within the 100-year flood plain to the Board of County Commissioners (Exhibit I, pages 5-14).

Jul 1995 Site photographs taken on 7/3/95 showed leaking tanks and equipment, contaminated soils, and garbage and debris throughout the site (Exhibit J, pages 1-6).

A DNR inspection report of 7/11/95 noted that "excavator had taken some material out of north pond"; "river eroding @ berm"; and "garbage and contaminated soil should be removed" (Exhibit F, pages 38-39, comments #2, #5, #7, & #9).

A letter of 7/19/95 from Virgle Barnett to Chris Horne provided copies of "employee time cards and rock sales tally sheets for material mined and processed at our Daybreak facility", noting that production slowed in mid-1992 "but has been continuous up to the present", and acknowledging that "products that are produced are a combination of material mined on the site and imported from other sources" (Exhibit E, page 79).

Site inspection photographs taken on 7/20/95 showed that: (1) a berm provides minimal distance between the river and the operations area; (2) considerable stockpiling and screening activities were occurring at this time; (3) siltation of on-site drainageways was apparent; and (4) substantial debris and discarded equipment was found on the site (Exhibit J, pages 7-12).

Aug 1995 A meeting held in Clark County offices on 8/1/95 was attended by Virgle Barnett and Charles Roe, both representing J.L. Storedahl & Sons, Inc.; Rich Lowry and Chris Horne of the Prosecuting Attorney's Office; Monty Anderson, Rich Hines and Eric Holmes of the County Planning Office; and Linda Maddy of Code Enforcement. The meeting focused on available procedures for receiving a Planning Director's determination as to historic rights, if any, related to zoning, and opportunities to appeal such a determination.

A letter of 8/2/95 from Chris Horne to Charles Roe advised that the Board of County Commissioners "has directed me to advise you and notify Storedahl and Sons that all grading must cease, pending receipt of necessary permits...", and indicating that a stop work order will be posted at the site; the letter concluded with the following sentence (Exhibit E, pages 80-81):

> In the interim, all grading activities **off the original 71 acre site** must stop immediately.

A Stop Work Order dated 8/3/95 was issued to Kevin Storedahl and posted on the site (Exhibit J, page 13).

Aug 95 cont A meeting held in Clark County offices on 8/7/95 was attended by Virgle Barnett of J.L. Storedahl & Sons, represented by attorney Charles Roe; County legal counsel Rich Lowry and Chris Horne; County planners Monty Anderson, Rich Hines and Eric Holmes; and Code Enforcement Officer Linda Maddy. The purpose of the meeting was to clarify the scope of the Stop Work Order, to discuss permit and EIS requirements, and to identify options for interim mining operations on the site.

The Reflector published a news article on 8/9/95 addressing the Stop Work Order and indicating that mining on the site stopped "about three years ago when Ray Woodside, owner of the property, called a halt to the digging" (Exhibit H, page 7).

A letter of 8/15/95 from Clark County to attorney Charles Roe memorialized the results of the two August meetings, emphasizing that the Stop Work Order "pertains only to grading, excavating, mining and similar earth moving activities **on the site**". This letter also noted that, while a shoreline permit is required for screening, washing and stockpiling of imported aggregate within the flood plain, these activities are being allowed to continue **on an interim basis** pending resolution of the overall issues. The letter also advised of the following: (1) any further mining on the site would be subject to site plan approval, and would be limited to the **60 acres** currently zoned for this use outside the 100-year flood plain; (2) a conditional use permit would be required to re-establish crushing operations on the site; and (3) SEPA compliance would be necessary for the above permits (Exhibit E, pages 82-83).

A County site inspection on 8/25/95 resulting from complaints, with a follow-up visit on 8/30/95, confirmed that mining had occurred on 8/25, 8/28, and 8/29/95, consisting of 15,000 to 18,000 cubic yards of material (Exhibit J, pages 14-15). This material was excavated from what may be part of the original 71-acre site, and more specifically from Pond #1 as identified on Figure 4 of the 1991 Reclamation Plan (Exhibit J, page 16), to which information has been added by County staff to provide reference points and to reflect site observations, including the section corner, labelling of Ponds #1 through #4, a conveyor system running between Ponds #1 and #2, and the location of screening, washing, gravel storage and bone yard activities.

Sep 1995 A meeting held in Clark County offices on 9/5/95 was attended by Virgle Barnett, John McKibbin, Charles Roe and John Dentley, representing J.L. Storedahl & Sons; Bob Cudahy of the County Commissioners' Office; Rich Lowry and Chris Horne of the Prosecuting Attorney's Office; Craig Greenleaf, Monty Anderson, Rich Hines and Eric Holmes of the County Planning Office; and Linda Maddy of Code Enforcement. Mr. Barnett acknowledged that mining had recently occurred on the 71-acre site, explaining that he misunderstood the Stop Work Order as applying only to areas outside this permitted acreage. The meeting focused on a discussion of the most expedient process for resolving the issue of grandfathered rights, if any.

The Reflector published a news article on 9/6/95, reporting that recent mining occurred on the site and alluding to the meeting scheduled for 9/5/95 (Exhibit H, page 8).

A letter dated 9/7/95 from Clark County to John McKibbin capsulized the discussion of the above meeting, indicating that the two major options for resolving the question of grandfathered rights are as follows: a) issuance of a Notice and Order, appealable to the Hearings Examiner and hence to Superior Court; or b) application for a Planning Director determination, with automatic referral to the Hearings Examiner and appealable to the Board of Commissioners and Superior Court. The letter identified the County's preferred option as the latter, indicating information necessary for a Planning Director Review and providing the appropriate application form (Exhibit E, pages 84-85).

A Final Decision and Order issued on 9/20/95 by the Western Washington Growth Management Hearings Board concluded that the exclusion of mining within the 100-year flood plain "under the record before use does not comply with the Act", and ordered that Clark County "Eliminate the prohibition of mining within the 100-year flood plain or adopt an analysis which substantiates the prohibition" (Exhibit I, pages 15-18, consisting only of the Final Order's cover page, the mineral lands discussion, the order page dealing with this issue, and the signature page).

Nov 1995 A meeting held in Clark County offices on 11/30/95 was attended by attorneys Charles Roe, John Dentley and James Sellers, representing Storedahl & Sons; Craig Greenleaf and Monty Anderson of the Planning Office; and Rich Lowry of the Prosecuting Attorney's Office. The meeting again focused on options available for obtaining a decision on mining and related processing rights for the property in question. The proponents indicated a preference to resolve this question through County issuance of a Notice and Order, followed by an appeal to the Hearing Examiner and, if necessary, to Superior Court. It was also mutually agreed that a third party audit of Storedahl records concerning mining activities on the site would be appropriate for review by the County.

Exhibit 27

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

RECEIVED
MAY 19 1997
CLARK COUNTY
Plan & Dev. Review

May 15, 1997

Mr. Michael V. Butts
Clark County
Dept. of Community Development
1408 Franklin Street
P.O. Box 9810
Vancouver, WA 98666-9810

Fax: 360-699-2011

Re: Potential impacts of Storedahl & Sons expansion of the Woodside gravel mining operation at the Daybreak site, East Fork Lewis River, Permit No. 10139

Dear Mr. Butts:

I have been asked by our Southwest Regional office to provide additional technical information regarding the referenced proposal. This letter touches on potentials for adverse effects arising from avulsion, subaqueous habitat modification, property loss, and/or cumulative impacts of multiple excavations along this reach. The Department of Natural Resources believes that each of these four issues must be addressed in a thorough and credible manner prior to permitting additional excavation along this reach.

The proponent intends to continue mineral processing and other operations within the floodplain that may lead to adverse environmental impacts. We believe these impacts should be addressed through the Shorelines process. Additionally, these operations are not addressed in the existing reclamation plan. Consequently, the Department cannot allow continued mining in Permit 10139 without a revised reclamation plan for the entire site.

The proposed excavation wil result in a deep lake separated from the 100-year floodplain by a weak gravel dike. Although the proponent contends that the river will not impinge on this deep lake in the foreseeable future, we disagree.

The present channel through the adjacent reach is unstable for three reasons:

(1) Gravel and cobbles are deposited in this area because the channel gradient decreases from about 30-feet-per-mile to about 15-feet-per-mile, causing a reduction in river velocity and concomitant reduction in the ability of the river to move its coarse bedload. Deposition of these gravels and cobbles chokes the channel, thereby producing rapid channel shifts. In fact, some parts of this reach have moved laterally more than 600 feet since 1937.

(2) Examination of the attached maps of the historical river channel (Collins, 1997; used with permission) reveals that, prior to 1937 (when the river was channelized), the East Fork consisted of multiple braided channels in the vicinity of the proposal. Similar braiding is the expected channel-pattern for this reach because: (a) its banks are made of gravel, (b) the overall gradient is moderately high, and (c) sediment transport rates appear to be high. A component of channel instability results from the East Fork's attempt to re-establish this braided morphology.

(3) The river is currently pinned between moderately-deep mined excavations north and south of this reach.

Because the river has scrolled rapidly across its floodplain and because the floodplain has been, and is being, widened by localized erosion along it margins, it is unreasonable to assume that it would not enter the proposed at deep lake some time in the future. If the river enters the lake, avulsion may occur. The event might be similar to the avulsion that occurred in 1971 when the Yakima River entered a gravel pit located in a similar fluvial environment. In one night, the Yakima moved 1,960 feet laterally (Dunne and Leopold, 1978) and damaged a freeway right-of-way.

Armoring the margins of the floodplain adjacent to the mine could arrest northward migration of the river. However, such revetments tend to increase the energy of the river. Furthermore, when current is focused on these dikes during floods, it is "reflected" across the channel and causes increased erosion downstream.

If the river does enter the lake, the channel could avulse resulting in habitat modification and/or significant property loss. Two sets of unnatural factors would influence channel morphology in that instance:

(1) The river could find a shorter route to areas of lower elevation and abandon the old channel.

(2) The erosive power would be markedly increased because gravel and cobbles pushed by the current would drop out in the lake. The river would no longer dissipate energy by pushing gravel and cobbles because fewer rocks would be available downstream from the lake. Consequently, velocity below the lake would increase, causing increased erosion.

The foregoing discussion illustrates some effects that occur when a river enters a deep excavated lake. Studies of effects that took place when the Cowlitz River entered pits near Toledo may be used to examine impacts that occur when a river enters a shallow excavation. (There may be benefits from small-scale mining in some rivers such as establishment of winter-holds for steelhead fry and breaking up of hard-facing that can armor a river bottom and hinder spawning.)

The 1990 map of the East Fork floodplain illustrates the areal extent of previous mining along the subject reach. We believe that the cumulative impacts of these mines together with the proposal should be investigated to determine how much gravel removal can occur without lasting damage to the river. The East Fork lies somewhere on the continuum between a river with no mining and the Los Angeles River, where almost every pebble has been removed and the river is a lifeless flume. The point of no-return in the spectrum for the East Fork should be identified, if possible.

We hope that this additional information helps you to better understand the potential impacts of this proposal. It is for these reasons that the Department believes that the proposal needs to be investigated more thoroughly. We urge Clark County to consider the information contained in this letter as significant new information on this proposal's significant adverse impacts and to withdraw its MDNS.

Cordially,

William S. Lingley, Jr.
Assistant State Geologist

References:

Collins, Brian, 1997, Application of geomorphology to planning and assessment of riverine gravel removal in Washington. In Collins, Brian, Geology and Geomorphology of Stream Channels [short course materials] Brian Collins (Seattle, Wash.) 46 p. Copyright.

Dunne, Thomas; Leopold L. B., 1978, Water in environmental planning: W.H. Freeman and Company, 818. (See page 22.)

cc Neil Smith - DNR Southwest Region
Phil Ferester - Office of the Attorney General
Kim Van Walensburg & Scott Morrison - DOE

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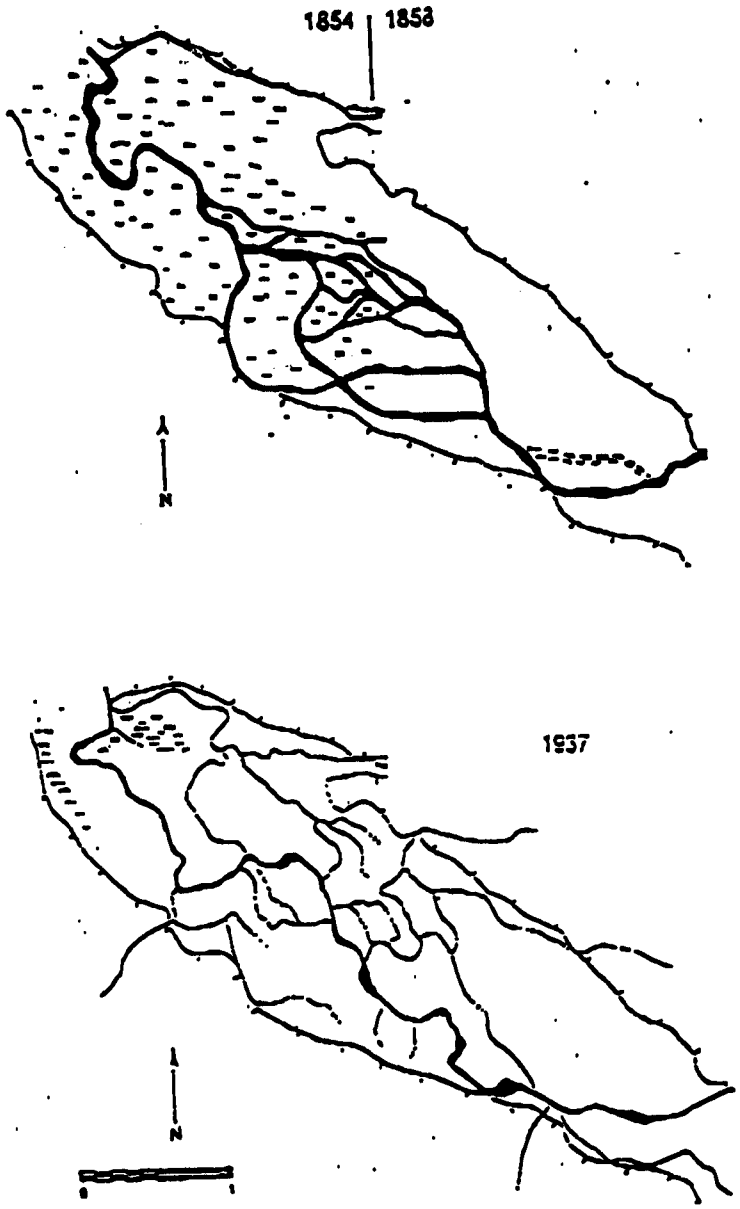

Figure 4. The East Fork Lewis River, from RM 6 to RM 10. River channel pattern is from maps, with year of aerial photographs or ground survey of map indicated. Scale shows one kilometer. Hatchured outline shows approximate edge of valley floor.

Page 6
Lingley to Butts

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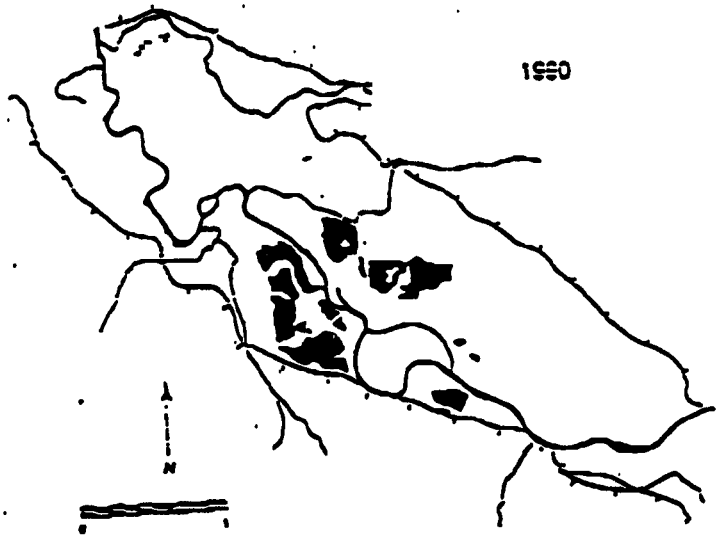

Figure 4 (continued). The East Fork Lewis River, from RM 6 to RM 10.

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EXHIBIT # 28

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CLARK COUNTY
Plan & Dev. Review

BEFORE THE LAND USE HEARING EXAMINER,
CLARK COUNTY

FRIENDS OF THE EAST FORK, **Appellant,** **v.** **CLARK COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT, STATE OF WASHINGTON,** **Respondent.**	**Appeal No. 97-004** **BRIEF OF J. L. STOREDAHL & SONS, INC., APPLICANT AND PARTY OF RECORD**

I. INTRODUCTION

The Planning Director, in interpreting Clark County Shoreline Master Program ("CCSMP") and the Shoreline Management Act ("SMA"), determined that a shoreline permit was not required for the Site Plan Review application, SPR 96-092, submitted by J. L. Storedahl & Sons, Inc. ("Storedahl") because under the application filed, and as modified, no mining would take place within the area of shoreline jurisdiction and movement of a conveyor belt onto the site would not meet the statutory definition of "development" under the SMA:

> The Planning Director has determined that if no mining occurs in the 100-year regulatory floodplain, and the site is revised to reflect this, then a Shoreline Permit under the County's Shoreline Master Program and Shoreline Ordinance is not required for the proposal.
>
> The Planning Director's determination is based on (a) no mining within the area of Shoreline Jurisdiction and (b) a determination that the conveyor equipment and the proposed placement of the conveyor does

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> not constitute a "substantial development" under the Shoreline Management Act of 1971 (Ch. 90.58 RCW). Specifically, the use of equipment is not required to obtain a Shoreline Permit because it is not included in the definition of Development contained within RCW 90.58.030.

Letter of Clark County Planning Director to John Dentler (January 29, 1997).

Friends of the East Fork ("FOEF") appealed the Planning Director's determination as to the lack of a necessity of a shoreline permit on a number of bases. For several reasons, enumerated herein, the decision of the Planning Director's should be affirmed.

II. ARGUMENTS

A. The Planning Director's Decision Should Be Affirmed Because Under SPR 96-092 (1) No "Removal of Any Sand, Gravel, or Minerals" Would Occur Within the Area of Shoreline Jurisdiction and (2) Even if the Conveyor Belt Would Be Moved Into the "Shoreline," the Equipment Utilized Does Not Meet the Definition of "Substantial Development"

The Clark County Planning Director determined that a Shoreline Permit is not required under SPR 96-092 because under such proposal no mining would occur within the area of shoreline jurisdiction and the movement of a conveyor belt as described per site plan review was not a "structure" within the meaning of RCW 90.58.020(3)(d). The decision of the Planning Director is sound and should be affirmed.

1. The Planning Director's Decision Should Be Affirmed Because Under SPR 96-092 No Mining Will Occur Within the Area of Shoreline Jurisdiction

The SMA generally prohibits undertaking "development" on shorelines of the state unless a shoreline permit issues:

> A substantial development <u>shall not be undertaken on shorelines of the state without first obtaining a permit</u> from the government entity having administrative jurisdiction under this chapter.

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RCW 90.58.140(2) (emphasis added).

The SMA defines "development" as:

> A use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling [sic]; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level.

RCW 90.58.030(3)(d) (emphasis added). Neither applicant's proposal under SPR 96-092, nor the approval as conditioned by staff, authorizes "removal of any sand, gravel, or minerals" from the area of shoreline jurisdiction. As the staff report notes, the proposal has been conditioned so that, even under current maps depicting the 100-year floodplain, no removal of sand, gravel, or minerals will occur therein. Under the SMA, "mining" is not defined as a "development" requiring a shoreline permit; however "removal of sand, gravel, or any minerals" within the area of shoreline jurisdiction does constitute "development," and would in most instances require such a permit. Similarly, the CCSMP narrowly defines such term:

> Mining is the removal of naturally occurring materials from the earth for economic use.

Shoreline Master Program, Clark County, Washington 67 (August 1974) (emphasis added).

Further, transport of material that is removed from outside the 100-year floodplain and then transported across the 100-year floodplain is not within the ambit of "removal of sand, gravel, or any minerals" from the area of shoreline jurisdiction. Contrary to the apparent assertion of FOEF, SPR 96-092 does not authorize the removal of sand, gravel, or minerals from the "lands under the jurisdiction of the SMA and the [sic] SHB." Appeal of Friends of the East Fork to Land Use Hearing Examiner, 2 (February 10, 1997).

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Here "development" does not reach "mining" in the sense apparently intended by FOEF. Instead, the legislature defined the term "development" to reach the " removal of any sand, gravel, or minerals" from the area of shoreline jurisdiction. Moreover, Clark County has previously determined that a shoreline permit is not required for existing processing activities on the Woodside property and SPR 96-092 does not propose any new "removal of any sand or gravel" that would require a shoreline permit.

In conclusion, under SPR 96-092, neither "development" as plainly defined by the SMA, nor "mining," as it is narrowly defined by the CCSMP, is reached and, therefore, there is no need for a shoreline permit. As such, the Planning Director's determination should be affirmed in this respect.

2. The Planning Director's Decision Should Be Affirmed Because Even if the Conveyor Belt Would Be Moved to the Area of the "Shoreline," the Equipment Utilized Does Not Meet the Definition of "Substantial Development"

Approval of SPR 96-092 does not require a shoreline permit because the movement of conveyor belts, as proposed (as one of an alternate means of conveyance) under SPR 96-092, does not meet the definition of development under the Shoreline Management Act. In order for the shoreline permit requirement to apply to the movement of the conveyor belt, "development" must first be reached. As noted, "development" is defined as:

> A use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling [sic]; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level.

RCW 90.58.030(3)(d).

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The movement of the proposed conveyor belt under SPR 96-092 is not "dredging, drilling, dumping, or filling." Neither is the movement of such conveyor belt the "removal of and sand, gravel or minerals" from the shoreline, nor is it the "driving of piling" nor "placing of obstructions" that, in any permanent or temporary way, "interferes with the normal public use of the surface waters overlying lands subject to the jurisdiction of the Act."[1]

Finally, the movement of such conveyor belts is not the "construction or exterior alteration of structures." Since the movement of a conveyor belt is not "development," it cannot, therefore, constitute "substantial development" otherwise requiring a shoreline permit. See RCW 90.58.030(3)(d), (e); RCW 90.58.140(2).

Where the legislature has provided a clear and exclusive list of the meaning of "development," there is no need to defer to any rule or other interpretation of the Department of Ecology. Cowiche Canyon Conservancy v. Bosley, 118 Wn.2d 801, 812-13 (1992). In Cowiche Canyon, in determining whether removal of a railroad trestle was "development" requiring a shoreline permit the Washington Supreme Court stated:

> In construing statutes, the primary objective is to ascertain the intent of the Legislature. Martin v. Meier, 111 Wn.2d 471, 479, 760 P.2d 925 (1988). Clear language will be given effect. People's Org. for Wash. Energy Resources v. Utilities & Transp. Comm'n, 104 Wn.2d 798, 825, 711 P.2d 319 (1985). If a term is defined in a statute, that definition is used.

Id. (emphasis added). The Washington Supreme Court noted, however, that "absent a statutory definition, [a] term is generally accorded its plain and ordinary meaning unless a contrary legislative intent appears." Cowiche Canyon, 118 Wn.2d at 813 (citing Dennis v.

---

[1] As noted elsewhere, the land in question is private property and no public easement exists in the area at issue. Movement of the conveyor belts, therefore, would not interfere with the "normal public use of surface waters overlying the lands subject to the jurisdiction of the Act."

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Department of Labor & Indus., 109 Wn.2d 467, 479-80, 745 P.2d 1295 (1987)). Here, by moving portable conveyor belts so as to transport material to the existing processing site, the applicant would not be constructing or altering "structures" or buildings within the area of shoreline jurisdiction. Rather, mobile conveyor belts, much like any other mobile piece of equipment such as commonly used portable irrigation sprinklers or threshing machines, would simply be moved to the appropriate position so as to enable the conveyance of the material to the extant processing location. Testimony will be presented that the conveyor belts used will be very mobile and, by a condition of the SPR 96-092, must be capable of quickly being removed from the site.

The Department of Ecology has defined the term "structure" by rule as:

> A permanent or temporary edifice or building, or any other piece of work artificially built or composed of parts joined together in some definite manner whether installed on, above, or below the surface of the ground or water, except for vessels.

WAC 173-14-030. Even if the rule adopted by Ecology did warrant deference, which it does not, supra, the rule appears to apply to buildings, houses, residences, and other such structures. Although the terms used are not further defined, the term "edifice" means "a building, esp. one of imposing appearance or size." The American Heritage Dictionary, 438 (2nd Col. Ed. 1985).

In deliberations regarding the meaning of "construction or exterior alteration of structures," the Washington Supreme Court rejected the Department of Ecology's arguments that its statutory interpretation was entitled to great weight. Cowiche Canyon, 118 Wn.2d at 814. Instead the court noted that "simply because the words of a statute are not defined in the statute does not make the statute ambiguous" so as to warrant deference to a regulatory

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definition. Id. (distinguishing Hama Hama Co. v. Shoreline Hearing Bd., 85 Wn.2d 441, 448, 536 P.2d 157, 161 (1975)). Such deference is suggested only in limited circumstances:

> When a statute is ambiguous, the construction placed upon the rule by the administrative agency charged with its administration and enforcement should be given great weight.

Cowiche Canyon, 118 Wn.2d at 813-14. Such ambiguity is not present and hence deference is not applicable here. The legislature apparently did not intend that the movement of mobile equipment to the area of shoreline jurisdiction to be considered substantial development requiring a shoreline permit. If the legislature had meant to include the movement of "equipment" within the meaning of "construction," surely it could have and would have so plainly stated. See Brewer v. Fibreboard Corp., 127 Wn.2d 512, 534, 901 P.2d 297 (1995) (legislature could have and would have used appropriate language if something other than the plain language was intended).

Here "development" is defined to encompass an exclusive list of activities, none of which implicate the movement of equipment, such as portable and mobile conveyor belts. Further, the common rule of statutory interpretation known as "noscitur a sociis," that is, the meaning of words are understood by the company they keep, is helpful here. Selles v. International Brotherhood of Teamsters, 50 Wn.2d 660, 663, 314 P.2d 456 (1957), cert. denied, 356 U.S. 975 (1958) ("the words 'concerted activities' are limited in meaning by the words with which they are associated (noscitur a sociis)"); Shurgard Mini-Storage of Tumwater v. Department of Revenue, 40 Wn. App. 721, 727, 700 P.2d 1176 (1985) ("the proper analysis of the section defining a public service business is to consider the rule of noscitur a sociis, which teaches that the meaning of doubtful words may be determined by

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reference to their relationship with other associated words and phrases") (citations omitted). None of the associated words describing "development" appears to reach such equipment.

The Planning Director has determined that the equipment that would be utilized does not meet the definition of "development." Primary responsibility for administering the SMA's permit system and the CCSMP is with local government. See RCW 90.58.050; Batchelder v. Seattle, 77 Wn. App. at 159 ("SMA establishes a permit system, with the primary responsibility for its administration upon local government"). As such, the Planning Director's determination is entitled to deference. To applicant's knowledge, Clark County has never defined equipment, such as tractors, plows, tools, pumps, irrigation sprinklers, or other equipment as "structures" that would require a Shoreline Permit. If the movement of the conveyor belts onto the site as proposed here constitutes the "construction or exterior alteration of structures," then the breadth and reach of such language takes in a host equipment that historically appears to have not been intended to be considered development: the movement of sprinkler pipes over the land, movement of a tractor onto the site, etc. Applying nos a socitur as a tool of statutory construction avoids reaching absurd results that otherwise result. Applying this rule of construction to the plain language leads to the conclusion that a shoreline permit is not required for the movement of a conveyor belt to the area in question.

Finally, construing "development" so as to bring within its scope the placement of a mobile conveyor belt as proposed under SPR 96-092 would support neither the purposes nor policy of the SMA.[2] Under the SMA, "public use" of the "shoreline" is a concept embodied in

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[2] The policy of the SMA includes, among other things, the goal of providing:

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both the definition of "development" and the definition of "substantial development," as it is associated solely with the use of surface waters overlying lands subject to the SMA. Looking first at "development," RCW 90.58.030(3)(d) provides that a "use consisting of . . . any project . . . which interferes with the normal public use of the surface of the waters overlying lands subject to [RCW 90.58]" is a development. Id.; see also, Cowiche Canyon, 118 Wn.2d at 815-816 (referring to policy and goals to elucidate whether "development" reached and a shoreline permit required).

There is no basis for concluding that moving a conveyor belt such as here (i.e., on fast lands even if such land was within the SMA's jurisdiction) would interfere with the public use of the surface of waters as there are no surface waters that would be obstructed. Therefore, "development" is not reached and the purposes of the SMA are not advanced by reliance on the "'public use" concept in embodied in RCW 90.58.030(3)(d). Id. at 816.[3] In summary, the

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> for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses. This policy is designed to insure the development of these shorelines in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest.

RCW 90.58.020 (emphasis added).

[3] The definition of "substantial development" also refers to "public use" of the shoreline. RCW 90.58.030(3)(e) provides, in part, that

> "any development . . . which materially interferes with the normal public use of the water or shorelines of the state" is a "substantial development."

Id. In Cowiche Canyon, the question of "public use" was examined by the Washington Supreme Court to determine if the placement of a gate on the right of way leading to a river was a violation of the SMA. The Court addressed and rejected the Department of Ecology's entreaties to find a violation of the SMA because the placement of a fenced gate allegedly "materially interfere[d] with the normal public use" of Cowiche Creek and therefore was "development" within RCW 90.58.030(3)(d), or

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Planning Director's determination should be affirmed because such determination would not cause interference with "normal public use" of the surface waters overlying lands subject to the SMA.

In summary, the Planning Director's decision should be affirmed because (i) the movement of the conveyor belt onto the site does not fall within the exclusive language used by the legislature in defining "development," (ii) a determination to the contrary would not advance the public use purposes of the SMA, and (iii) as the primary agency with responsibility for administering and enforcing the permit system under the SMA and CCSMP, the Planning Director's decision is entitled to deference.

B. The Planning Director's Finding That a Shoreline Permit Is Not Required as Part of SPR 96-092 Should Be Affirmed Because There Is No Basis to Allegations of (1) Unlawful "Piecemealing" or (2) Unlawful "Segmentation" of a Larger Proposal

Local opponents argue that somehow, the Planning Director's determination that a Shoreline Permit is not required is erroneous because such decision represents an "unlawful segmentation under the Shorelines Management Act from a single project . . . and therefore creates a piecemeal review in an attempt to allow this portion of the project to proceed while other portions of the project await approval." Appeal of Friends of the East Fork to Land Use Hearing Examiner, 1 (February 10, 1997).

"substantial development" under RCW 90.58.030(3)(e). Id. at 817. The Washington Supreme Court rejected these arguments. In the instant case, just as in Cowiche Canyon, the conveyor belts here would not interfere with any normal public access to the shorelines because (i) there is no public access, (ii) the land in question is private property, and (iii) even if there was public access, the public could walk around the conveyor belts. See id.

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1. No Unlawful Piecemealing Under the SMA Occurs as a Result of the Planning Director's Decision Because a Shoreline Line Permit Is Not Required

FOEF's allegation that the Planning Director's determination represents unlawful "piecemealing" in the context of the Shoreline Management Act may be reached only if a shoreline permit is required. RCW 90.58.140(2). The County, via a Notice and Order, has determined that Storedahl has preexisting processing rights within the area of shoreline jurisdiction and which would be utilized under SPR 96-092. Notice and Order (Ex. 1). Further, no other "proposals" have been or need be prepared for Clark County that would result in "removal of any sand, gravel, or minerals" from the area of shoreline jurisdiction, see RCW 90.58.0103(3)(d), nor is the definition of "mining" reached under Clark County's Shoreline Master Program ("CCSMP"). Supra at 3. Because a shoreline permit is not required, no unlawful "piecemealing" would occur under the SMA or the CCSMP as the result of the Planning Director's decision on appeal hereunder.

Further, applicant has made clear to Planning Staff during the SPR process that material could be conveyed by excavation truck or frontloader to the existing processing site without the need for moving a conveyor belt on or over the area of shoreline jurisdiction. Letter of John L. Dentler to Monty Anderson, 7 (January 16, 1997) (Ex. 2); letter of John L. Dentler to Michael V. Butts, 5 (May 5, 1997) (Ex. 3). Thus, even if the Planning Director determined that a shoreline permit was required for movement of a conveyor belt onto the site, there would be no need to hold up approval of SPR 96-092 while a shoreline permit was pending. If a Shoreline Permit was required for this proposal, material could simply be conveyed by other means until such permit issued, if at all.

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2. Unlawful "Piecemealing" or "Segmentation" Would Not Occur Under SPR 96-092 Because of Approvals That May Be Required By Other Agencies

Land use activity that would occur under SPR 96-092 is not dependent on other proposals to mine elsewhere on the Woodside property. The 20 acres at issue may be mined without mining elsewhere on the property and other potions of the property may be mined without mining on the 20-acre parcel. Clark County has previously issued a Notice and Order concluding that the Woodside property is imbued with preexisting rights to import and process sand and gravel at the existing processing site that would be utilized here. Notice and Order (Ex. 1). Applicant's position is that, at this juncture, no additional proposals are needed in order to continue existing processing at that site.

To the extent that it may be the position of the Department of Natural Resources ("DNR") or other agencies that further approvals or permits are required in order to undertake the activity contemplated under SPR 96-092 and continue processing at the current site, such arguments do not make this proposal "unlawful piecemealing" under the SMA. There is no need for a shoreline permit for the activity that will be carried out by the applicant: (i) all removal of sand, gravel or any minerals will occur outside the 100-year floodplain, (ii) the conveyor belt is not "development" and if it is, such belt need not be extended into the 100-year floodplain, and (iii) activity carried out at the existing processing site is grandfathered and a shoreline permit need not be obtained to continue such activity.

An updated reclamation plan application was submitted in 1991; however, it was determined that because mining was proposed in the 100-year floodplain, a Shoreline Permit was required and the County would be the lead agency for purposes of SEPA. Due to a number of factors, including the County's rezone of the Woodside property, as well as

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community opposition to mining in the 100-year floodplain, applicant was faced with substantial uncertainties. As a result, no formal draft environmental impact statement was submitted and no further processing of such application and SEPA documents have been undertaken. Applicant has notified Clark County staff that is unlikely that any further requests to process such application will be made. Letter of John L. Dentler to Michael V. Butts, 2 (March 13, 1997) (Ex. 4). Storedahl did, however, submit a new and updated reclamation plan to the DNR for 60 acres, which included the land under consideration here. The DNR rejected that application, apparently due to substantive insufficiency and because it would not "split the [operating] permit." Storedahl has appealed DNR's determination that it cannot consider a reclamation permit for an area smaller than the operating permit. Storedahl is hopeful that a resolution can reached with the DNR.

Without belaboring the intricacies of the SMA, Ch. 78.44 RCW, such Act does not appear to require submission of reclamation plans for areas <u>not</u> yet intended for mining. In fact, the Act provides:

> Prior to receiving a reclamation permit, an applicant must submit an application on forms provided by the department that shall contain the following information and shall be considered part of the reclamation permit:
>
> (7) <u>Expected area to be disturbed</u> by surface mining during (a) the <u>next twelve months</u>, and (b) the <u>next twenty-four months</u>;
>
> (9) Other pertinent data as required by the department.

Ch 192, § 1, Session Laws 1997 (filed April 24, 1997) (emphasis added) (amending RCW 78.44.081). Further, by operation of law, an operating permit, such as that held by the Woodsides <u>must</u> be considered a valid reclamation plan:

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> Operating permits issued by the department between January 1, 1971, and June 30, 1993, shall be considered reclamation permits.

Ch. 192, § 1, Session Laws 1997 (filed April 24, 1997) (emphasis added) (amending RCW 78.44.081). Further, such act provides:

> The reclamation permit shall be granted for the period required to deplete essentially all minerals identified in the reclamation permit on the land covered by the reclamation plan. The reclamation permit shall be valid until the reclamation is complete unless the permit is canceled by the department.

Id.

While the DNR has requested an updated reclamation plan, and applicant intends to comply with the requirements of the Surface Mining Act, it remains applicant's position that no further proposals need by tendered in order for the County to have rendered the Planning Director's decision which is on appeal here or in order for applicant to obtain site plan review from Clark County.

Because such activity is not dependent on other proposals, there is no basis for reversing the Planning Director's decision that a Shoreline Permit is not required for SPR 96-092.

3. The Planning Director's Determination Does Not Violate the Requirements of the State Environmental Policy Act ("SEPA"), Ch. 43.21C, Because Applicant Is Not and Need Not Pursue Other Proposals in Order to Undertake This Proposal and, Therefore, the Planning Director's Determination Should Be Affirmed

The Planning Director's determination that a Shoreline Permit is not required for SPR 96-092 is not controlled by the requirements of SEPA, Ch. 43.21C RCW. To the extent that SEPA has any relevance to the Planning Director's decision, the SEPA rules make clear that only interdependent parts of a larger proposal need be reviewed as a whole:

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> Proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action shall be evaluated in the same environmental document. (Phased review is allowed under subsection (5).) Proposals or parts of proposals are closely related, and they shall be discussed in the same environmental document, if they:
> (i) Cannot or will not proceed unless the other proposals (or parts of proposals) are implemented simultaneously with them; or
> (ii) Are interdependent parts of a larger proposal and depend on the larger proposal as their justification or for their implementations.

WAC 197-11-060(3)(b) (emphasis added).

This provision did not exist at the time that Merkel v. Port of Brownsville, 8 Wn. App. 844 (1973), was decided.[4] Rather, the aforenoted SEPA rule was established with Merkel as

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[4] In Merkel, the Washington Court of Appeals held that the Port of Brownsville could not begin an uplands portion of a development project, even if it completed SEPA review for the entire project until it had attained all appropriate Shoreline Permits for the entire project. The facts in Merkel are clear on a salient point, that is, the uplands (non-shorelines) project was entirely dependent on "substantial development" yet to be undertaken in the shoreline area. Id. at 850-51 (noting that not only would the uplands area provide parking necessary for the marina within the shoreline, but that the uplands would provide the very lumber for the docks necessary for the marina, etc.). Here, unlike Merkel however, no other proposals are required in order to undertake mining on the 20 acres. The County has previously determined that the Woodsides have preexisting rights to process within the shoreland (see Ex. 2.), and the DNR has determined that Woodsides have an operating permit for the entire 349 acres. Further, mere conveyance of sand and gravel does not require a shoreline permit.

The Merkel court also noted that when developing Shoreline Master Programs, the SMA required counties to consider uses in areas adjacent to the shoreline. Id. The court reasoned that the purposes of both SEPA and the SMA would be advanced by consideration of the two areas in one EIS, prior to the granting of SMA permits for the lowlands project. To do this in reverse order, the court reasoned, would result in "coercive" land use decisions. However, the provision of the SMA cited by the court relates to the development of local Shoreline Management Programs, not the Shoreline Permitting process. More importantly, there is nothing present in the instant situation that would appear to "coerce," commit, or prejudice Clark County decision-making on a shoreline permit elsewhere on the Woodside property, if one were required, merely because the Planning Director determined here that a shoreline permit was not required for mining on the 20-acre site outside of the 100-year floodplain.

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the backdrop. The continued viability and applicability of Merkel in any circumstance is questionable, but particularly so here.

The key factors set forth in the SEPA rule are (1) whether multiple proposals must proceed at the same time, or (2) the proposal at issue is a smaller portion of an interdependent proposal and the smaller proposal would not proceed unless the larger proposal would also be carried out. WAC 197-11-060(3)(b). Here, the land use activity on the 20 acres in question may undergo processing and SEPA review for two reasons. First, the 20 acres may be mined without simultaneous mining of the balance of the property within shoreline jurisdiction. The applicant has informed the County on multiple occasions that it is unlikely that any further requests for processing of any proposals to mine in the 100-year floodplain will be requested. In short, at this juncture there are no other active proposals under consideration for new developments in the shoreline.[5] Further, as noted, it is applicant's position that further DNR approvals need not be obtained prior to approval of SPR 96-092.

Subsequent to Merkel, several courts have examined this SEPA question and the key test set forth is whether the proposal under consideration is interdependent or intertwined with another larger proposal that is coercive of development with the area of shoreline jurisdiction; that is, whether the proposal as to the 20 acres is dependent on mining the remaining portions of the Woodside property.

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[5] Late last year, Storedahl submitted a proposed reclamation plan to the DNR to mine 60 acres, 20 acres of which involves the land under site plan review and 40 acres of which are adjacent to the approximate 20 acres. However, the DNR rejected this proposal and it is not being processed further by the DNR at this time. Storedahl has filed an administrative appeal before an administrative hearings office for the DNR. In any event, mining on the 20 acres could take place independent of reclamation plans to mine elsewhere on the property, including the other 40 acres now zoned with a surface mining overlay.

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For example, in Narrowsview Preservation Association v. City of Tacoma, 84 Wn.2d 416, 425 (1974), the Washington Supreme Court noted that a shoreline permit was not needed for a broad rezone action because it would not commit or coerce development to proceed within the area of shoreline jurisdiction:

> Unlike the facts of Merkel v. Port of Brownsville, 8 Wn. App. 844 (1973), there is no commencement of construction to prejudice subsequent decision-making or any other acts which would allow specific physical improvements being made on the land within 200 feet of the shoreline.

Id. at 425. Thus, in Narrowsview, because the action under consideration did not cause, commit, coerce, or prejudice subsequent development within the shoreline, a shoreline permit was not necessary to development in uplands. Similarly, in Cheney v. City of Mountlake Terrace, 87 Wn.2d 338, 343 (1976), the Washington Supreme Court held that while a road project was subject to SEPA review, a private parcel near the roadway did not need to be included within the City's SEPA analysis because the road development did not commit the City

> as to the type, manner, or timing of development of the private parcel. The completion of the road is in no way dependent upon or intertwined with the development of the property.

Id. at 343 (emphasis added). Again, the court distinguished this fact pattern from Merkel and other cases which it believed "formed part of a totally integrated plan for development with the immediate project." Id. (emphasis added). In San Juan County v. Natural Resources, 28 Wn. App. 796, 802, 626 P.2d 995 (1981), the Court of Appeals held that even where development contemplated sometime in the future may occur, consideration of a smaller project was not unlawful because such future development or approvals would be subject to subsequent review and, therefore, such further development was not "'coercive' of future

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expansion." More recently, in Batchelder v. Seattle, 77 Wn. App. 154, 159-160, 890 P.2d 25 (1995), the Washington Court of Appeals rejected arguments that a short plat review that occurred prior to review of a shoreline substantial development permit (which was required since the proposal would take place in the area of shoreline jurisdiction) represented unlawful piecemealing of a larger proposal:

> However, careful reading of Port of Brownsville reveals that the Port had obtained permits and began clearing and grading land in preparation for a development project [within the area of shoreline jurisdiction] which had not yet been reviewed for a substantial development permit. There the court did not reverse the permits which had been issued; rather it required that the injunction preventing further clearing of the land be maintained until review of the entire development project had been completed and the substantial development permit issued. Brownsville, at 851-52. Thus, Brownsville stands for the proposition that a single project may not be divided into segments for purposes of avoiding compliance with the SMA. Id., at 851.

Batchelder, 77 Wn. App. at 159-160.

Finally, the Batchelder court noted that comprehensive review ultimately did occur for the "larger project," which included the short plat and the proposal for activity occurring in the area of shoreline jurisdiction. Similarly, if the DNR or other agencies determine that a comprehensive reclamation plan approval or other such permits are required in order to process materials elsewhere on the Woodside property, then, like the situation in Batchelder, comprehensive review of such project including activity occurring in the area of shoreline jurisdiction would occur.

Similarly, should Storedahl or the Woodsides proceed with proposals to conduct new mining in the area of shoreline jurisdiction (which, as noted previously, is not presently planned and unlikely), it is clear that Clark County's position is that a shoreline permit would

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be needed. Indeed, the County, in August of 1996, posted a stop-work order on the Woodside property on the basis of then new mining in the shoreline. Such mining was halted and no new mining has been carried out in the area of shoreline jurisdiction (nor are any proposals for additional mining in the area of shoreline jurisdiction being requested for further processing by Storedahl). Clearly, Clark County would not be coerced or committed into granting "substantial development" in the shoreline by virtue of the Planning Director's decision on appeal here.

In summary, mining may occur under the 20-acre site plan review without mining ever taking place elsewhere on the Woodside property. If new mining is pursued within the area of shoreline jurisdiction, which applicant stresses is not being requested, then the County's position appears to be that a Shoreline Permit would be required. At that time, such activity, including any interdependent actions associated with the activity, can be analyzed and reviewed in its entirety and thus in accord with Batchelder. Finally, the Planning Director, via a Notice and Order based on detailed findings of fact, determined that the Woodsides have nonconforming use rights to import, stockpile, and process sand and gravel at the subject location that predates the enactment of the SMA. (See Ex. 1.) There is, to applicant's knowledge, no other action pending that requires a Shoreline Permit here and hence, no unlawful piecemealing or coercive decision-making that would otherwise violate the SMA or SEPA. For these reasons, the Planning Director's determination should be affirmed.

C. The Planning Director's Decision Should Be Affirmed Because the SMA Has No Application in This Instance to the 20-Acre Parcel As It Falls Outside the Geographic Scope of the 100-Year Floodplain

Because mining would not occur in the 100-year floodplain and the conveyor belt would not be fastened or secured in the 100-year floodplain, the SMA has no application to

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the activity at issue and, therefore, neither a substantial development permit nor a conditional use permit is required under the SMA or the CCSMP.

It is of paramount importance to determine if the SMA of 1971, Ch. 90.58 RCW, has any application to the land that would be occupied by the conveyor belt or mining being considered under SPR 96-092. Based on the following analysis, it does not.

The SMA requires that

> [a] substantial development shall not be undertaken on shorelines of the state without first obtaining a permit from the government entity having administrative jurisdiction under this chapter.

RCW 90.58.140(2). Thus the requirement of obtaining a permit under the SMA is limited in the first instance to those qualifying activities undertaken but only if such activities are undertaken within the geographic area denoted as "shorelines of the state."

In turn, "shorelines of the state" are comprised of "the total of all 'shorelines' and 'shorelines' of state-wide significance." RCW 90.58.030(2)(c). In turn, "[s]horelines means:

> All of the waters of the state, including reservoirs, and their associated shorelands.

RCW 90.58.030(2)(e). Finally, "shorelands" or "shoreland areas" are defined as:

> Those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the department of ecology. Any county or city may determine that portion of a one-hundred-year-floodplain to be included in its master program as long as such portion includes, as a minimum, the floodway and the adjacent land extending landward two hundred feet therefrom.

RCW 90.58 030(2)(f) (1996) (emphasis added).

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Further, by rule, floodplain is limited to the 100-year floodplain:

> "Floodplain" is synonymous with one hundred-year floodplain and means that land area susceptible to being inundated by stream derived waters with a one percent chance of being equaled or exceeded in any given year. The limit of this area shall be based upon flood ordinance regulation maps or a reasonable method which meets the objectives of the act.

WAC 173-22-030(2) (emphasis added). Under the SMA, County government has primary authority with respect to administering the SMA through its Shoreline Master Program. See RCW 90.58.090; Batchelder v. Seattle, 77 Wn. App. 154, 159, 890 P.2d 25 (1995) ("SMA establishes a permit system, with the primary responsibility for its administration upon local government"). However, at bottom, the SMA jurisdiction, including Clark County's Shoreline Master Program, may not extend beyond the 100-year floodplain.

Of paramount importance to the disposition of this appeal, the SMA provides:

> Shorelines . . . of the state shall be appropriately classified and these classifications shall be revised when circumstances warrant regardless of whether the change in circumstances occurs through man-made causes or natural causes. Any areas resulting from alterations of the natural condition of the shorelines and shorelands of the state no longer meeting the definition of "shorelines of the state" shall not be subject to the provisions of chapter 90.58 RCW.

RCW 90.58.020 (emphasis added). Further, rules adopted by the Department of Ecology reflect that it is the defining criteria of the 100-year floodplain that controls the outer geographic scope of the SMA:

> In the event that any of the wetland designations shown on the maps adopted in WAC 173-22-060 conflict with the criteria set forth in this chapter the criteria shall control.

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WAC 173-22-055 (1996).[6] Thus, the outer geographic extent of applicability of the shoreline area is the "floodplain." In turn, the floodplain does not extend beyond the actual 100-year floodplain, that is, that area "susceptible to being inundated with stream derived water with a one percent chance of being equaled or exceeded in any given year." WAC 173-22-030(2).

The definition of "floodplain" is, therefore, probabilistic and two highly qualified expert hydrogeologists will testify that, due to changes in the river and floodplain and fundamental mapping errors, the 20-acre parcel under consideration for site plan review and the vast majority of land over which the conveyor belt will traverse is not part of the 100-year floodplain. Similarly, due to changes in the river channel of the East Fork Lewis River, most of the existing processing site falls outside the 100-year floodplain and is beyond the jurisdictional scope of the SMA and CCSMP.

Because the 20-acre parcel is not part of the 100-year floodplain, it is not part of the "floodplain." Because the land is not part of the floodplain, it is not part of the shoreland. Because the land is not part of the shoreland, it is not part of the shoreline. Because the land is not part of the shoreline, as a matter of law, the jurisdiction of the SMA and the CCSMP does not extend to mining on the 20-acre parcel addressed by the County as part of the SPR 96-092. Therefore, the Planning Director's determination that a shoreline permit is not required for site plan approval of SPR 96-092 should be affirmed.

Further, the vast majority of land between the 20-acre parcel and the existing conveyor belt is not within the geographic scope of shoreline jurisdiction. The material excavated can be conveyed to the existing conveyor belt without fixing the conveyor belt to any fast land

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[6] The SMA used the term "wetland" to denote the landward reach of a shorelines area until 1996 when "shorelands" was substituted for wetlands. Wetlands was given a new meaning. See RCW 90.58.030(2)(h).

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within the 100-year floodplain. Rather, an excavation truck or front loader could convey material across a short portion of the 100-year floodplain between the 20-acre site and the existing conveyor belt or, alternatively, a conveyor belt could be moved into position without ever being affixed to the 100-year floodplain. As such, even if the conveyor belt is otherwise "development," it would not be placed "on the shorelines" so as to require the issuance of a shoreline permit. RCW 90.58.140(2).

In summary, because the SMA's landward reach of jurisdiction is limited to the outer limits of the 100-year floodplain, the shoreline permitting system does not apply in this instance to SPR 96-092.

III. CONCLUSIONS

The Planning Director's decision finding that a Shoreline Permit is not required for application SPR 96-092 should be affirmed because:

1. No "removal of any sand, gravel, or minerals" is proposed for areas falling within the geographic scope of SMA jurisdiction;

2. The movement of conveyor belt equipment onto the site to convey material to the existing processing does not involve the construction or alteration of structures under the SMA and, therefore, a Shoreline Permit is not required.

3. Due to fundamental errors in mapping the 100-year floodplain and changes in the bed and channel of the East Fork Lewis River, much of the Woodside property under consideration here no longer falls within the jurisdictional purview of the SMA. As such, even if the movement of a conveyor belt onto the site did constitute "development," the conveyance of sand and gravel to the existing processing site can be accomplished by means which do not require moving a conveyor belt onto or necessarily even over the 100-year floodplain and, therefore, a Shoreline Permit is not required for such conveyancing;

4. The Planning Director's decision does not result in a land use decision that may somehow coerce Clark County or other agencies into granting or causing new development in the 100-year floodplain. As such, the Planning Director's

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decision as to the necessity of a Shoreline Permit is neither unlawful segmentation nor piecemeal development under either the SMA or SEPA; and

5. The purposes and policies of the SMA and CCSMP are not violated by the Planning Director's determination.

DATED: May 19, 1997.

PERKINS COIE

By _____
John L. Dentler, WSBA #24310
Charles B. Roe, Jr., WSBA #648
Attorneys for Applicant J. L. Storedahl & Sons, Inc.

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Mailed 2/29/96

Post-it® Fax Note 7671	Date 2/29	# of pages ▶ 23
To John Bentler	From Monty	
Co./Dept.	Co. Clark County	
Phone #	Phone # 699-2379	
Fax # 956-1208	Fax #	

CLARK COUNTY
DEPARTMENT OF COMMUNITY DEVELOPMENT

IN RE: MATTER OF J.L. STOREDAHL & SONS, INC.	NOTICE AND ORDER: FINDINGS OF FACT AND CONCLUSIONS OF LAW

This Order relates to gravel mining, processing and associated activities conducted by J.L. Storedahl & Sons, Inc., (hereinafter "Storedahl") on property owned by Ray and Merry Woodside, in partnership with Virginia I. Woodside (hereinafter "Woodside property"), comprised of a 349-acre parcel in Sections 13 and 24, T-4, R1E, EWM, and Sections 18 and 19, T-4, R2E, located north of the East Fork of the Lewis River in northern Clark County. On August 3, 1995, the Clark County Department of Community Development (hereinafter "Department") issued a "stop work order" as to certain of Storedahl's mining and related activities on the Woodside property. After issuance of the stop work order, Storedahl terminated mining and processing activities at the Woodside property. The Department understands that Storedahl has plans to resume mining and processing activities on said property and, in light of such plans, the Department issues this notice and order regulating mining and processing. The Department has investigated and examined mining activities that have taken place over the past quarter-century on the Woodside property for the purpose of becoming more fully informed so as to prepare a notice

EXHIBIT 1

an order designed to comprehensively determine the regulatory framework applicable to the future mining and related activities carried out by Storedahl on the Woodside property.

Based on such examination, the Department makes the following findings, conclusions and issues this Notice and Order:

I. FINDINGS OF FACT

A. The Woodside property was zoned as "FX" beginning in 1961. That zoning designation permitted all uses not defined as "heavy manufacturing." Surface mining was not included within the definition of "heavy manufacturing."

B. With adoption of a new comprehensive plan in 1980, the Woodside property was rezoned under two categories. The vast majority of the Woodside property, approximately 270 acres, was subject to a so-called "AG-S," a zoning category which included an "agricultural" and "surface mining combining district" overlay. This designation permitted agricultural and surface mining uses. An 80-acre portion of the Woodside property was zoned AG without the surface mining overlay. The County gave the AG-S designation to virtually all existing mining operations and to parcels that owners or operators indicated were intended for mining.

C. The Shoreline Management Act of 1971, Ch. 90.58 RCW, became effective on June 1, 1971. Clark County first adopted a Shoreline Master Program ("SMP") in August of 1974 and this

SMP was approved by the Department of Ecology on December 18, 1974. WAC 173-19-140.

D. Clark County's Shoreline Master Program identifies "stream shorelines" within Clark County, including portions of the lands at issue herein situated north of the East Fork of the Lewis River "from the Gifford Pinchot National Forest Boundary (Sec. 24, T4N, R4E), downstream to confluence with Mason Creek (Sec. 14, T4N, R1E), including all lands situated within the flood plain as defined in WAC 173-22-040(2)(a)." (Clark County Shoreline Master Program at 10-11 (August 1974).)

E. The Clark County SMP designated portions of the Woodside property as "stream shorelines" further zoned such property as "rural" and such designation permits surface mining within the shoreline as a "conditional use," subject to five general policies. (Master Program at p. 67.)

F. Under the authority of the Growth Management Act, Ch. 36.70A RCW, Clark County adopted a 20-year Comprehensive Growth Management Plan, effective January 1, 1995. The Plan included Mineral Lands Policy #4.5.8 as follows: "Surface mining other than Columbia River dredging shall not occur within 100-year flood plain."

G. The Clark County Shoreline Master Program, however, with the exception of amendments adopted in 1992 providing for 50-foot setbacks in the rural zone for residential development, has

not been amended to prohibit surface mining in the 100-year flood plain.

H. The implementing Growth Management Plan regulations, however, removed the surface mining combining district overlay (Ag-S) on approximately 250 acres of the Woodside property located with the 100-year flood plain, while rezoning to AG-S a 40-acre portion of such property located outside the flood plain. After adoption of the County Growth Management Plan and related development regulations, approximately 60 acres of Woodside property remained zoned for surface mining.

I. The Western Washington Growth Management Hearings Board recently held that the County's adoption of blanket prohibition of surface mining in the 100-year flood plain was not supported by the record and remanded the Growth Management Plan to the County to "[e]liminate the prohibition of mining within the 100-year flood plain or adopt an analysis which substantiates the prohibition." Achen, et al. v. Clark County, et al., No. 95-2-0067 at 25, 68 (WWGMHB, Sept. 21, 1995). Pursuant to a motion for reconsideration, the Hearings Board refused to grant a proposed order of invalidity and the blanket ban on surface mining in the 100-year flood plain remains in effect during the period of remand. Achen, et al. v. Clark County, et al., No. 95-2-0067 at 2-3 (WWGMHB, Dec. 6,

1995). An appeal is of this decision is now pending before Clark County Superior Court.

J. On January 10, 1971, an application to conduct surface mining and processing on the Woodside property was filed with the Washington State Department of Natural Resources (hereinafter "DNR") by Mr. Lawrence Edwards, Sr. This application was for all gravel deposits within a ten-acre area located within Sections 13, 19 and 24 of the Woodside property. However, the permit references a 71-acre portion of Sections 19 and 24 of the Woodside property. Subsequently, the surface mining permit was transferred to Mr. Paul Zimmerly and finally to the Woodsides. The geographic coverage of such original permit is, at best, ambiguous. After an informal hearing before the DNR on November 8, 1990, DNR determined that Surface Mining Permit #70-10139, issued by the DNR on January 1, 1971, covers the entirety of the contiguous Woodside 349-acre property. DNR mining permits, applications and correspondence related to the Woodside property are inconsistent and provide little assistance in resolving the present questions.

K. Mining of sand, gravel and aggregate commenced on the Woodside property in 1968, with processing of aggregate, including rock crushing, beginning in the early 1970's. Such activities occurred under a surface mining operating permit approved by DNR.

L. In July of 1975, Clark County conditionally concluded that a shoreline permit was not required under RCW 90.58.140(2) for a change in operators and increased mining activity on the Woodside property, provided that expansion beyond the limits of the DNR-approved reclamation plan does not occur, and stipulating that in order to make this determination, it will be necessary to obtain from DNR the approved reclamation plan. Such reclamation plan was never obtained by the County.

M. On May 14, 1991, in response to the County's new position that a shoreline permit was required, Storedahl submitted to Clark County an application, pursuant to RCW 90.58.140(2), to undertake surface mining and processing on the Woodside property within the "shoreline," as defined under the Clark County Shoreline Master Program.

N. The Woodside property previously mined by Storedahl was used for agricultural uses as pasture and the area planned for future mining was or is now used for similar agricultural purposes or such land is laying idle.

O. Storedahl mined, processed and sold considerable volumes of aggregate from the Woodside property during the period 1990 through July of 1995. During this period, aggregate was also imported to the Woodside property by Storedahl for processing, including screening, sizing, crushing and washing. Between 1990 and 1995, annual sales totals for sand and aggregate

mined from or imported to the Woodside property varied annually between a low of 80,000 tons and a high of 557,000 tons of material.

P. Storedahl's business ledgers and journals (including royalty payments) indicate continuous sales of Daybreak product for each quarter from 1990 through the third quarter of 1995. Given the capacity of the Daybreak site to store approximately 130,000 tons of finished product, such business records are inconclusive as to continuous mining during this period, except for the third and fourth quarters of 1990 and the third and fourth quarters of 1991. Affidavits from Storedahl employees working on the site attest to continuous mining during such 1990-95 period.

Q. Rock crushers have been used on the Woodside property since the early 1970's. Storedahl intermittently used a rock crusher on the Woodside property until approximately February, 1992, when the rock crusher was moved from the Woodside property to Storedahl's "Woodland" site. It appears that such rock crusher is a mobile piece of equipment and not a fixed structure.

R. The movement of a rock crusher to and from the Woodside property is reasonable and customary business practice in view of the nature of gravel deposits on the Woodside property. Such movement of a rock crusher under such circumstances does

not, standing alone, reflect: (1) a permanent cessation of use; or (2) an intent to abandon subsequent usage of a rock crusher; or (3) an overt act or omission implying that Storedahl did not claim or retain any interest in the right to mine and process sand and gravel.

S. On January 22, 1991, Clark County determined that surface mining could expand to an area on the Woodside property not having a surface mining overlay "in view of the Diminishing Resources Doctrine," but that a shoreline permit would be required.

T. The mining lease on which Storedahl operates was entered into on March 30, 1984. The mining lease extends for one ten-year period, following by two ten-year periods to be exercised at the option of the lessee. Subsequent extensions are on a year-to-year basis at the option of the lessor.

U. Prior to the enactment of the County's ban on mining in the 100-year flood plain by adoption of the comprehensive plan in December of 1994, the operators of the sand and gravel mine intended to mine the entirety of the Woodside property. This intent is reflected by: (1) the submission by Woodside of a reclamation plan application covering the entirety of the Woodside property; (2) the submission of shoreline permit application by Storedahl in 1991 covering the balance of the Woodside property; (3) the existence of a surface mining lease

concluded in 1984 and covering a 32-year period with potential for subsequent extensions; (4) ongoing negotiations between Storedahl and Woodside in 1993-94 for the outright purchase of the Woodside property.

V. The Clark County Mineral Group Final Report, issued in conjunction with the Growth Management Plan, recognized that the area in and around the East Fork of the Lewis River contained high-quality aggregate deposits, but recommended against mining within the 100-year flood plain for environmental reasons.

W. The County historically treated surface mining that was established prior to the adoption of the Act and the County's Shoreline Master Program as a nonconforming or pre-existing use that may continue without a shoreline substantial development permit.

II. CONCLUSIONS OF LAW

A. Rights to Nonconforming Uses.

1. Applicable Law.

a) Under the Growth Management Act, unless the Growth Management Hearings Board makes a specific finding of invalidity, the County's surface mining ban in the 100-year flood plain is presumed to be valid. RCW 36.70A.300.

b) A nonconforming use is a use which lawfully existed prior to the enactment of a zoning ordinance or resolution, which is maintained after the effective date of the ordinance or resolution, although it does not comply with the use restrictions applicable to the area in which it is situated. See e.g., Andrew v. King Cty, 21 Wn.App. 566, 570 (1978), review denied, 91 Wn.2d 1023 (1979).

c) Once a nonconforming use is established, the burden shifts to the party claiming abandonment or discontinuance of the nonconforming use to prove such. Van Sant v. Everett, 69 Wn.App. 641, 648 (Div. I, 1993).

d) The applicable Clark County Code provides that "If a nonconforming use not involving a structure has been changed to a conforming use, or if the nonconforming use ceases for a period of six (6) months or more, said use shall be considered abandoned, and said premises shall thereafter be used only for uses permitted under the provision in the district in which it is located." CCC 18.412.030.3.B. Nevertheless, Washington law requires and Clark county has in the past required actual proof of abandonment: (1) an intent to

abandon the nonconforming use coupled with (2) an overt act or omission evidencing an intent to surrender the right to carry out the use at issue.

e) Clark County Code 18.329.070, which requires that pre-existing surface mines (as to effective date of provision 1990-02-01) adhere to the regulations of the surface mining combining districts (CCC 18.329, et. seq.), is not recognized by the County as a part of its Code because it was not adopted in accordance with own procedures mandated by State law for planning commission hearing and recommendation.

f) The Storedahl rock crusher constitutes "equipment" rather than a "structure;" accordingly, its relocation was not subject to the prohibition in former CCC 18.412.040(A) against "moving" nonconforming structures.

2. Conclusion.

In view of the applicable law and foregoing findings of fact:

a) The Department concludes that Storedahl has a nonconforming right to conduct otherwise lawful mining the historically-mined 71-acre portion of the Woodside property, notwithstanding the January

1, 1995, surface mining ban in the 100-year flood plain because it is further concluded that:

1) Surface mining and processing, including screening, sorting, washing and rock crushing were lawfully established uses as of 1968-1970, prior to the time of the adoption of the County's surface mining combining district ordinance in 1970.

2) Given the applicable burden of proof, the Department cannot conclude that mining or processing uses were discontinued. Moreover, Storedahl did not manifest an intent to abandon the use of a rock crusher or sand and aggregate surface mining and processing after the adoption of the zoning change, nor did Storedahl engage in any overt act or omission evidencing an intent to forego nonconforming rights to mining or processing of sand and aggregate including rock crushing on the Woodside property.

3) The use of rock crusher and processing of sand and gravel on the Woodside property pre-existed the County's surface mining combining district ordinance and such uses are

grandfathered under that ordinance and, hence, need not conform to the requirements therein, including the necessity of obtaining a CUP or being constrained by the hours of operation.

B. Diminishing Assets Doctrine and Nonconforming Use Rights to Mine and Process Sand and Gravel on the Balance of the Woodside Property.

1. Applicable Law.

a) The Clark County Code, 18.412.030.E. provides that: "If an existing nonconforming use or portion thereof, not housed or enclosed within a structure, occupies a portion of a lot or parcel of land on the effective date hereof, the area of such use may not be expanded, nor shall the use of any part thereof be moved to any other portion of the property not regularly and actually occupied for such use."

b) Due to the nature of surface mining as a land use, the application of facts to the County Code and specifically, the issue of what portion of the property was "regularly and actually occupied" for use requires special analysis. Many if not the majority of states considering quarrying operations and surface mining, including sand and gravel extraction, conclude that in the context of

nonconforming uses, such land uses are unique. Specifically, as distinguished from other nonconforming uses in which the land is merely incidental to the activity conducted on it, the extraction of sand and gravel contemplates the excavation and sale of the corpus of the land itself as a resource. Depending on demand, the land will be gradually excavated in order to continue to supply the various grades of sand and gravel. This statement or principle of law has been referred to by the courts has the Doctrine of Diminishing Resources (or Assets).

c) The majority of state courts considering the issue of the expansion of nonconforming uses have adopted the Diminishing Resources Doctrine. Under the Doctrine of Diminishing Resources, a landowner having designated a tract of land for excavation can excavate the entire site even though he has only begun extraction or mining on one portion when later restrictive ordinance makes such a use nonconforming. The Doctrine is an exception to the rule against the expansion of nonconforming uses and recognizes that activities such as gravel mining, unlike other nonconforming uses, actually

consume the land in the process of "use" and, by necessity, must expand by mining deeper or extending operations to other portions of land. In applying the doctrine, various courts have recognized that unless the doctrine is applied, miners would be encouraged to contemporaneously initiate mining on multiple portions of land.

d) Clark County has, in the context of the expansion of a nonconforming surface mining operation, recognized and applied the doctrine in the past.

e) However, the difficulty here is that no Washington courts have opined on the Doctrine of Diminishing Resources.

f) For the reason stated in the preceding paragraph, the Department is reluctant to state conclusively that the Doctrine of Diminishing Resources does or does not apply in this particular instance.

g) Therefore, taking the cautious approach, the Department concludes that until a Washington court with jurisdiction rules on the applicability of the Doctrine of Diminishing Resources, the County ordinance on nonconforming uses controls. If a court or hearing examiner adopts the Doctrine of Diminishing Resources then, as noted, it controls

determinations of the extent to which surface mining and processing may continue as a nonconforming use on the Woodside property.

2. Conclusion.

Until such time as an administrative hearings officer or court adopts the Diminishing Resources Doctrine, the Department concludes that Storedahl may not expand surface mining and processing beyond the 71 acres already subject to mining and under a valid surface mining reclamation plan.

C. Shoreline Substantial Development

1. Shoreline Nonconforming Uses.

a) Applicable Law:

i. Under rules issued by the Washington Department of Ecology: "Where nonconforming development standards do not exist in the applicable master program, the following definitions and standards shall apply: (1) 'Nonconforming development' means a shoreline use or structure which was lawfully constructed or established prior to the effective date of the act or the applicable master program, or amendments thereto, but which does not conform to present regulations or standards of the program or policies of the

act; (2) Nonconforming development may be continued provided that it is not enlarged, intensified, increased, or altered in any way which increases its nonconformity." WAC 173-14-055(1), (2).

ii. Because surface mining is a permitted use of the Woodside property under the Clark County Shoreline Master Program, the Doctrine of Diminishing Resources could have no applicability with respect to the necessity of obtaining a shoreline permit.

b) Conclusions:

i. Surface mining and processing on the Woodside property may not expand as nonconforming shoreline uses.

2. <u>Shoreline Permit Requirement</u>

a) Applicable Law:

i. The Department of Ecology rules implementing the Shoreline Management Act provide: "Substantial development undertaken on the shorelines of the state prior to the effective date of the act shall not require a permit except under the following circumstances: (1) Where the activity was unlawful prior to the

effective date of the act. (2) Where there has been an unreasonable period of dormancy in the project between its inception and the effective date of the act. (3) Where the development is not completed within two years after the effective date of the act. In determining the running of the two-year period hereof, those periods of time after June 1, 1971 shall not be included during which a development was not actually pursued by construction and the pendency of litigation reasonably related thereto made reasonable not to so pursue. (4) Where substantial development occurred prior to the effective date of the act on a shoreline and continued on to a different lake, river, or tributary after the effective date, a permit shall be required for the development undertaken after the effective date. Substantial development undertaken prior to the effective date of the act shall not continue without a permit into other phases that were not part of the plan being followed at the time construction commenced. WAC 173-14-050.

b) Conclusions:

The Department concludes that surface mining and processing on the Woodside property is a substantial development. A shoreline permit is required for surface mining in the 100-year flood plain.

D. Vested Rights Doctrine And Storedahl Application For a Shoreline Permit

1. Applicable Law

a) Under Washington law, an applicant for a shoreline permit attains vested rights as to those ordinances and regulations in effect at the time that a completed shoreline permit was submitted unless a local government adopts a differing vesting statute in accord with constitutional and statutory requirements. Erickson v. McLerran, 125 Wn.2d 864 (1994); Talbot v. Gray, 11 Wn.App. 807, (1974).

b) At the time that Storedahl submitted its shoreline permit application in 1991 Clark County had not adopted any ordinance otherwise changing the time of vesting as to shoreline permits.

c) No local ordinance limits the "duration" of a shoreline permit application or provides for abandonment thereof for inaction.

2. Conclusions

a) Storedahl applied for a shoreline permit to undertake mining over the entirety of the Woodside property on May 12, 1991, prior to the adoption of development regulation prohibiting surface mining in the hundred year flood plain which took effect on January 1, 1995.

b) Due to Washington's Vested Rights Doctrine, the Department concludes that the ban on surface mining in the hundred year flood plain does not operate to prohibit Storedahl from obtaining a shoreline permit to engage in surface mining within flood plain areas on the Woodside property.

c) Environmental issues regarding such surface mining should be addressed in the context of the proceedings on the shoreline permit application, and not in these proceedings.

III. ORDER

A. For the reason that historic mining and processing operations constituting a preexisting and nonconforming use were established on the Woodside property prior to the effective date of the County's Growth Management Plan and related development regulations and the County's surface mining combining district ordinance, and such uses have not been shown to have been abandoned, Storedahl may, subject to the issuance of a shoreline permit, continue its present operations on the 71 acres subject to a surface mining reclamation permit.

B. Because of the uncertainty of applicable law (associated primarily with the Doctrine of Diminishing Resources and related nonconforming uses), Storedahl is prohibited from conducting sand and gravel surface mining and processing activities on the balance of the Woodside property within the 100-year flood plain, except those portions of land for which a shoreline permit is granted.

C. Because Storedahl applied for a shoreline permit on May 12, 1991, prior to the ban on mining in the 100-year flood plain, vested rights have been attained as to those development regulations in effect at the time the application was submitted. Such rights have not been abandoned through inaction. Therefore, any shoreline

permit granted is not subject to the ban on surface mining in the 100-year flood plain.

D. Because surface mining and rock crushing were established prior to the County's ordinances governing surface mining and rock crushing, Storedahl need not obtain a conditional use permit in order to operate a rock crusher on said property, nor do other requirements and limitations of CCC 18.329 apply in this instance.

E. Those uses found to be nonconforming or preexisting as per this notice and order are hereby deemed eligible for site plan approval.

F. Surface mining or processing hereinafter undertaken by Storedahl on the Woodside property in contravention of the foregoing shall result in a per diem penalty of $250.

IV. APPEAL

A. This Order shall become final unless no later than ten (10) days after the notice and order are served, a person aggrieved by the order requests in writing an appeal before the hearings examiner.

B. The Department understands that Storedahl will appeal this Notice and Order to the hearing examiner. It is the intention of the Department that if such appeal is filed, the examiner shall have jurisdiction to rule on all issues (factual and legal) addressed herein, including

those issues resolved favorably to Storedahl. It is the Department's further intent that any other aggrieved person be permitted to move to intervene as a party in such proceedings without the necessity of filing a separate appeal and, if intervention is allowed, to thereafter fully participate as a party in such proceedings, including the right to cross-examine witnesses and to present evidence and argument.

C. Storedahl has previously indicated in writing its concurrence with the foregoing intentions.

D. Upon filing of an appeal, the Department recommends that the examiner issue a preliminary order: (1) setting a deadline for interventions; and (2) scheduling a pre-hearing conference.

DATED this 21th day of February, 1996.

CRAIG GREENLEAF, Director
Clark County Planning Department

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January 16, 1997

Mr. Monty Anderson
Commercial/Industrial Team Leader
Clark County
1408 Franklin Street
P.O. Box 9810
Vancouver, WA 98666-9810

Re: Further Submissions and Clarifications on SPR 96-092

Dear Monty:

Enclosed herein are a number of submissions, documents, and maps along with a narrative that responds to the planning staff's requests for further information regarding several aspects of mining as proposed on the parcel at issue.

1. Groundwater

Several issues were raised including (a) location of adjacent wells, (b) impact of mining on quantity and quality of domestic well water, (c) potential to breach aquitards, if any, and (d) regulations for abandoning and capping wells within the area of site plan review. Storedahl contracted with David J. Newton Associates to analyze issues (a) through (c) and they are addressed in the enclosed letter, Tab A, and are summarized herein.

a. Location of Adjacent Domestic Wells

The enclosed letter and attached materials submitted by a groundwater hydrologist and engineer shows the location of adjacent domestic water wells, in addition to the location of study or observation wells. (Figure 2 of Tab A.)

b. Impacts of Mining on Well Water Quantity and Quality

In addition, the hydrologists examined the issue of water quality and quantity and concluded as follows:

[/97016.007]

EXHIBIT 2

> [I]ncreasing the lateral extent of mining is expected to have minimal, if any, effect on groundwater elevations and yield in nearby wells completed in the Unconsolidated Sedimentary Aquifer since groundwater condition in this unit will not be significantly changed. . . . Water quality in nearby wells completed in the Unconsolidated Sedimentary Aquifer is expected to be unchanged by the proposed mining.

Letter from David J. Newton and Steven R. Bruce to John Dentler, 3-4 (January 8, 1997). The basis of the conclusion is elaborated upon in the enclosed letter. I should also add, as pointed out in my previous submission of December 6, 1996, that Storedahl has developed and implemented a Spill Prevention, Containment, and Countermeasure Plan that should minimize interactions, if any, of petroleum products with groundwater. Finally, movement of groundwater is generally away from adjacent wells. See id.

c. **Potential to Puncture Aquitard**

The hydrologists noted that the top of the geological formation separating the two aquifers in the project vicinity is located at a depth of greater than approximately 40 feet. The geologist conclude that "mining is not likely to affect the quantity or quality of the Troutdale Gravel Acquifer [deeper acquifer], provided that mining does not penetrate the geologic layer that appears to confine this acquifer." Id. at 4.

As a result, as a cautionary measure, Storedahl will not mine any deeper than 40 feet below existing groundlevel. As noted, this limitation will prevent disturbance of the top of the geologic layer separating the two aquifers. See id.

d. **Abandonment and Capping of Wells**

It is likely that at least one of the wells located on the site will be removed. The wells in question are noted as "Woodside #5 and #6." Id., Figure 2. Any well removed or abandoned will conform to the requirements of WAC 173-160-095. If there are any other nonconflicting County ordinances that apply to terminating wells, please incorporate them as a condition of site plan review.

2. Potential Noise Impacts

Storedahl contracted with an engineering firm, Daly-Standlee & Associates, Inc., specializing in analysis of noise in industrial and commercial settings. Enclosed as Tab B is a cover letter and a detailed analysis of potential noise impacts that may arise due to the project. The project does have the potential to create noise impacts that could exceed standards set for in the Washington Administrative Code. Ch. 173-60 WAC. The project will be carried out in accordance with mitigation measures identified and recommended. Noise impacts will be mitigated as recommended by our noise engineer by one or more of the following: (a) setback from nearby residences, (b) erection of noise mitigation berms of varying heights, and (c) applying noise reduction equipment on excavation and related equipment as necessary. The use of one or more of the noted mitigation measures will keep noise emanating from the site and impinging on nearby residences below the noise standards set forth by the Washington Department of Ecology. Ch. 173-60 WAC; Tab C, Letter of William M. Holliday and Kerrie G. Standlee to Virgle Barnett (June 13, 1996).

3. Road Stability and Safety

Staff raised two issues: (a) will mining at the site affect the stability of the adjacent County roadbed and road, and (b) will the creation of a pond near the roadway create an unacceptable automobile hazard? These issues are addressed in turn.

a. Roadbed and Roadway Stability

Storedahl contracted with David J. Newton Associates to analyze the potential impacts of mining on adjacent County roadway. (Tab C.) An engineering geologist and geotechnical engineer conducted a preliminary geotechnical evaluation by examining the proposed cut slopes on the site, reviewing published and unpublished materials, inspecting soil characteristics on site by auger boring, and observing surrounding conditions and existing well logs. The engineers then applied predictive models to yield conclusions:

> Based on our analyses, it is our opinion that the proposed cut slopes will be stable provided that the soil conditions are similar to those exposed in the existing mining operation and that no

> rapid drawdown of the water table occurs. Variations in soil types and water conditions may require that local areas be sloped at flatter inclinations. We recommend that excavated slopes be periodically observed by an engineering geologist or geotechnical engineer to confirm that the soil conditions are as anticipated in this letter.

Letter of Mount L. Murbach and Lloyd J. Reitz to Mr. Monty Anderson, 2 (January 6, 1997) (Tab C). It should be emphasized that the project does not anticipate drawing any water from the site and it is likely that at least one well in the vicinity will be terminated.

b. Automobile Safety

Storedahl contracted with DKS Associates to examine the potential safety issues involved with creation of a pond adjacent to 61st Avenue and N.E. J. A. Moore Road. The engineer furnished his opinion in writing, concluding that there was no significant safety issue that would arise from the project. In fact, sight-distance would be improved by the project. However, with respect to the specific issued raised by staff with regard to automobiles entering the pond, the engineering consultant concluded:

> Based upon speed zone of 40 miles per hour and less than 1,000 vehicles per day, the clear zone [required for mitigation] would be 16 feet. The water's edge will be set back at least 35 feet from the roadway with existing grades in the first 20-foot setback area and 3:1 slopes in the next 15 feet prior to the waters [sic] edge (Figure 1). The proposed design for the water's edge would meet these design criteria.

Letter of Ransford S. McCourt, P.E., to Mr. Virgle Barnett, 2 (January 3, 1997) (Tab D). In summary, there should be no significant adverse automobile safety impacts caused by the creation of the pond according to the proposal as set forth in the site design.

4. Fish and Wildlife Impacts

Staff stated that our consultant's analysis should reference the fact that information provided by the Washington Department of Fish & Wildlife suggests that salmon spawning habitat is located adjacent to and below the mining site; however, staff did not take issue with the consultant's opinion and conclusion that no significant impact would occur to fish and wildlife habitat, and specifically, impacts on salmon in the East Fork due to heated groundwater leaving the ponds and entering the East Fork Lewis River. A clarifying letter will be forwarded to you addressing this issue in the near future.

5. Effects on Floodplain Function and Avulsion

a. Floodplain Impacts

Storedahl contracted with a highly qualified hydrogeologist to examine potential floodplain impacts and to recommend measures that might be included to protect floodplains should any significant impacts be anticipated. In short, the hydrologist concluded that the portion of the regulatory 100-year floodplain depicted on FEMA maps comes from a downstream source, not upstream. Letter of Dr. Jeffrey B. Bradley to Mr. John Dentler, 1 (January 9, 1997) (Tab E). Thus, Dr. Bradley concludes that "[a]dverse hydraulic or erosional effects in that area [where mining would occur] would not be expected." Further, Dr. Bradley concluded that even though the area includes portions of the delineated regulatory 100-year floodplain, the area was not inundated during a recent flood in excess of a 100-year flood event, see id., and that "hydraulic and erosion hazards in this regulatory floodplain would not be significant." Id. Finally, in view of these two findings, Dr. Bradley states:

> For the above reasons, I must emphasize that hydraulic and erosional effects would be insignificant in the 100-year regulatory floodplain adjacent to the proposed mining. Furthermore, as I understand the proposal, the proposed mining is to occur outside of the 100-year regulatory floodplain. The 100-year floodplain will have no direct connection to the mining activity. Since their [sic] will be no connection between the 100-year floodplain and the mining activity, there cannot be hydraulic

> or erosional impacts caused by mining adjacent to the regulatory floodplain.

Id. (emphasis in original).

Finally, with respect to floodplain impacts, Dr. Bradley recommended that no berms be placed between mining and the floodplain as they would provide no benefit to the floodplain or mining activity. However, in view of the proposal to refrain from mining in the floodplain, Dr. Bradley did recommend a setback of 20 feet from the delineated floodplain to account for any inaccuracies in the designation of the regulatory 100-year floodplain. Id. at 1-2. The site plan maps have been revised to reflect this setback from the 100-year regulatory floodplain. In summary, the project, as proposed, is not anticipated to have probable significant and adverse impacts on the 100-year regulatory floodplain.

b. Avulsion

Dr. Bradley has conducted a number of evaluations of the adjacent portions of the East Fork Lewis River. With respect to avulsion, Dr. Bradley examined historical trends in river movement in the adjacent area going back as far as 1935. Id. at 2. He also examined flooding characteristics during a recent flood (February 1996) in excess of a 100-year event and concluded that the portion of the 100-year floodplain on the southwest corner of the site was not inundated during the flood event. Further, the 100-year floodplain in the northern portion of the site was derived from backwater downstream on the East Fork Lewis River. Id. As a result of Dr. Bradley's analysis, he concludes:

> Based on these facts, avulsion of the main channel of the East Fork Lewis River into the subject mining area is highly improbable.

Id. (emphasis added). Again, the project, as proposed herein, is unlikely to result in probable significant adverse impacts pertaining to avulsion.

6. Archeological Survey and Analysis

Storedahl contracted with Mr. Jefferson Davis of Vancouver to undertake an archeology and cultural resource survey of the site. Mr. Davis completed his study

and issued the enclosed report. Jefferson Davis, Archeological Survey of Proposed Ground Quarry T4N R2E 818 Battleground, Washington (January 14, 1997) (Tab F). The survey found no resources of interest and the items recovered were a few pieces of broken glass and ceramics indicating domestic settlement in years past. I believe Mr. Davis's study meets all of the County's requirements. Mr. Davis concluded:

> As I expected no prehistoric site or objects were identified within the project area. . . . I would recommend that this not be considered as a significant cultural resource because it does not appear to meet the criterea [sic] for the National Register of Historic Places. The remains lack the integrity necessary to quality for the NRHP. They have been subjected to fire, plowing and removal as trash.

Id. at 22.

7. Clarification of Site Plan Maps

Staff raised at least two concerns with regard to Storedahl's site design maps. First, there was a desire to have the maps reflect where mining would occur and not occur with regard to the 100-year regulatory floodplain. As noted elsewhere, the site plan maps have been revised to reflect that mining will not take place in the 100-year regulatory floodplain and have been changed to reflect the noted 20-foot setback from the existing 100-year regulatory floodplain (as recommended by Dr. Bradley, thereby reflecting previous letters clarifying where mining will take place). See enclosed maps.

Second, staff indicated that the maps should reflect the approximate location of the anticipated conveyor belt to convey material offsite to the existing crusher. The maps have been changed to reflect the location of the conveyor belts. It should also be noted that an alternative to utilizing the conveyor belts is simply to move the material to the existing conveyor belt by utilizing trucks designed for earth moving purposes. It is anticipated that conveyancing by this method would not require the construction of roads as the truck or trucks could simply pass over existing flat pasture lands. See enclosed maps.

8. Engineering Description of Conveyor Belts

Staff also requested materials providing an engineering or general description of the conveyor belts proposed to be utilized on the site. Enclosed as Tab G is a sample of the type of conveyor belt likely to be used on the site.

* * *

Monty, I believe the enclosed submissions respond to all of the issues that you or other staff identified. If not, please let me know as quickly as possible.

Sincerely,

John L. Dentler

Enclosures

cc: Melissa Remick (w/enclosures)
Rich Lowry (w/o enclosures)
Rex Hapala (w/enclosures)
Charles B. Roe, Jr. (w/o enclosures)

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May 5, 1997

VIA FACSIMILE and U.S. MAIL

Mr. Michael V. Butts
Clark County Community Development
Current Planning Manager
1408 Franklin Street
P.O. Box 9810
Vancouver, WA 98666-9810

Re: Comments on MDNS and SPR Approval for SPR 96-092

Dear Mr. Butts

Following are comments submitted by the applicant regarding (1) the threshold MDNS determination under SEPA, chapter, 43.21C RCW and the applicable Clark County Code and (2) the draft site plan review approval. I would very much appreciate it if these comments are incorporated, as appropriate, into the SEPA and SPR final documents.

1. Comments on Conditions Leading to MDNS

a. Prohibition on Mining in Floodplain

It is now apparent that no portion of the 100-year floodplain enters the 20-acre parcel currently under consideration for site plan review. Storedahl contracted with WEST Consultants to conduct a very thorough, if not exhaustive, study of the extent of the floodplain on the Woodside property. The analysis included topographic measures at two-foot elevation intervals over the entire property, in-depth hydraulics modeling using an extensive set of data on flood events in the East Fork Lewis River, mapping of flood elevations over the entire property, and comparison of this mapping with last February's 300-year flood event. In short, the results of this study find that no portion of the 20-acre parcel is located in the 100-year floodplain. See file correspondence WEST Consultants. Further, to ensure the accuracy and validity of the study and its conclusions, Storedahl hired Professor Peter Klingeman, P.E., of

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EXHIBIT 3

Oregon State University to review the work of WEST Consultants. Professor Klingeman is an expert in hydrogeology, fluvial geomorphology, floodplain dynamics, and other subjects of an erudite nature. Dr. Klingeman also has previous experience evaluating the environmental impacts of sand and gravel mining with regard to riverine issues. Dr. Klingeman endorses, without reservation, the methods, analyses, and conclusions of WEST Consultants with regard to the evaluation of the 100-year floodplain as well as the fact that avulsion and erosion effects are extremely unlikely at the 20-acre site and over the rest of the property as well. See letter of Professor Peter Klingeman of Oregon State University (April 29, 1997).

Accordingly, I recommend that condition 1 of the MDNS be eliminated since there is no longer any basis in law or in fact for the condition.

b. Off-Site Runoff - Berms and County Right-of-Way

With regard to condition 5, the applicant wishes to reiterate here that it will work with the County to address off-site flooding as it affects mining and related conditions at the site. However, applicant should not be responsible for addressing preexisting impacts created off-site through upland development and the lack of adequate measures to retain water runoff.

2. Staff Report

Page 1: The name "Mr. Robert Laird" should be removed and in lieu thereof, please substitute Ms. Diane Murbach.

Page 2: The staff report should note that applicant has indicated two potential means of conveying material to the existing conveyor belt and processing site. First, applicant proposed to utilize highly portable electrically-driven conveyor belts to move material to the existing conveyor belt. Second, in the alternative, applicant indicated that if this is not feasible, material would be conveyed by excavator trucks across the adjacent pasture to the existing conveyor. The report should identify this alternative method of conveying sand and gravel to the processing site.

Page 2-3: Background Information. The staff report should reflect that applicant has indicated to the County that the application for a shoreline permit relating to a proposed project to mine the entire 349-acre site is presently being

reviewed by the applicant and, based on the review so far, it is unlikely that any proposal to mine the entire 349-acre site will be requested for further processing.

Page 6: Above-Ground Utilities. The SPR requires removal of the existing power line prior to initiation of mining. However, as noted in previous correspondence, the power line currently serves a pump used to irrigate pastureland in the vicinity of the site. The power line is needed for farming purposes and there is no rational basis for requiring removal of the power line until mining occurs in the area where the power line is located. Further, the power line could be retained and used to service the conveyor belt system, if that alternative of conveyance is utilized. In summary, the condition should be modified to require removal when mining occurs near the power pole or would otherwise create any dangerous or hazardous situation.

Page 7: Existing/Proposed Structures. The single family residence on the site is currently occupied and again, there is no rational basis, in fact or in law, for requiring removal prior to commencement of <u>any</u> mining. The residents utilizing the structure need not be evicted or removed until such time as mining approaches the residence so to implicate the safety or welfare of the residents or the structure.

Page 11: Earth. As noted earlier, none of the 20-acre site lies within the 100-year floodplain. There is, therefore, no basis in law or in fact for inclusion of a mitigation measure relating to avoidance of the fingers of the floodplain. Further, notwithstanding the above sentence, the condition is overly vague due to the use of undefined terms and phrases such as "threatening the integrity of the floodplain," "if at any time the integrity of the floodplain is threatened, mining shall cease." Presumably the primary function of the floodplain is to serve as an overflow area when the river channel fills during an extreme flood event. No structures will built on the 100-year floodplain and even if "structures" were on the 100-year floodplain, they would not interfere with the capacity of the 100-year floodplain to accept overflow waters.

The condition regarding inspection is read, interpreted, and understood to mean that inspections of slope stability will occur "during mining," not during periods prior to the commencement of mining.

Pages 12-15: Water: Surface. Several aspects of the section on water appear to be erroneous and potentially misleading.

First, it is now clear, as aforenoted, that no portion of the 100-year floodplain is present on the site. See Klingeman letter (April 29, 1997) and previous correspondence of WEST Consultants. This new information makes even more remote previous estimates of the probability of any avulsion effect as a result of this proposal or existing condition on the Woodside property. Id.

The following statement appears incorrect: "The proposal is located in an area where the East Fork of the Lewis River exists in a narrow, steep-sided valley with little or no floodplain and enters a broad floodplain." In fact, the proposal is located well downstream of any area that may be characterized as a "narrow steep sided valley." See page 13 of Draft Site Plan Report. The proposal is, in fact, located on a broad valley of very gentle slopes and topographic relief and the report should be clarified to reflect this fact.

The staff report states that if avulsion should occur, then "the existing and proposed mining pits would all be interconnected." There is no basis in fact for making this conclusion. I am aware of no study by any hydrogeologist that has characterized such an event would occur, even if avulsion did occur. The source and authority for this conclusory statement should be identified in the staff report and corrected if not supported by applicable and well-founded studies.

At page 14, the staff report states that "according to G. Mathias Kondolf, Ph.D. (Effects of Aggregate Mining on River Floodplains, April 11, 1996), the river does have the potential and will most likely flow into the proposed or the existing adjacent mining pits in the future. (Kondolf, pp. 5)." See page 14 of Draft Site Plan Report. This statement would appear to be factually unsupported and erroneous. At the time Dr. Kondolf's report was written, Storedahl had not even submitted the proposal currently under consideration and review. Therefore, the statement regarding predictions of where the river will flow as to this 19-acre site plan proposal are necessarily mischaracterized as applying to this specific proposal.

Page 21: Utilities. The staff report would require removal of utility poles septic system and wells on the site. However, there is no factual or legal basis for removal of such utilities until such time as such utilities are incompatible with mining.

Page 23: Conditions of Final Approval. Condition 8, regarding a vegetation clearing plan does not appear to comport with the applicable preceding section of the

report. There is no anticipated clearing that would take place in any critical area. Further, the site is pastureland and has already been plowed and disked by farming implements this season

Page 23: Hours of Operation. The applicant will voluntarily adhere to hours of operation as stated; however, there appears to be no legal basis for such a requirement since the property at issue has a nonconforming use for surface mining that has preceded the hours of operation requirement.

Page 23: Reclamation Plan. There appears to be no basis for requiring submittal of an approved reclamation as a part of site plan review approval. No County ordinance would appear to support the inclusion of such a condition. The applicant will work with the DNR to meet the requirements of the Surface Mining Act, Ch. 78.44 RCW.

Page 24, Condition B6. As noted earlier, there is no factual or legal basis to require abandonment of the wells located on the property until such time as their presence is incompatible with mining.

Page 25, Condition D3. As noted earlier, there is no factual or legal basis to require removal or demolition of the residence on site prior to initiation of mining anywhere on the site. The residence should be allowed on the site until such time as mining is incompatible with a single-family residence.

Finally, applicant reiterates that two methods of conveying sand and gravel off-site from the exiting conveyor belt were under consideration and should be reflected in the SPR documents. First, sand and gravel would be conveyed by electric conveyor belts. In the alternative, material could be conveyed to the existing conveyor belt via excavation truck over the existing tilled pasture on the site. No road would need be built as nothing would impede access over the land in its current state.

Thank you for your consideration of the these comments.

Sincerely

John L. Dentler
Attorney for J. L. Storedahl & Sons, Inc.

Enclosure

cc: Virgle Barnett
Charles B. Roe, Jr.
Jim Sellers
Casey Marshall

[/SPRCOM.DOC]

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March 13, 1997

Mr. Michael Butts
Current Planning Manager
Mr. Monty Anderson
Sr. Planner
Department of Community Development
Clark County
1408 Franklin Street
P.O. Box 9810
Vancouver, WA 98666-9810

Re: Draft Site Plan Review and SEPA Document

Dear Mike and Monty:

On behalf of Storedahl, I thank you for taking the time out of your schedules to meet with Charlie, myself, and Storedahl's consultants. As I noted at the meeting, I wanted to review the draft report in more detail and get back in touch with you once I had reviewed the staff report in greater detail.

Following are my comments and questions relating to specific portions of the report:

1. A.1 - Project Description (page 1, paras. 1 and 4)

As I noted at our meeting, this proposal is <u>not</u> part of a larger, 349 acre mining proposal. This issue was, at least as I understood it, previously settled as elaborated upon by Rich Lowry in responding to David McDonald's assertion of just such a conclusion. The basis for Mr. Lowry's determination to the contrary was that the proposal to mine the 19-acre site is not intertwined or interdependent with proposals to mine other areas of the Woodside property and in light of case law interpreting SEPA. I strongly urge you to consult with Mr. Lowry on this matter before the rep is issued and correct paras. 2 and 4. As stated, the description is erroneous.

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EXHIBIT 4

Moreover, I will now state that the County should not expect any further submissions or documents, including EIS draft documents, on proposals to mine the entire 349-acre site. Regardless of the merits of such a proposal, Storedahl will heed the local community's desire, as expressed by members of Friends of the East Fork, to avoid mining to the maximum extent possible in the 100-year regulatory floodplain. If there is any doubt, I recommend that you insert the following in lieu of statements to the contrary: "The applicant is not pursuing and does not plan to pursue a proposal to mine the entire 349-acre site." I am hopeful that this clarification will assist you and your staff in analyzing the proposal that is currently before you.

I also believe that the project description is inaccurate with regard to depth of mining. Previous correspondence reflected that mining would occur only to a depth of 35 feet--or up to the bottom of the alluvial deposits (approximately 30-40 feet) and would not enter the Troutdale formation. The project description should be altered to accurately reflect this change and this change likely requires reassessment of the section addressing groundwater. Infra.

2. B.1 - Environmental Elements--Earth

a. Setbacks From 100-Year Floodplain

On page 2, para. 3, the project description should clarify that the applicant proposed 20-foot setbacks from the delineated 100-year floodplain. As noted at our meeting, there is sufficient room within the buffers to undertake mining without engaging in mining on the 100-year floodplain.

b. Mitigation Conditions Requiring a Mining Plan

There has been no probable significant impact identified that should require, as a condition of approval, the requirement of submitting a mining operation plan addressing phasing, avoidance of the 100-year floodplain, and where and how mining equipment will operate in each individual phase.

There is no basis for a condition of "avoidance of the 100 year flood plain." Storedahl is not proposing to mine the 100-year regulatory floodplain. The site is currently a hay field and farm machinery travels over the site without apparent significant impacts. Our consultants are not aware of any data or rationale to suggest

anything to the contrary. Further, the 20-foot buffer was voluntarily suggested by Storedahl as an added measure of assurance to avoid any probable significant adverse impacts in the 100-year floodplain and to honor the County's current ban on mining in 100-year floodplains, notwithstanding the fact that Storedahl's position is that the ban is without force or effect because it was adopted without observance of mandatory procedures under the Growth Management Act and Shoreline Management Act.

Secondly, it is my understanding that Storedahl had previously submitted a phased and generalized mining plan for this site and staff indicated that such plan was not needed. Before this condition is placed in the staff report, I request that you determine if it relates to significant adverse impacts and whether it is really needed, in consideration of the 20-foot buffers surrounding the current 100-year floodplain. Typically, a plan of operation is something controlled by the DNR. I request that you carefully analyze the rationale for such a condition prior to making the report final.

c. Periodic Inspection by Geotechnical Engineer

The staff report includes a condition requiring inspection by a Geotechnical Engineer every three months. I wish to point out that the impetus behind the original examination by M. Murbach, Geotechnical Engineer, was based on concern for road stability adjacent to the anticipated mining pond. After inspection, Mr. Murbach determined that there would be no impact to the road stability provided the soils at this 19-acre site are similar to those elsewhere on the site and there is no rapid drawdown of water.

Storedahl wishes to clarify that there is no activity planned at the site that would result in water drawdown.[1] There is no indication, based on well logs and other information, that the soils at the 19-acre site differ from those elsewhere at the site. Further, there has been no indication of slope instability at other ponds and slopes created by mining on the Woodside property. Notwithstanding this information, Storedahl does not object to the condition, in general. However, the

[1] The report may wish to cross-reference such fact at page 3, para. 1, last two sentences: "A 20 foot setback for mining activity is proposed form the floodplain boundary. No withdrawal of surface water is anticipated."

condition should be modified to clarify the initial inspection need not occur until mining occurs and creates substantial changes in physical topography ("significant slopes")[2] and such inspection should recur every three months or after further substantial changes in physical topography since the time of the prior inspection. Further, the inspection should be limited to the area where paved county roads run adjacent to the site. The intent here would simply be to avoid meaningless inspections where there is no basis for slope failure.

3. B.2 - Environmental Elements–Air

A dust control plan will be submitted for mining activities at the site, etc. However, as a point of clarification, SWAPCA does not permit mining activity per se; rather, it issues permits for specific equipment used at the site. All equipment anticipated for use at the site has current SWAPCA permit approval and any new equipment used at the site will be covered by the requisite permits. Further, applicant will comply with all applicable SWAPCA rules.

4. B.3 - Environmental Elements–Water-Surface

a. Avulsion

As an initial matter, the staff report appears to ignore Dr. Bradley's analysis and conclusions. See p. 4-5, paras. 3-4. These analyses and reports were submitted previously.[3] The reasons for this are not clear; however, to my knowledge it is the only analysis of the conditions above, adjacent, and immediately downstream of the site and which has examined topographic features of the site. Dr. Bradley concludes that the movement of the river into the proposed site is improbable. A mere hypothetical movement somewhere, sometime, somehow in the future, whether on the geological time scale or otherwise, does not mean that a significant adverse

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[2] I am not aware of a definition of "significant slopes" and it may be useful to either cite to the definition of "significant slope" or to define what staff means by use of the term "significant slope."

[3] I recognize that, due to my oversight, the foundation for Dr. Bradley's analysis was submitted much more recently and may not have been incorporated in the staff report.

environmental impact is "probable." I recognize that the magnitude of an impact resulting from the remotely possible event should be employed when making final conclusions probable significant adverse impacts. So too should potential mitigation measures. Even considering such analysis, there appears to be no basis for the staff conclusion. I am, as yet, also unaware of any study on this proposal concluding that the East Fork will "likely flow into the proposed . . . mining pit in the future." If such a study has been completed supporting conclusions, as stated in the staff report, I request that it be forwarded to me. See p. 5, para. 1. In the meantime, the only supportable and specific analysis of the potential for avulsion to this specific site and of which I am aware is the analysis performed by Dr. Bradley. See enclosed letter of Tom Grindeland, P.E., Senior Hydraulic Engineer of WEST Consultants to Monty Anderson (March 13, 1997).

b. Likely Impacts

(1) Sedimentation

As noted, the enclosed correspondence from WEST Consultants more fully addresses this section of the draft report. However, the following information may be helpful.

Where a river enters a large pond-like environment, such as a mining pit filled with surface and groundwater, the river water slows because of reduction in gradient. When this occurs, sediment loads are deposited. Over the long-run, this serves to decrease a river's sediment load, not increase it. The report should be altered to reflect anticipated short term effects from this project, vis-à-vis long term effects from this project, where the extremely unlikely event of capture of the anticipated mining pond, some 2,300 feet from the river should occur. As noted, the ultimate effect of a river entering a pond should be to decrease sediment load, not increase it.

In addition, the flow of East Fork, both creates erosion and deposition of sediments, regardless of mining. The recent movement of the river into gravel ponds south of the Woodside property was clearly anticipated and foreseeable (see previous correspondence of Dr. Bradley) and, in fact, it is my understanding that the Washington Department of Fish and Wildlife desired the river to enter ponds so as to create salmon habitat. (See enclosed correspondence.) Further entry into such ponds

is not rapid but occurred when the river gradually eroded the southern bank and eliminated land separating the bank from the pond. This is not avulsion (note definition provided in staff report) but simply the gradual erosion of a river bank separating the main river channel from the ex-mining ponds. See Grindeland letter.

If avulsion into the anticipated mining pit for this project were to occur, even though it is improbable, river velocity will likely slow and sediment loads will be deposited in the deeper areas before leaving and entering areas of higher flow. In fact, the staff report points out that deltas were created at the point where the East Fork entered the mining pond south of the Woodside property. Such "deltas" are most certainly formed by sediment deposits in slower water.

(2) Impacts to Hydrology?

It is not clear what is meant by the report's statements "[i]f river avulsion into the project area were to occur, the resulting impacts to hydrology . . . could be substantial," page 5, para. 3, and "[b]ased upon the potential for these hydrologic impacts to the mining pit and surrounding area, probable significant adverse environmental impacts due to river hydrology and the proposal exist." Id. para. 4.

Again, it is essential to keep in mind impacts anticipated to result from this proposal. The statements in the report appear to be concerned over impacts to "hydrology." Hydrology is merely the study of water and its distribution and effects on the land. The mining pit will be created by the proposal and the question remains, how will this impact the environment? I believe the conclusory statements quoted above should be refocused on the probable significant adverse impacts identified, if any--not impacts to "hydrology" or the "mining pit." Our consultants have addressed this issue.

(3) Fisheries Impacts

Although staff points to the entry of entry of Salmon Creek into the old Klineline Pond, it is my understanding that environmental groups and the Department of Fish and Wildlife believe that such event has helped to enhance salmon production and various entities do not wish to have the river revert back to the original location. See enclosed article.

Numerous peer-reviewed studies have been submitted previously to the County addressing fisheries and wildlife impacts associated with gravel mining. Enclosed are additional copies of such studies. Fisheries issues are also addressed in greater detail by Dr. Reiser. See letter of Dr. Reiser to M. Anderson (March 13, 1997) (forthcoming).

(4) Conveyor Belts

There is no basis for the conclusory statement that the "placement of this conveyor could increase the extent of impacts caused during flood events by trapping debris under the conveyor and altering the river flow."

First, to my knowledge, there has never been any flooding from the East Fork in the area planned for movement of the conveyor belt, even in flood events in excess of so-called 100-year floods. Second, to the extent that floodwaters of the East Fork are the concern, such conveyor is highly mobile and can be moved in a matter of minutes or hours. Lastly, if staff anticipates that significant impacts are caused by the conveyor belt, it can be elevated at the time it is moved onto site and hence, serve to minimize if not eliminate the remote potential for the "trapping of debris under the conveyor and altering the flow of river."

(5) Drainage From Outside Project

The staff report places a "mitigation" condition on the applicant requiring engineering and drainage plans necessary to protect damage to roads and threats to public safety. P. 5 para. 6.

This drainage is a long-standing problem that most likely stems from development on the bluffs without adequate provisions for retention of storm water runoff. The drainage periodically results in accumulation of sediment, cobbles and debris along the ditch at J. A. Moore Road and which is periodically removed by Clark County work crews. This is not an impact resulting from this proposal and Storedahl should not be required to remedy a problem created by off-site parties. Storedahl will, however, ensure that berms it places and activity it conducts as a result of this proposal will not further exacerbate the existing problem through blockage of

the culvert and will mitigate probable significant impacts caused by this proposal such as anticipated erosion should drainage enter the pit.

5. B.3 - Environmental Elements--Water-Groundwater

a. Concern for Puncture of Troutdale Aquifer and Reducing Troutdale Groundwater Levels

I appreciate staff concern regarding potential for puncture of the Troutdale aquifer. In a previous submission, it was my understanding that the proposal had been altered to reflect mining only to a depth of 35 feet or the top of the Troutdale formation. In consideration of the analyses and comments of David J. Newton it seems appropriate to limit mining only to the top of the Troutdale formation (fine sand layer which is not valuable to Storedahl operations) or a depth of 35 feet, whichever is lesser. With this condition in place, it is extremely unlikely that any significant adverse impacts should result from this proposal. I should also note, and the staff report should reflect, that there has been no reported effects from past mining on the Woodside property and problems of well water quantity or quality. See letter of David J. Newton to Monty Anderson (March 13, 1997) (forthcoming).

b. Concern for Pollution of the Troutdale Groundwater

As noted at our meeting and in prior correspondence, which has been either overlooked or ignored, the potential for polluting the groundwater is minimal if not nonexistent. First, the significance of any pollution of groundwater would appear to be the product of the following factors: (1) the likelihood of a polluting event, (2) the character of the "pollutant," (3) the amount or quantity of pollutant likely to be released if an event occurs, and (4) the degree to which the pollutant can be removed from the water.

Here, the only event of which we are aware might be the leak or breaking of a hydraulic hose or a fuel spill. Other than such substances, no toxic materials, hazardous substances, or heavy metals will be used in the mining of rock. These hydrocarbon compounds are hydrophobic and float on water. They should remain on the surface and not enter groundwater. Storedahl, as noted in previous correspondence, has in place a Spill Prevention, Containment, and Countermeasure

Plan ("SPCCP"). Given, the character of the potential pollutant, it should be particular amenable to containment and cleanup measures. The amount of pollutant likely to spilled is quite small. In the event of a hydraulic line burst, at most ***approximately 50 gallons*** (worst case) could be discharged. If the leak was a fuel spill and a worst-case situation, considerably more petroleum could enter the water; however, once again, the pollutant floats and generally petroleum fuels are highly volatile and evaporate quickly. Further, such spills are amenable to containment and cleanup actions, such as Storedahl's SPCCP. Finally, the site is some 2,300 feet from the river and the likelihood that the pollutant would travel through the native soils and reach the river is not high, particularly in light of the other aforenoted factors. As noted previously, the same minimal risk is also present under the current farming practices that have historically occurred and will continue to occur should this proposal not be approved.

c. Probable Significant Adverse Impacts

Given the depth of mining proposed herein, the easily detectable difference between the alluvial deposits and the Troutdale formation, the lack of higher hydraulic head in the alluvial groundwater, relative to Troutdale groundwater, the absence of pollutants likely to enter the groundwater, the minuscule probability of a substantial spill, and the presence of the SPCCP make it extremely unlikely that that this proposal will result in probable significant adverse impacts significantly affecting the environment. See Newton letter.

6. B.5 - Environmental Elements--Existing On-Site Wells

It is Storedahl's intention to maintain the viability of the housing units as long as possible. Therefore, it is desirable to allow the wells to remain functional until such time as mining proceeds into such the proximate area of the wells. At such time the wells will be removed in accord with the requirements of the Washington Department of Health. Therefore, Storedahl requests that the condition requiring immediate removal of the wells be deleted.

7. B.5 - Environmental Elements--Animals

This section should probably be clarified. First, the area in question is currently a hayfield. The report should reflect this fact.

Based on materials previously submitted, it is highly improbable that the proposal will result in increased groundwater temperatures. Within a short distance of the site, groundwater temperature differences will likely be non-detectable. Further, from two to several months would elapse before groundwater leaving the site would reach the East Fork. Again the focus here should be significant impacts. The period of time during which temperature is a concern in the East Fork is during summer low-flow months. Given the lag time, even if groundwater reaching the East Fork was elevated, which is improbable, it would not enter the East Fork at a time when temperature represents a concern to the health of salmon stocks.

There is no possibility of turbid, sediment laden groundwater from reaching the East Fork. The native alluvial sand and gravel soils act as a filtering mechanism that removes turbidity. Indeed, sand filtration is used by large drinking water production facilities to clarify and purify drinking water. There is not one shred of evidence of which I am aware to make even a general statement that turbidity from this proposal is likely or even a plausible impact, much less a significant one, to the water quality and fisheries values of the East Fork. See letter of David J. Newton and previous correspondence of Dr. Dudley Reiser.

The site will have no direct surface connection with the East Fork. Therefore, concerns of creating habitat for predatory species that could impact salmon populations are not well founded. Finally, there is no salmon spawning habitat on the site that is the focus of this proposal. It is currently a hayfield. Finally, even if avulsion to the site occurred, impacts to fisheries may be beneficial rather than detrimental. As noted earlier there is much support in the literature for the proposition that the mining ponds can enhance rearing habitat and enhancement of salmon populations.

Finally, the report appears to ignore the fact that substantial fish and wildlife benefits will result from the project due to the creation of valuable and limited shoreline wetlands and open-water wetlands. This habitat should support numerous

waterfowl species and other birds as well as mammals (beavers and otters) and amphibians. The ponds should also create opportunities for consumptive and nonconsumptive recreational opportunities. The report should be amended to reflect this facet of the proposal.

8. B.6 - Energy and Natural Resources

Loss of land for agricultural production was previously analyzed by the County at the time the County zoned the property for surface mining. Further, the land is not necessarily lost to agricultural production as the remaining ponds could be used for the production of trout, catfish, or other commercially valuable farm-raised fishes; or the ponds could be used for recreational fishing opportunities.

9. B.7b - Noise

The noise study noted that noise standards could be met through a combination of factors, including berms and special noise reduction mufflers. This section of the report should be altered to note that, based on noise levels recorded on equipment that will be used on the site at the beginning of the project, Storedahl will place special mufflers on equipment and/or will construct berms if the equipment utilized does not meet the standards. The intent here is to allow flexibility until the specific equipment is tested in relation to the test point. All MSHA (federal) inspection standards and standards under the WAC will be met.

10. B.16 - Utilities

There should be no reason for removing the power line currently present on the site. As noted the conveyor belt will utilize electrical power. Removal and replacement of the line and pole may result in more environmental impacts than would leaving the line and poles in place.

* * *

I am hopeful that these comments are helpful. As noted earlier, it is Storedahl's intention to devise a project that responds to the County's and community's concerns.

Please feel free to call me if you or your staff should have any questions regarding this letter or the enclosed materials.

Sincerely,

John L. Dentler

Enclosures

cc: Rich Lowry
Brian Carrico

[/97072.001]

173-12-040 Ecological commission submission of views
173-12-050 Adoption of regulations
173-12-060 Meetings.

WAC 173-12-010 Purpose. The ecological commission, hereinafter referred to as the commission, was established to provide advice and guidance to the director of the department of ecology on various matters before action is taken by the director. The purpose of this regulation is to set forth the relationship between the director and the ecological commission with regard to such advice and guidance and the procedures to be followed by the director in requesting advice and guidance and by the members of the commission in responding with their views.

[Order DE 70-11, § 173-12-010, filed 1/5/71.]

WAC 173-12-020 Scope of directions—Requests for advice and guidance. The director, as required by RCW 43.21A.190, shall submit all regulations, other than those relating to procedural matters, to the member of the commission to obtain their advice and guidance. In addition, it is the intention of the director, whenever practicable, to submit all positions or actions he proposes to take of major significance to the commission for their advice and guidance. Matters of major significance shall include, but are not limited to, procedural regulations pertaining to applications for and granting of variances and to financial assistance grants proposed to be given to public entities, and bills prepared for introduction in the legislature by departmental request. Notwithstanding the last paragraph of RCW 43.21A.190, the director shall submit to the commission all comprehensive water resource plans, or planning processes proposed for adoption as a regulation. Comprehensive environmental quality plans or planning processes shall be similarly submitted for advice and guidance.

[Order DE 70-11, § 173-12-020, filed 1/5/71.]

WAC 173-12-030 Requests of the director for advice and guidance. The director shall include with each request to the members of the commission for advice and guidance a statement of the background occasioning the request together with the director's proposal; e.g., a proposed regulation. The request shall be in the form of a letter to each commissioner setting forth the subject of the request and a date by which the director desires the commissioners to submit their views to him. Accompanying each letter will be three attachments: (1) A background statement, (2) the director's proposal, and (3) a form for submission of each commissioner's views to the director.

Except in matters involving "emergency" regulations, the director, in setting of dates for submission of views by the commissioners, shall under normal conditions allow for at least one public meeting of the commission between the dates of the request and of the submission.

Whenever practicable the director shall, pursuant to RCW 34.04.025, hold public hearings relating to a regulation proposed for adoption in conjunction with meetings of the ecological commission. If no public hearings are held in relation to a regulation, other than one relating to an emergency, proposed for adoption, the director shall, whenever practicable, furnish the data, views and other written material provided to the director by interested persons prior to the date of submission of views by the commissioners.

[Order 71-10, § 173-12-030, filed 8/4/71; Order DE 70-11, § 173-12-030, filed 1/5/71.]

WAC 173-12-040 Ecological commission submission of views. Each member of the commission shall submit his views separately and in writing with regard to each request for advice and guidance as provided in WAC 173-12-030. Whenever possible a commissioner shall submit his views to the director on the form provided by the director under WAC 173-12-030. Commissioners shall submit their views to the secretary of the commission at his office in Olympia. If the secretary is someone other than the director, the secretary, upon receiving the views of a commissioner, shall forthwith deliver the same to the director. The secretary of the commission shall be responsible for maintaining a register containing a full and complete file of all relevant documents pertaining to each request for advice and guidance of the director.

[Order DE 70-11, § 173-12-040, filed 1/5/71.]

WAC 173-12-050 Adoption of regulations. Except as hereafter provided in this section, the director shall not adopt a regulation, other than those pertaining to procedural matters, until thirty days after the director's request for views of the commissioners: *Provided, however,* That whenever a regulation is designated by the director as an emergency regulation, the director may adopt said regulation as soon as he has received views of at least three commissioners generally approving the regulation as proposed by the director.

[Order 71-10, § 173-12-050, filed 8/4/71; Order DE 70-11, § 173-12-050, filed 1/5/71.]

WAC 173-12-060 Meetings. Regular meetings of the commission shall be held quarterly on the second Wednesday of March, June, September, and December at 9:30 a.m. at a location to be designated by the commission. Any person may obtain information as to said location by contacting the secretary of the commission at the offices of the department of ecology, Olympia, Washington.

[Order DE 72-16, § 173-12-060, filed 6/30/72.]

Chapter 173-14 WAC

PERMITS FOR DEVELOPMENTS ON SHORELINES OF THE STATE

WAC
173-14-010 Authority.
173-14-020 Purpose.
173-14-030 Definitions.
173-14-040 Developments exempt from substantial development permit requirement.
173-14-050 Application of the permit system to substantial development undertaken prior to the act.
173-14-055 Nonconforming development standards.
173-14-060 Time requirements of permit.
173-14-062 Applicability of permit system to federal agencies
173-14-064 Revisions to permits.
173-14-070 Notice required.
173-14-080 Public hearings

173-14-[illegible] Filing with department and attorney general
173-14-[illegible] Review criteria for substantial development permits
173-14-[illegible] Applications for substantial development, conditional use, or variance permit
173-14-[illegible] Letter of exemption
173-14-[illegible] Permits for substantial development, conditional use or variance
173-14-[illegible] Department review of conditional use and variance permits
173-14-[illegible] Review criteria for conditional use permits
173-14-[illegible] Review criteria for variance permits
173-14-[illegible] Minimum standards for conditional use and variance permits
173-14-[illegible] Requests for review
173-14-[illegible] Certificates of requests for review

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-14-[illegible] Department of ecology review. [Order DE 76-17, § 173-14-160, filed 7/27/76. Order DE 75-22, § 173-14-160, filed 10/16/75.] Repealed by 79-07-001 (Order DE 78-7), filed 6/14/78. Statutory Authority: RCW 90.58.200.

173-14-180 Regulatory orders by local government or the department. [Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-180, filed 5/2/86. Statutory Authority: RCW 90.58.200 and 90.58.140(3). 81-04-027 (Order DE 80-52), § 173-14-180, filed 2/2/81. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-180, filed 6/14/78. Order DE 76-17, § 173-14-180, filed 7/27/76. Order DE 75-22, § 173-14-180, filed 10/16/75.] Repealed by 87-16-101 (Order DE 87-09), filed 8/5/87. Statutory Authority: RCW 90.58.200.

173-14-190 Hearings on regulatory orders. [Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-190, filed 6/14/78. Order DE 75-22, § 173-14-190, filed 10/16/75.] Repealed by 81-04-027 (Order DE 80-52), filed 2/2/81. Statutory Authority: RCW 90.58.200 and 90.58.140(3).

WAC 173-14-010 Authority. This regulation is adopted pursuant to RCW 90.58.140(3) and 90.58.200 the Shoreline Management Act of 1971.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-010, filed 6/14/78. Order DE 75-22, § 173-14-010, filed 10/16/75. Order 71-18, § 173-14-010, filed 12/16/71.]

WAC 173-14-020 Purpose. RCW 90.58.140(3) requires local governments to establish a program, consistent with rules adopted by the department of ecology, for the administration and enforcement of the permit system for shoreline management established therein. The purpose of this regulation is to establish basic rules for the permit system in harmony with the spirit of RCW 90.58.140(3).

This administrative regulation is drafted to also reflect RCW 90.58.050 which provides that the intent of the Shoreline Management Act is to establish a cooperative program between local government and the state. According to this provision, local government shall have the primary responsibility for initiating and administering the regulatory program of shoreline management, whereas the department shall act primarily in a supportive and review capacity with primary emphasis on insuring compliance with the policies and provisions of the Shoreline Management Act.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-020, filed 6/14/78. Order DE 75-22, § 173-14-020, filed 10/16/75. Order 71-18, § 173-14-020, filed 12/16/71.]

WAC 173-14-030 Definitions. The following definitions shall apply:

(1) "Act" means chapter 286, Laws of 1971 ex. sess., chapter 90.58 RCW, the Shoreline Management Act of 1971 as amended.

(2) "Applicable master program" means the master program approved or adopted by the department pursuant to RCW 90.58.090 or 90.58.190 prior to issuance of the permit by local government.

(3) "Average grade level" means the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under the proposed building or structure: *Provided*, That in the case of structures to be built over water, average grade level shall be the elevation of ordinary high water.

Calculation of the average grade level shall be made by averaging the elevations at the center of all exterior walls of the proposed building or structure.

(4) "Conditional use" means a use, development, or substantial development which is classified as a conditional use or is not classified within the applicable master program.

(5) "Department" means the department of ecology.

(6) "Exempt" developments are those set forth in WAC 173-14-040 which do not meet the definition of substantial development under RCW 90.58.030 (3)(e).

(7) "Fair market value" of a development is the expected price at which the development can be sold to a willing buyer. For developments which involve nonstructural operations such as dredging, drilling, dumping, or filling, the fair market value is the expected cost of hiring a contractor to perform the operation or where no such value can be calculated, the total of labor, equipment use, transportation, and other costs incurred for the duration of the permitted project.

(8) "Final order" includes the approval or disapproval of a permit, or a letter of exemption as set forth in WAC 173-14-115.

(9) "Height" is measured from average grade level to the highest point of a structure: *Provided*, That television antennas, chimneys, and similar appurtenances shall not be used in calculating height, except where it obstructs the view of a substantial number of residences on areas adjoining such shorelines, or the applicable master program provides otherwise: *Provided further*, That temporary construction equipment is excluded in this calculation.

(10) "Local government" means any county, incorporated city, or town which contains within its boundaries any lands or waters subject to this chapter.

(11) "Natural or existing topography" means the topography of the lot, parcel, or tract of real property immediately prior to any site preparation or grading, including excavation or filling.

(12) "Party of record" includes all persons who have notified local government of their desire to receive a copy of the final order on a permit under WAC 173-14-070.

(13) "Permit" means any substantial development, variance, conditional use permit, or revision authorized under chapter 90.58 RCW.

(14) "Public interest" means the interest shared by the citizens of the state or community at large in the affairs of government, or some interest by which their rights or liabilities are affected such as an effect on public property or on health, safety, or general welfare resulting from a use or development.

(15) "Structure" means a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels.

(16) "Transmit" means to send from one person or place to another by mail or hand delivery. The date of transmittal for mailed items is the date that the department's final order is certified for mailing or, for hand-delivered items, is the date of receipt at the destination, and

(17) "Variance" is a means to grant relief from the specific bulk, dimensional or performance standards set forth in the applicable master program and not a means to vary a use of a shoreline.

(18) "Vessel" includes ships, boats, barges, or any other floating craft which are designed and used for navigation and do not interfere with the normal public use of the water.

(19) The definitions and concepts set forth in RCW 90.58.030 also apply as used herein.

[Statutory Authority: RCW 90.58.120 and 90.58.200. 88-19-004 (Order DE 88-23), § 173-14-030, filed 9/8/88. Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-030, filed 5/2/86. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-030, filed 6/14/78. Order DE 76-17, § 173-14-030, filed 7/27/76. Order DE 75-22, § 173-14-030, filed 10/16/75. Order 71-18, § 173-14-030, filed 12/16/71.]

WAC 173-14-040 Developments exempt from substantial development permit requirement. (1) The following developments shall not require substantial development permits:

(a) Any development of which the total cost or fair market value, whichever is higher, does not exceed two thousand five hundred dollars, if such development does not materially interfere with the normal public use of the water or shorelines of the state.

(b) Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "Normal repair" means to restore a development to a state comparable to its original condition within a reasonable period after decay or partial destruction except where repair involves total replacement which is not common practice or causes substantial adverse effects to the shoreline resource or environment.

(c) Construction of the normal protective bulkhead common to single-family residences. A "normal protective" bulkhead is constructed at or near the ordinary high water mark to protect a single family residence and is for protecting land from erosion, not for the purpose of creating land. Where an existing bulkhead is being replaced, it shall be constructed no further waterward of the existing bulkhead than is necessary for construction of new footings.

(d) Emergency construction necessary to protect property from damage by the elements. An "emergency" is an unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with this chapter.

(e) Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities on wetlands, construction of a barn or similar agricultural structure, and the construction and maintenance of irrigation structures including but not limited to head gates, pumping facilities and irrigation channels: *Provided*, That a feedlot of any size, all processing plants, other activities of a commercial nature, alteration of the contour of the wetlands by leveling or filling other than that which results from normal cultivation, shall not be considered normal or necessary farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being used for feeding livestock hay, grain, silage, or other livestock feed, but shall not include land for growing crops or vegetation for livestock feeding and/or grazing, nor shall it include normal livestock wintering operations.

(f) Construction or modification of navigational aids such as channel markers and anchor buoys.

(g) Construction on wetlands by an owner, lessee or contract purchaser of a single family residence for his own use or for the use of his family, which residence does not exceed a height of thirty-five feet above average grade level and which meets all requirements of the state agency or local government having jurisdiction thereof, other than requirements imposed pursuant to this chapter. "Single family residence" means a detached dwelling designed for and occupied by one family including those structures and developments within a contiguous ownership which are a normal appurtenance. An "appurtenance" is necessarily connected to the use and enjoyment of a single family residence and is located landward of the perimeter of a marsh, bog, or swamp. On a state wide basis, normal appurtenances include a garage, deck, driveway, utilities, fences, and grading which does not exceed two hundred fifty cubic yards (except to construct a conventional drainfield). Local circumstances may dictate additional interpretations of normal appurtenances which shall be set forth and regulated within the applicable master program. Construction authorized under this exemption shall be located landward of the ordinary high water mark.

(h) Construction of a dock, designed for pleasure craft only, for the private noncommercial use of the owners, lessee, or contract purchaser of a single-family residence, for which the cost or fair market value, whichever is higher, does not exceed two thousand five hundred dollars.

(i) Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored ground water from the irrigation of lands.

(j) The marking of property lines or corners on state owned lands, when such marking does not significantly interfere with normal public use of the surface of the water.

(k) Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on the effective date of the 1975 amendatory act which were created, developed or utilized primarily as a part of an agricultural drainage or diking system; and

(6) Any project with a certification from the governor pursuant to chapter 80.50 RCW.

(2) Exemptions shall be construed narrowly.

(3) Exempted developments authorized by local government shall be consistent with the policies and provisions of the act and the applicable master program.

[Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-040, filed 5/23/86. Statutory Authority: RCW 90.58.030, 90.58.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-040, filed 4/15/85. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-040, filed 6/14/78; Order DE 76-17, § 173-14-040, filed 7/27/76; Order DE 75-28, § 173-14-040, filed 12/4/75; Order DE 75-22, § 173-14-040, filed 10/16/75; Order 71-18, § 173-14-040, filed 12/16/71.]

WAC 173-14-050 Application of the permit system to substantial development undertaken prior to the act. Substantial development undertaken on the shorelines of the state prior to the effective date of the act shall not require a permit except under the following circumstances:

(1) Where the activity was unlawful prior to the effective date of the act.

(2) Where there has been an unreasonable period of dormancy in the project between its inception and the effective date of the act.

(3) Where the development is not completed within two years after the effective date of the act. In determining the running of the two-year period hereof, those periods of time after June 1, 1971, shall not be included during which a development was not actually pursued by construction and the pendency of litigation reasonably related thereto made it reasonable not to so pursue.

(4) Where substantial development occurred prior to the effective date of the act on a shoreline and continued on to a different lake, river or tributary after the effective date, a permit shall be required for the development undertaken after the effective date.

Substantial development undertaken prior to the effective date of the act shall not continue without a permit into other phases that were not part of the plan being followed at the time construction commenced.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-050, filed 6/14/78; Order 73-23, § 173-14-050, filed 10/23/73; Order 71-18, § 173-14-050, filed 12/16/71.]

WAC 173-14-055 Nonconforming development standards. Where nonconforming development standards do not exist in the applicable master program, the following definitions and standards shall apply:

(1) "Nonconforming development" means a shoreline use or structure which was lawfully constructed or established prior to the effective date of the act or the applicable master program, or amendments thereto, but which does not conform to present regulations or standards of the program or policies of the act;

(2) Nonconforming development may be continued provided that it is not enlarged, intensified, increased, or altered in any way which increases its nonconformity;

(3) A nonconforming development which is moved any distance must be brought into conformance with the applicable master program and the act;

(4) If a nonconforming development is damaged to an extent not exceeding seventy-five percent replacement cost of the original structure, it may be reconstructed to those configurations existing immediately prior to the time the structure was damaged, so long as restoration is completed within one year of the date of damage;

(5) If a nonconforming use is discontinued for twelve consecutive months or for twelve months during any two-year period, any subsequent use shall be conforming. It shall not be necessary to show that the owner of the property intends to abandon such nonconforming use in order for the nonconforming rights to expire;

(6) A nonconforming use shall not be changed to another nonconforming use, regardless of the conforming or nonconforming status of the building or structure in which it is housed; and

(7) An undeveloped lot, tract, parcel, site, or division which was established prior to the effective date of the act or the applicable master program but which does not conform to the present lot size or density standards may be developed so long as such development conforms to other requirements of the applicable master program and the act.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-14-055, filed 8/5/87. Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-055, filed 5/23/86.]

WAC 173-14-060 Time requirements of permit. The following time requirements shall apply to all permits:

(1) Substantial progress toward completion of a permitted activity shall be undertaken within two years after the approval of the permit by local government. Substantial progress shall include all of the following, where applicable: The making of contracts; signing of notice to proceed; completion of grading and excavation; and the laying of major utilities; or, where no construction is involved, commencement of the activity: *Provided*, That local government may authorize a single extension before the end of the time limit, with prior notice to parties of record and the department, for up to one year based on reasonable factors.

(2) Permit authorization shall terminate within five years after the approval of the permit by local government: *Provided*, That local government may authorize a single extension before the end of the time limit, with prior notice to parties of record and the department, for up to one year based on reasonable factors.

(3) The running of a permit time period shall not include the time during which an activity was not actually pursued due to the pendency of reasonably related administrative appeals or litigation.

(4) Local government may issue permits with a fixed termination date of less than five years.

(5) When permit approval is based on conditions, such conditions shall be satisfied prior to occupancy or use of a structure or prior to commencement of a nonstructural activity: *Provided*, That an alternative compliance limit may be specified in the permit.

(6) Revisions to permits under WAC 173-14-064 may be authorized after original permit authorization has expired under subsection (2) of this section: *Provided*, That this procedure shall not be used to extend the original permit time requirements.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-14-060, filed 8/5/87; 80-04-027 (Order DE 80-9), § 173-14-060, filed 3/18/80; 78-07-011 (Order DE 78-7), § 173-14-060, filed 6/14/78; Order DE 75-22, § 173-14-060, filed 10/16/75; Order 71-18, § 173-14-060, filed 12/16/71.]

WAC 173-14-062 Applicability of permit system to federal agencies. The permit system shall be applied in the following manner to federal agencies on lands meeting the criteria of the Shoreline Management Act and the department for shorelines of the state.

(1) Federal agencies shall not be required to obtain permits for developments undertaken by the federal government on lands owned in fee by the federal government, unless the federal government grants or reserves to the state or local government, substantial jurisdiction over activities on those lands.

(2) The permit system shall apply to nonfederal activities constituting developments undertaken on lands subject to nonfederal ownership, lease or easement, even though such lands may fall within the external boundaries of a federal ownership.

(3) The permit system shall apply to developments undertaken on lands not federally owned but under lease, easement, license, or other similar federal property rights short of fee ownership, to the federal government.

(4) Federal agency actions shall be consistent with the approved Washington state coastal zone management program subject to certain limitations set forth in the Federal Coastal Zone Management Act, 16 U.S.C. 1451 et seq. and regulations adopted pursuant thereto.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-062, filed 6/14/78; Order DE 75-22, § 173-14-062, filed 10/16/75.]

WAC 173-14-064 Revisions to permits. When an applicant seeks to revise a permit, local government shall request from the applicant detailed plans and text describing the proposed changes in the permit.

(1) If local government determines that the proposed changes are within the scope and intent of the original permit, local government may approve a revision.

(2) "Within the scope and intent of the original permit" means all of the following:

(a) No additional over water construction is involved except that pier, dock, or float construction may be increased by five hundred square feet or ten percent from the provisions of the original permit, whichever is less;

(b) Ground area coverage and height of each structure may be increased a maximum of ten percent from the provisions of the original permit;

(c) Additional separate structures may not exceed a total of two hundred fifty square feet;

(d) The revised permit does not authorize development to exceed height, lot coverage, setback, or any other requirements of the applicable master program except as authorized under the original permit;

(e) Additional landscaping is consistent with conditions (if any) attached to the original permit and with the applicable master program;

(f) The use authorized pursuant to the original permit is not changed; and

(g) No substantial adverse environmental impact will be caused by the project revision.

(3) If the sum of the revision and any previously approved revisions under WAC 173-14-064 violate the provisions in WAC 173-14-064(2) above, local government shall require that the applicant apply for a new permit in the manner provided for herein.

(4) Within eight days of the date of final local government action, the revision including the revised site plan, text and the final ruling on consistency with this section shall be filed with the department and the attorney general. In addition, local government shall notify parties of record of their action.

(5) If the revision to the original permit involves a conditional use or variance which was conditioned by the department, local government shall submit the revision to the department for the department's approval, approval with conditions, or denial. The revision shall indicate that it is being submitted under the requirements of this subsection. The department shall render and transmit to local government and the applicant its final decision within fifteen days of the date of the department's receipt of the submittal from local government. Local government shall notify parties of record of the department's final decision.

(6) The revised permit is effective immediately upon final action by local government or, when appropriate under WAC 173-14-064(5), by the department.

(7) Appeals shall be in accordance with RCW 90.58.180 and shall be filed within thirty days from the date of receipt of the local government's action by the department or, when appropriate under WAC 173-14-064(5), the date the department's final decision is transmitted to local government and the applicant. Appeals shall be based only upon contentions of noncompliance with the provisions of WAC 173-14-064(2) above. Construction undertaken pursuant to that portion of a revised permit not authorized under the original permit is at the applicant's own risk until the expiration of the appeals deadline. If an appeal is successful in proving that a revision is not within the scope and intent of the original permit, the decision shall have no bearing on the original permit.

[Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-064, filed 5/23/86. Statutory Authority: RCW 90.58.030, 90.58.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-064, filed 4/15/85. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-064, filed 6/14/78; Order DE 76-17, § 173-14-064, filed 7/27/76; Order DE 75-22, § 173-14-064, filed 10/16/75.]

WAC 173-14-070 Notice required. Upon receipt of a proper application for a shoreline management substantial development, conditional use, or variance permit, local government shall insure that notices thereof are published at least once a week on the same day of the week for two consecutive weeks in a newspaper of general circulation within the area in which the development is proposed. In addition, local government shall insure that additional notice of such application is given by at least one of the following methods:

(1) Mailing of the notice to the latest recorded real property owners as shown by the records of the county assessor within at least three hundred feet of the boundary of the property upon which the substantial development is proposed;

(2) Posting of the notice in a conspicuous manner on the property upon which the project is to be constructed or,

(3) Any other manner deemed appropriate by local authorities to accomplish the objectives of reasonable notice to adjacent landowners and the public.

An affidavit that the notice has been properly published, and/or as applicable, posted or deposited in the U.S. mail pursuant to this section shall be affixed to the application. All such notices shall include a statement that within thirty days of the final newspaper publication, any interested person may submit his written views upon the application to the appropriate local government or notify the local government of his desire to receive a copy of the action taken upon the application. All persons who notify the appropriate local government of their desire to receive a copy of the final order shall be notified in a timely manner of the action taken upon the application. If a hearing is to be held on an application, notices of such a hearing shall include a statement that any person may submit oral or written comments on an application at such hearing.

All notices of applications for shoreline management substantial development, conditional use, or variance permits shall contain, as a minimum, the information called for in the following form:

NOTICE OF APPLICATION FOR
SHORELINE MANAGEMENT
SUBSTANTIAL DEVELOPMENT, CONDITIONAL USE, OR
VARIANCE PERMIT (use appropriate)

Notice is hereby given that __(state full name)__ who is __(describe relationship to property, such as owner, purchaser, lessee, etc.)__ of the below-described property has filed an application for a substantial development, conditional use, or variance permit __(use appropriate)__ for the development of __(describe development, including uses)__ located at __(give street address, if known, otherwise give distance and direction to nearest town)__ within . . (quarter section) of section . . of township N., Range . . W.M., in __(city or town)__ __(county)__ Washington. Said development is proposed to be within __(name of water area)__ and/or its associated wetlands. Any person desiring to express his views or to be notified of the action taken on this application should notify __(name of local government official)__ in writing of his interest within thirty days of the final date of publication of this notice which is __(date)__.

Written comments must be received by __(date)__.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-070, filed 6/14/78; Order DE 76-17, § 173-14-070, filed 7/27/76; Order DE 75-22, § 173-14-070, filed 10/16/75; Order 71-18, § 173-14-070, filed 12/16/71.]

WAC 173-14-080 Public hearings. Local governments may establish a mandatory or optional public hearing procedure to precede the issuance or denial of substantial development, conditional use, or variance permits in order to allow interested persons to present their views.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-080, filed 6/14/78; Order DE 75-22, § 173-14-080, filed 10/16/75; Order 71-18, § 173-14-080, filed 12/16/71.]

WAC 173-14-090 Filing with department and attorney general. A final action by local government on an application for a permit, whether it be an approval or denial, or a revision shall be filed with the department and attorney general. A "final action" is that order or ruling, whether it be an approval or denial, which is established after local administrative appeals related to the permit have lapsed. When a substantial development permit and a conditional use or variance permit are required for a development, the filing of local government's rulings on the permits shall be made concurrently.

Copies of the original application, affidavit of public notice, site plan, vicinity map, permit, and final order shall be filed with the department and attorney general within eight days of the local government final action on a permit. Where applicable, local government shall also file the applicable documents required by chapter 43.21C RCW, the State Environmental Policy Act, or in lieu thereof, a statement summarizing the actions and dates of such actions taken under chapter 43.21C RCW.

Filing is not complete until the required documents have been received by the department and by the attorney general. This same rule shall apply to conditional uses, variances, rescissions and revisions of permits. If the filing is determined by the department to be incomplete, the department will identify the deficiencies and so notify local government and the applicant in writing. If the requested materials are not received by the department within thirty days of notification, the permit will be returned to local government for completion and resubmittal.

"Date of filing" of a local government final action involving approval or denial of a substantial development permit, or involving a denial of a variance or conditional use permit, is the date of actual receipt of a completed filing by the department. With regard to a permit for a conditional use or variance approved by local government, and such permits which also involve concurrent filing by local government of a substantial development permit, the "date of filing" means the date the department's final order on the variance or conditional use permit is transmitted to local government and the applicant. The department shall in all circumstances notify in writing the local government and the applicant of the "date of filing."

[Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-090, filed 5/23/86. Statutory Authority: RCW 90.58.030, 90.58.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-090, filed 4/15/85. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-090, filed 6/14/78; Order DE 76-17, § 173-14-090, filed 7/27/76; Order DE 75-22, § 173-14-090, filed 10/16/75; Order 71-18, § 173-14-090, filed 12/16/71.]

WAC 173-14-100 Review criteria for substantial development permits. * (1) Prior to the effective date of an applicable master program, a substantial development permit shall be granted only when the development proposed is consistent with:

(a) The policies and procedures of the act;

(b) The guidelines and regulations of the department; and,

(c) So far as can be ascertained, the master program being developed for the area.

(2) After the adoption or approval, as appropriate, by the department of an applicable master program, a substantial development permit shall be granted only when the development proposed is consistent with:

(a) The policies and procedures of the act;

(b) The provisions of this regulation, and

(c) The applicable master program adopted or approved for the area.

*The State Environmental Policy Act, chapter 43.21C RCW, has been determined to be applicable to government permit programs. See WAC 461-08-175, rules of practice and procedures of the shorelines hearings board. Also see State Environmental Policy Act guidelines.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-100, filed 6/14/78; Order DE 75-22, § 173-14-100, filed 10/16/75; Order 71-18, § 173-14-100, filed 12/16/71.]

WAC 173-14-110 Application for substantial development, conditional use, or variance permit. Applications for a substantial development, conditional use, or variance permit shall contain, as a minimum, the information called for in the following form. Such forms shall be supplied by local government.

APPLICATION FOR SUBSTANTIAL DEVELOPMENT, CONDITIONAL USE, OR VARIANCE PERMIT

TO THE APPLICANT: This is an application for a substantial development, conditional use, or variance permit as authorized by the Shoreline Management Act of 1971. It is suggested that you check with appropriate local, state, or federal officials to determine whether your project falls within any other permit systems.

1. Name of applicant . . . . . .
2. Mailing address . . . . . .
3. Relation of applicant to property:
   Owner . . . . . .
   Purchaser . . . . . .
   Lessee . . . . . .
   Other . . . . . .
4. Name and address of owner, if other than applicant
   . . . . . .
   . . . . . .
5. General location of proposed project (please list section to the nearest quarter section, township, and range)
   . . . . . .
6. Name of water area and/or wetlands within which development is proposed
   . . . . . .
7. Current use of the property with existing improvements
   . . . . . .
   . . . . . .
8. Proposed use of property (Please be specific) . . . . . .
   . . . . . .
   . . . . . .
9. (To be completed by local official.) Nature of the existing shoreline. (Describe type of shoreline, such as marine, stream, lake, lagoon, marsh, bog, swamp, flood plain, floodway, delta; type of beach, such as accretion, erosion, high bank, low bank, or dike; material such as sand, gravel, mud, clay, rock, riprap, and extent and type of bulkheading, if any.) . . . . . .
   . . . . . .
   . . . . . .
   . . . . . .
10. (To be completed by local official.) In the event that any of the proposed buildings or structures will exceed a height of thirty-five feet above the average grade level, indicate the approximate location of and number of residential units, existing and potential, that will have an obstructed view.
11. (To be completed by local official.) If the application involves a conditional use or variance, set forth in full that portion of the master program which provides that the proposed use may be a conditional use, or, in the case of a variance, from which the variance is being sought.

Project diagrams: Draw all site plans and maps to scale, clearly indicating scale on lower right-hand corner and attach them to the application.

(a) Site plan: Include on plan:

(1) Site boundary.

(2) Property dimensions in vicinity of project.

(3) Ordinary high-water mark.

(4) Typical cross section or sections showing:

(i) Existing ground elevations.

(ii) Proposed ground elevation.

(iii) Height of existing structures.

(iv) Height of proposed structures.

(5) Where appropriate, proposed land contours using five-foot intervals in water area and ten-foot intervals on areas landward of ordinary high-water mark, if development involves grading, cutting, filling, or other alteration of land contours.

(6) Show dimensions and locations of existing structures which will be maintained.

(7) Show dimensions and locations of proposed structures.

(8) Identify source, composition, and volume of fill material.

(9) Identify composition and volume of any extracted materials, and identify proposed disposal area.

(10) Location of proposed utilities, such as sewer, septic tanks and drainfields, water, gas, electricity.

(11) If the development proposes septic tanks, does proposed development comply with local health and state regulations?

(12) Shoreline designation according to master program.

(13) Show which areas are shorelines and which are shorelines of state-wide significance.

(b) Vicinity map.

(1) Indicate site location using natural points of reference (roads, state highways, prominent land marks, etc.).

(2) If the development involves the removal of any soils by dredging or otherwise, please identify the proposed disposal site on the map. If the disposal site is beyond the confines of the vicinity map, provide another vicinity map showing the precise location of the disposal site and its distance to the nearest city or town.

(3) Give a brief narrative description of the general nature of the improvements and land use within one thousand feet in all directions from development site (i.e., residential to the north, commercial to the south, etc.)

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-110, filed 6/14/78. Order DE 76-17, § 173-14-110, filed 7/27/76; Order DE 75-22, § 173-14-110, filed 10/16/75; Order 71-18, § 173-14-110, filed 12/16/71.]

WAC 173-14-115 Letter of exemption. Whenever a development falls within the exemptions stated in WAC 173-14-040 and the development is subject to a U.S. Corps of Engineers section 10 permit under the Rivers and Harbors Act of 1899, or a section 404 permit under the Federal Water Pollution Control Act of 1972, the local government shall prepare a letter addressed to the applicant and the department exempting the development from the substantial development permit requirements of chapter 90.58 RCW. This exemption shall be in substantially the following form. Such forms will be supplied by local government.

EXEMPTION FROM SHORELINE MANAGEMENT ACT SUBSTANTIAL DEVELOPMENT PERMIT REQUIREMENT

To: _____

(name and address of the applicant)

The proposal by (name of applicant) to undertake the the following development (please be specific)

_____

upon the following property (please list legal description, i.e., section to the nearest quarter section)

_____

_____

within (name of water area) and/or its associated wetlands is exempt from the requirement of a substantial development permit because the development

_____

(Identify exemptions as outlined in WAC 173-14-040)

_____

(Corps Public Notice Number)

The proposed development is consistent or inconsistent with

CHECK ONE

CONSISTENT	INCONSISTENT	
☐	☐	Policies of the Shoreline Management Act.
☐	☐	The guidelines of the Department of Ecology where no master program has been finally approved or adopted by the department
☐	☐	The master program

_____ _____

(Date) (Signature of Authorized Local Governmental Official)

[Statutory Authority: RCW 90.58.030, 90.58.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-115, filed 4/15/85. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-115, filed 6/14/78. Order DE 76-17, § 173-14-115, filed 7/27/76; Order DE 75-22, § 173-14-115, filed 10/16/75.]

WAC 173-14-120 Permits for substantial development, conditional use, or variance. Each permit for a substantial development, conditional use or variance, issued by local government shall contain a provision that construction pursuant to the permit shall not begin and is not authorized until thirty days from the date of filing as defined in RCW 90.58.140(6) and WAC 173-14-090; or until all review proceedings initiated within thirty days from the date of such filing have been terminated; except as provided in RCW 90.58.140 (5)(a)(b)(c).

Permits for substantial development, conditional use, or variance shall be in substantially the following form. Such forms will be supplied by local government.

SHORELINE MANAGEMENT ACT OF 1971
PERMIT FOR SHORELINE MANAGEMENT SUBSTANTIAL DEVELOPMENT, CONDITIONAL USE, OR VARIANCE

NOTE - THIS PAGE FOR LOCAL GOVERNMENT USE ONLY

(Consecutive but beginning with No. 1)

Application No.

Administering Agency

(city or county)

Date received

Approved Denied

Date

Type of Action(s)

☐ Substantial Development Permit
☐ Conditional Use Permit
☐ Variance Permit

Pursuant to chapter 90.58 RCW, a permit is hereby granted/denied to:

_____

(name of applicant)

_____

(address)

_____

to undertake the following development. (Please be specific)

_____

_____

_____

upon the following property (please list the legal description, i.e., section to the nearest quarter section, township, range):

_____

_____

Within (name of water area) and/or its associated wetlands.

The project will (be/not be) within shorelines of state wide significance (RCW 90.58.030). The project will be located within a (environment) designation. The following master program provisions are applicable to this development (state the master program section or page number): If a conditional use or variance, also identify the portion of the master program which provides that the proposed use may be a conditional use, or that portion of the master program being varied.

_____

Development pursuant to this permit shall be undertaken pursuant to the following terms and conditions:

_____

_____

_____

_____

This permit is granted pursuant to the Shoreline Management Act of 1971 and nothing in this permit shall excuse the applicant from compliance with any other federal, state or local statutes, ordinances or regulations applicable to this project, but not inconsistent with the Shoreline Management Act (chapter 90.58 RCW).

This permit may be rescinded pursuant to RCW 90.58.140(8) in the event the permittee fails to comply with the terms or conditions hereof.

CONSTRUCTION PURSUANT TO THIS PERMIT WILL NOT BEGIN OR IS NOT AUTHORIZED UNTIL THIRTY DAYS FROM THE DATE OF FILING AS DEFINED IN RCW 90.58.140(6) AND WAC 173-14-090, OR UNTIL ALL REVIEW PROCEEDINGS INITIATED WITHIN THIRTY DAYS FROM THE DATE OF SUCH FILING HAVE TERMINATED; EXCEPT AS PROVIDED IN RCW 90.58.140 (5)(a)(b)(c).

_____ _____

(Date) (Signature of Authorized Local Government Official)

_____

THIS SECTION FOR DEPARTMENT USE ONLY IN REGARD TO A CONDITIONAL USE OR VARIANCE PERMIT.

Date received by the department _____

Approved _____ Denied _____

This conditional use/variance permit is approved/denied by the department pursuant to chapter 90.58 RCW.

Development shall be undertaken pursuant to the following additional terms and conditions:

_____

_____

_____ _____

(Date) (Signature of Authorized Department Official)

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-120, filed 6/14/78. Order DE 76-17, § 173-14-120, filed 7/27/76; Order DE 75-22, § 173-14-120, filed 10/16/75; Order 71-18, § 173-14-120, filed 12/16/71.]

WAC 173-14-130 Department review of conditional use and variance permits. After local government approval of a conditional use or variance permit, local government shall submit the permit to the department for the department's approval, approval with conditions, or denial. When the department intends to conditionally approve a conditional use or a variance permit, the department shall notify the local government of its intention and the nature of the conditions prior to rendering its final decision. The department shall render and transmit to local government and the applicant its final decision approving, approving with conditions, or disapproving the permit within thirty days of the date of submittal by local government pursuant to WAC 173-14-090. Local government shall notify those interested persons having requested notification from local government pursuant to WAC 173-14-070 of the departments final decision.

[Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-130, filed 5/23/86. Statutory Authority: RCW 90.58.030, 90.58.120 and 90.58.200. 85-09-043 (Order DE 85-05), § 173-14-130, filed 4/15/85. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-130, filed 6/14/78. Order DE 76-17, § 173-14-130, filed 7/27/76; Order DE 75-22, § 173-14-130, filed 10/16/75.]

WAC 173-14-140 Review criteria for conditional use permits. The purpose of a conditional use permit is to allow greater flexibility in varying the application of the use regulations of the master program in a manner consistent with the policies of RCW 90.58.020: *Provided*, That conditional use permits should also be granted in a circumstance where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020. In authorizing a conditional use, special conditions may be attached to the permit by local government or the department to prevent undesirable effects of the proposed use.

(1) Uses which are classified or set forth in the applicable master program as conditional uses may be authorized provided the applicant can demonstrate all of the following:

(a) That the proposed use is consistent with the policies of RCW 90.58.020 and the policies of the master program;

(b) That the proposed use will not interfere with the normal public use of public shorelines;

(c) That the proposed use of the site and design of the project is compatible with other permitted uses within the area;

(d) That the proposed use will cause no unreasonable adverse effects to the shoreline environment in which it is to be located; and

(e) That the public interest suffers no substantial detrimental effect.

(2) Other uses which are not classified or set forth in the applicable master program may be authorized as conditional uses provided the applicant can demonstrate, in addition to the criteria set forth in WAC 173-14-140(1) above,

that extraordinary circumstances preclude reasonable use of the property in a manner consistent with the use regulations of the master program.

(3) Uses which are specifically prohibited by the master program may not be authorized.

(4) In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

[Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-140, filed 5/23/86. Statutory Authority: RCW 90.58.200 and 90.58.140(3). 81-04-027 (Order DE 80-52), § 173-14-140, filed 2/2/81. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-140, filed 6/14/78; Order DE 75-22, § 173-14-140, filed 10/16/75.]

WAC 173-14-150 Review criteria for variance permits. The purpose of a variance permit is strictly limited to granting relief from specific bulk, dimensional or performance standards set forth in the applicable master program where there are extraordinary or unique circumstances relating to the property such that the strict implementation of the master program will impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020.

(1) Variance permits should be granted in a circumstance where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020. In all instances extraordinary circumstances shall be shown and the public interest shall suffer no substantial detrimental effect.

(2) Variance permits for development that will be located landward of the ordinary high water mark (OHWM), as defined in RCW 90.58.030 (2)(b), except within those areas designated by the department as marshes, bogs, or swamps pursuant to chapter 173-22 WAC, may be authorized provided the applicant can demonstrate all of the following:

(a) That the strict application of the bulk, dimensional or performance standards set forth in the applicable master program precludes or significantly interferes with a reasonable use of the property not otherwise prohibited by the master program;

(b) That the hardship described in WAC 173-14-150 (2)(a) above is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of the master program, and not, for example, from deed restrictions or the applicant's own actions;

(c) That the design of the project is compatible with other permitted activities in the area and will not cause adverse effects to adjacent properties or the shoreline environment;

(d) That the requested variance does not constitute a grant of special privilege not enjoyed by the other properties in the area, and is the minimum necessary to afford relief; and

(e) That the public interest will suffer no substantial detrimental effect.

(3) Variance permits for development that will be located either waterward of the ordinary high water mark (OHWM), as defined in RCW 90.58.030 (2)(b), or within marshes, bogs, or swamps as designated by the department under chapter 173-22 WAC, may be authorized provided the applicant can demonstrate all of the following:

(a) That the strict application of the bulk, dimensional or performance standards set forth in the applicable master program precludes a reasonable use of the property not otherwise prohibited by the master program;

(b) That the proposal is consistent with the criteria established under (2)(b) through (e) of this section; and

(c) That the public rights of navigation and use of the shorelines will not be adversely affected.

(4) In the granting of all variance permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example if variances were granted to other developments in the area where similar circumstances exist the total of the variances shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

(5) Requests for varying the use to which a shoreline area is to be put are not requests for variances, but rather requests for conditional uses. Such requests shall be evaluated using the criteria set forth in WAC 173-14-140.

[Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-150, filed 5/23/86. Statutory Authority: RCW 90.58.200 and 90.58.140(3). 81-04-027 (Order DE 80-52), § 173-14-150, filed 2/2/81. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-150, filed 6/14/78; Order DE 76-17, § 173-14-150, filed 7/27/76; Order DE 75-22, § 173-14-150, filed 10/16/75.]

WAC 173-14-155 Minimum standards for conditional use and variance permits. Pursuant to RCW 90.58.100(5) and 90.58.140(3), the criteria contained in WAC 173-14-140 and 173-14-150 for shoreline conditional use and variance permits shall constitute the minimum criteria for review of these permits by local government and the department. Local government and the department may, in addition, apply the more restrictive criteria where it exists in approved and adopted master programs.

[Statutory Authority: RCW 90.58.200 and 90.58.140(3). 81-04-027 (Order DE 80-52), § 173-14-155, filed 2/2/81.]

WAC 173-14-170 Requests for review. All requests for review of any final permit decisions under chapter 90.58 RCW and chapter 173-14 WAC are governed by the procedures established in RCW 90.58.180 and chapter 461-08 WAC, the rules of practice and procedure of the shorelines hearings board.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-170, filed 6/14/78; Order DE 75-22, § 173-14-170, filed 10/16/75.]

WAC 173-14-174 Certification of requests for review. All requests for review filed with the department pursuant to RCW 90.58.180(1) must contain the items required by WAC 461-08-055. Such requests shall be filed with the department within thirty days of the date of filing as defined in RCW 90.58.140(6) and WAC 173-14-090. The department will certify the request for review to the

shorelines hearings board within thirty days of receipt of same if it appears the request has set forth valid reasons to seek review. Failure of the department to provide such certification does not preclude the requestor from obtaining certification from the attorney general or from obtaining a review in the superior court under any right to review otherwise available.

[Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-174, filed 6/14/78.]

Chapter 173-15 WAC
PERMITS FOR OIL OR NATURAL GAS EXPLORATION ACTIVITIES CONDUCTED FROM STATE MARINE WATERS

WAC
173-15-010 Authority and purpose.
173-15-020 Definitions.
173-15-030 Exploration activity permit system.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-15-040 Penalties. [Statutory Authority: RCW 90.58.550, 90.58.560 and 1983 c 138. 84-01-028 (Order DE 83-35), § 173-15-040, filed 12/12/83.] Repealed by 87-16-101 (Order DE 87-09), filed 8/5/87. Statutory Authority: RCW 90.58.200.

WAC 173-15-010 Authority and purpose. These rules are promulgated pursuant to RCW 90.58.550(6) for the purpose of establishing the basic requirements for the exploration activity permit system.

[Statutory Authority: RCW 90.58.550, 90.58.560 and 1983 c 138. 84-01-028 (Order DE 83-35), § 173-15-010, filed 12/12/83.]

WAC 173-15-020 Definitions. The following definitions shall apply:

(1) "Department" means the department of ecology.

(2) "Exploration activity" means reconnaissance or survey work related to gather information about geologic features and formations underlying or adjacent to marine waters. Such activities include sonic, ultrasonic, seismic, sparker, side-scan sonar, infrared, heat sensor, chemical analysis (sniffer), or other remote sensing techniques which do not disturb the surface of the aquatic lands, as well as drilling, core sampling, or other exploratory techniques which penetrate the beds underlying or adjacent to marine waters.

(3) "Marine waters" includes the waters of Puget Sound north to the Canadian border, the waters of the Strait of Juan de Fuca, the waters between the western boundary of the state and the ordinary high water mark, and related bays and estuaries. RCW 90.58.550 (1)(b).

(4) "Normal public use of the marine waters of the state" means those activities generally enjoyed by members of the public including, but not limited to, recreation, fishing (commercial and sports), navigation and commerce.

(5) "Vessel" includes ships, boats, barges, or any other floating craft. RCW 90.58.550 (1)(c).

(6) "Director" means the director of the department of ecology.

(7) "Person" means any individual, public or private corporation, agency, or other entity whatsoever except for state or federal agencies.

[Statutory Authority: RCW 90.58.550, 90.58.560 and 1983 c 138. 84-01-028 (Order DE 83-35), § 173-15-020, filed 12/12/83.]

WAC 173-15-030 Exploration activity permit system. The permit system established by RCW 90.58.550 shall be as follows:

(1) Applicability.

(a) A person desiring to perform oil or natural gas exploration activities by vessel located on or within marine waters of the state shall first obtain a permit from the department.

(b) An exploration activity permit obtained under (a) of this subsection shall be the sole permit required to be obtained for exploration activity under chapter 90.58 RCW.

(c) Except as provided in (b) of this subsection, nothing herein shall modify any powers of local governments set forth in chapter 90.58 RCW.

(2) Exploration activity permit application.

(a) Applications for an exploration activity permit shall be supplied by the department.

(b) Applications shall be filed with the Shorelands Division, Department of Ecology, Headquarters Office, Olympia, WA 98504.

(c) No application shall be processed until it is deemed complete by the department.

(d) Each application for an exploration activity permit shall be accompanied by a completed environmental checklist as provided in Title 197 WAC.

(3) Processing of complete application.

(a) A complete application will be forwarded to state natural resource management agencies and local governments and Indian tribes affected by the proposed exploration activity.

(b) Comments will be requested regarding the proposed exploration activity and its compatibility with the criteria established under RCW 90.58.550(2). Normally, reviewing agencies will be allowed fifteen days, from receipt of the application as provided by the department, in which to submit comments to the department.

(4) Public notice.

(a) Upon receipt of a completed application, the department shall instruct the applicant to publish notice thereof.

(b) Notices of the proposed exploration activity shall be published in the newspaper of the largest general circulation within each of the counties in which the activity is proposed.

(c) Any person wishing to express views on the proposed exploration activity will be given fifteen days to comment to the department.

(d) All notices of applications for exploration activity permits shall contain, as a minimum, the information called for in the following form:

Notice of Application for
Exploration Activity Permit

Notice is hereby given that __(company name of institution)__ has filed an application for an exploration activity permit for oil and/or natural gas survey and reconnaissance work in __(list major bodies of water)__

of receipt of the penalty to the department or local government for remission or mitigation of such penalty. Upon receipt of the application, the department or local government may remit or mitigate the penalty only upon a demonstration of extraordinary circumstances, such as the presence of information or factors not considered in setting the original penalty.

When a penalty is imposed jointly by the department and local government, it may be remitted or mitigated only upon such terms as both the department and the local government agree.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-17-050, filed 8/5/87.]

WAC 173-17-060 Appeal of civil penalty. (1) Right of appeal. Persons incurring a penalty imposed by the department or imposed jointly by the department and local government may appeal the same to the shorelines hearings board. Appeals to the shorelines hearings board are contested cases subject to the provisions of chapter 34.04 RCW. Persons incurring a penalty imposed by local government may appeal the same to the local government legislative authority.

(2) Timing of appeal. Appeals shall be filed within thirty days of receipt of notice of penalty unless an application for remission or mitigation is made to the department or local government. If such application is made, appeals shall be filed within thirty days of receipt of local government's and/or the department's decision regarding the remission or mitigation.

(3) Penalties due.

(a) Penalties imposed under this section shall become due and payable thirty days after receipt of notice imposing the same unless application for remission or mitigation is made or an appeal is filed. Whenever an application for remission or mitigation is made, penalties shall become due and payable thirty days after receipt of local government's and/or the department's decision regarding the remission or mitigation. Whenever an appeal of a penalty is filed, the penalty shall become due and payable upon completion of all review proceedings and upon the issuance of a final decision confirming the penalty in whole or in part.

(b) If the amount of a penalty owed the department is not paid within thirty days after it becomes due and payable, the attorney general, upon request of the department, shall bring an action in the name of the state of Washington to recover such penalty. The action shall be brought in Thurston County or in any county in which such violator may do business. If the amount of a penalty owed local government is not paid within thirty days after it becomes due and payable, local government may take actions necessary to recover such penalty.

(4) Penalty recovered. Penalties recovered by the department shall be paid to the state treasurer. Penalties recovered by local government shall be paid to the local government treasury. Penalties recovered jointly by the department and local government shall be divided equally between the department and the local government unless otherwise stipulated in the order.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-17-060, filed 8/5/87.]

WAC 173-17-070 Criminal penalty. The procedures for criminal penalties shall be governed by RCW 90.58.220.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-17-070, filed 8/5/87.]

WAC 173-17-080 Oil or natural gas exploration—Penalty. Persons violating the provisions of RCW 90.58.550 or chapter 173-15 WAC shall be subject to a civil penalty issued by the department in an amount of up to five thousand dollars a day. The procedures for oil or natural gas exploration penalties shall be governed by RCW 90.58.560.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-17-080, filed 8/5/87.]

Chapter 173-18 WAC

SHORELINE MANAGEMENT ACT—STREAMS AND RIVERS CONSTITUTING SHORELINES OF THE STATE

WAC

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173-18-350 Snohomish County.
173-18-360 Spokane County.
173-18-370 Stevens County.
173-18-380 Thurston County.
173-18-390 Wahkiakum County.
173-18-400 Walla Walla County.
173-18-410 Whatcom County.
173-18-420 Whitman County.
173-18-430 Yakima County.

WAC 173-18-010 Purpose. The department of ecology, pursuant to RCW 90.58.300, is designated the state agency responsible for the program of regulation of the

shorelines of the state. This chapter delimits the streams and rivers and portions thereof which constitute shorelines of the state pursuant to RCW 90.58.030 (2)(d) and (e).

[Order DE 72-13, § 173-18-010, filed 6/30/72.]

WAC 173-18-020 Applicability. The provisions of this chapter shall apply state wide.

[Order DE 72-13, § 173-18-020, filed 6/30/72.]

WAC 173-18-030 Definitions. The definitions and concepts set forth in RCW 90.58.030 shall apply as used herein.

[Order DE 72-13, § 173-18-030, filed 6/30/72.]

WAC 173-18-040 Streams and rivers. The following provisions of this chapter delimit, by county, the streams and rivers which constitute shorelines of the state as follows:

(1) Streams which constitute shorelines.

(a) Western Washington. The following provisions describe the streams in Western Washington from the point at which the stream reaches a mean annual flow of twenty cubic feet per second down to the mouth of said stream or river: *Provided*, That the stream falls at said point, within the jurisdiction of chapter 90.58 RCW.

(b) Eastern Washington. The following provisions describe the streams in Eastern Washington from the point at which the stream reaches a mean annual flow of twenty cubic feet per second down to the mouth of said stream or river: *Provided*, That the stream falls at said point, within the jurisdiction of chapter 90.58 RCW.

(2) Rivers which constitute shorelines of state-wide significance.

(a) Western Washington. The following provisions describe the point on those rivers in Western Washington where the mean annual flow reaches one thousand cubic feet per second and lists said river in all counties below said point through which said river passes with a mean annual flow in excess of one thousand cubic feet per second: *Provided*, That the river falls at said point within the jurisdiction of chapter 90.58 RCW.

(b) Eastern Washington. The following provisions describe either of the following points on those rivers in Eastern Washington, whichever is farther upstream:

(i) The point at which the mean annual flow exceeds two hundred cubic feet per second, or

(ii) The lowest extremity of the first three hundred square miles of drainage area east of the crest of the Cascade Range, provided that either of said points which is utilized is within the jurisdiction of chapter 90.58 RCW.

(iii) The following provisions additionally list said river in all counties below said point through which said river passes.

(3) Streams or rivers outside the jurisdiction of chapter 90.58 RCW. In those cases where the above described points on streams or rivers fall in geographical areas outside of the jurisdiction of chapter 90.58 RCW. The following provisions list said streams or rivers in all counties downstream from the boundaries of said geographical areas. In such listing, if the body of water is a shoreline of state-wide significance below said geographical area, such will be indicated in the description and by asterisk.

(4) Other data.

(a) Wherever a river of state-wide significance falls within a county, it is followed by an asterisk.

(b) The following provisions set forth the name of the quadrangle maps where the stream or river is shown. The quadrangle in which the shoreline delimitation begins and the first quadrangle downstream from the county line is underlined. The quadrangle in which the shoreline of state-wide significance begins is followed by an asterisk. The size, in minutes, of all quadrangle maps is designated.

(c) Where quadrangle maps are unavailable, photomaps have been used as indicated.

[Order 73-14, § 173-18-040, filed 8/27/73; Order DE 72-13, § 173-18-040, filed 6/30/72.]

WAC 173-18-044 Review of designations. The department shall review all the designations made herein at least once in every five-year period following the effective date of chapter 90.58 RCW or as frequently before then as is deemed advisable by the department, and prepare the necessary revisions to ensure that the designations conform to the policies of chapter 90.58 RCW and of chapter 173-18 WAC in the manner and form prescribed for adopting and amending rules and regulations in chapter 34.04 RCW (the Administrative Procedure Act).

[Statutory Authority: RCW 90.58.120 and 90.58.200. 80-08-052 (Order DE 80-20), § 173-18-044, filed 6/30/80.]

WAC 173-18-046 Conflicts between designations and criteria. In the event that any of the designations set forth in this chapter conflict with the criteria set forth in RCW 90.58.030(2) or in WAC 173-18-040 the criteria shall control. The designation of the stream or river shall be governed by the criteria.

[Statutory Authority: RCW 90.58.120 and 90.58.200. 80-08-052 (Order DE 80-20), § 173-18-046, filed 6/30/80.]

WAC 173-18-050 Adams County. Streams

Stream Name	Quadrangle Name and Size	Legal Description
(1) Cow Creek*	Karakul Hills* 7 1/2 Marengo 7 1/2 Benge 15 Ritzville S.E. 7 1/2	From mouth of Lugenbeal Creek (Sec 15,T19N,R37E) downstream thru Hallin and Cow lakes, thru Finnel Lake to mouth on Palouse River (Sec 27,T15N,R37E). This stream has a 300 square mile drainage area ending at mouth of Lugenbeal Creek.
(2) Palouse River*	La Crosse 15 Benge 15 Starbuck 15	From Whitman County line (Sec 24,T16N,R38E) along county line downstream to Franklin County line (Sec 3, T15N,R37E), right shore only. This stream has over 300 sq miles of drainage area.

WAC 173-18-100 Clark County. Streams

Stream Name	Quadrangle Name and Size	Legal Description
(1) Big Tree Creek	Yacolt 15 Yacolt 7 1/2	From the confluence of Big Tree Creek and Big Creek (Sec 6,T4N,R4E) downstream to mouth at East Fork Lewis River (Sec 13,T4N,R3E).
(2) Boulder Creek	Camas 15	From the confluence of Boulder Creek and unnamed creek (Sec 9,T2N,R4E) downstream to confluence of Boulder Creek and East Fork Little Washougal Rivers (Sec.8, same township).
(3) Burnt Bridge Creek	Orchards 7 1/2 Vancouver 7 1/2	From I-205 overcrossing (Sec 16,T2N,R2E) and Burnt Bridge Creek downstream to Vancouver Lake (Sec 9,T2N, R1E)
(4) Canyon Creek	Lookout Mt. 15 Yacolt 15	From the National Forest boundary line (Sec.12,T5N,R4E) downstream to mouth at Lewis River (Sec.31,T6N,R4E) excluding the portion which flows thru Gifford Pinchot National Forest.
(5) Cedar Creek	Yacolt 15	From the confluence of Cedar Creek and Cold Creek (Sec 8,T3N,R4E) downstream to mouth at Rock Creek (Sec 31, T4N,R4E)
(6) Cedar Creek	Amboy 7 1/2 Yacolt 7 1/2 Ariel 7 1/2	From the confluence of Cedar Creek and unnamed creek (Sec 24,T5N,R3E) downstream to mouth at Lewis River (Sec 12,T5N,R1E)
(7) Chelatchie Creek	Amboy 7 1/2	From an approximate point along the south section line (SE1/4 of NW1/4 of Sec 14, T5N,R3E) downstream to mouth at Cedar Creek (Sec 16, same township)
(8) Columbia River (Cont.)*	Bridal Veil 15 Washougal 7 1/2 Camas 7 1/2 Mount Tabor 7 1/2 Portland 7 1/2 Vancouver 7 1/2 Sauvie Island 7 1/2 St Helens 7 1/2	From the Skamania County line on Columbia River (Sec. 19,T1N,R5E) downstream along the Washington Oregon boundary to Cowlitz County line at Lewis River (Sec 10,T4N,R1W). The flow exceeds 1,000 cfs MAF at Skamania-Clark County line
(9) Lewis River*	Mt. St Helens 15 Cougar 15 Yacolt 15 Amboy 7 1/2 Ariel 7 1/2 Woodland 7 1/2 Ridgefield 7 1/2 St Helens 7 1/2	From the Skamania County line (Sec 36,T7N,R4E) left bank only downstream to mouth at Columbia River (Sec.2,T4N,R1W). The flow exceeds 1,000 cfs MAF at Skamania-Clark County line
(10) Copper Creek	Lookout Mtn. 15 Yacolt 15	From the Gifford Pinchot National Forest boundary (Sec.25,T4N,R4E) downstream to mouth at Lewis River East Fork (Sec.24, same township).
(11) Fifth Plain Creek	Lackamas 7 1/2	From the confluence of Fifth Plain Creek and Shanghai Creek (Sec 6,T2N,R3E) downstream to mouth at Lackamas Creek (Sec.7, same township)
(12) Fly Creek	Yacolt 15	From the confluence of Fly Creek and unnamed creek (Sec 1, T4N,R4E) downstream to mouth at Canyon Creek (Sec 4 T5N, R4E)
(13) Gee Creek	Ridgefield 7 1/2	From the confluence of Gee Creek and unnamed creek (Sec.19 T4N,R1E) downstream to mouth at Lewis River (Sec 31, T4N,R1W)
(14) Glenwood Creek	Orchards 7 1/2	From the intersection of Glenwood Creek and NE 119th St (Sec.29,T3N R2E) downstream to Salmon Creek (Sec 20, same township)
(15) Hagan Creek	Camas 15 Bridal Veil 15	From the confluence of Hagan Creek and unnamed creek (Sec.36,T3N,R4E) downstream to Skamania County line (Sec 1, T2N,R4E)
(16) King Creek	Yacolt 15	From the confluence of King Creek and unnamed creek (Sec.26,T4N,R4E) downstream to mouth at Lewis River East Fork (Sec 21, same township)
(17) Lackamas Creek	Camas 15 Lackamas 7 1/2	From the Military Reservation boundary (Sec 9, T2N R3E) downstream through Lackamas Lake to Washougal River near Camas (Sec 12,T1N R3E)
(18) Lewis River (E. Fk.)*	Lookout Mt. 15 Yacolt 15 Battle Ground 7 1/2 Ridgefield* 7 1/2 Yacolt 7 1/2	From the Gifford Pinchot National Forest boundary (Sec 24,T4N,R4E) downstream to mouth at Lewis River (Sec 32,T5N,R1E) The 1,000 cfs MAF begins at the mouth of Mason Creek (Sec 14, T4N R1E)
(19) Little Washougal River	Camas 15	From the confluence of Boulder Creek and East Fork Little Washougal River (Sec 8,T2N,R4E) downstream to mouth on Washougal River (Sec 32, same township)
(20) Little Washougal River (E. Fk.)	Camas 15	From the confluence of East Fork Little Washougal River and Jones Creek (Sec 9,T2N,R4E) downstream to mouth at confluence with Boulder Creek (Sec 8,T2N,R4E)
(21) Lockwood Creek	Ridgefield 7 1/2	From the confluence of Lockwood Creek and unnamed creek (Sec 1,T4N,R1E) downstream to mouth at East Fork Lewis River (Sec 11, same township)
(22) Mason Creek	Battle Ground 7 1/2	From the confluence of Mason Creek and unnamed creek (Sec 8,T4N,R2E) downstream to mouth at East Fork Lewis River (Sec 14,T4N,R1E)

(23) Matney Creek	Camas 15 Lackamas 7 1/2	From the confluence of Matney Creek and unnamed creek (Sec 15,T2N,R3E) downstream to mouth at Lackamas Creek (Sec 9, same township)
(24) Mill Creek	Battle Ground 7 1/2 Orchards 7 1/2 Vancouver 7 1/2	From the confluence of Mill Creek and unnamed creek (SW1/4 Sec 7,T3N,R2E) downstream to mouth at Salmon Creek (Sec 23 T3N,R1E)
(25) Morgan Creek	Yacolt 7 1/2 Battle Ground 7 1/2	From an approximate point (SE1/4 of Sec 12,T3N,R2E) downstream to mouth at Salmon Creek (Sec 12, same township)
(26) North Siouxon Creek	Lookout Mt. 15 Yacolt 15	From the Skamania County line (Sec.25,T6N,R4E) downstream to mouth at Siouxon Creek (Sec 25 same township)
(27) Rock Creek	Yacolt 15	From an approximate point on the north section line (SE1/4 of NW1/4 of Sec 33,T4N,R3E) downstream to mouth on Salmon Creek (Sec 4,T3N,R3E)
(28) Rock Creek	Battle Ground 7 1/2	From the confluence of Rock Creek and unnamed creek (Sec 2,T4N,R2E) downstream to mouth on East Fork Lewis River (Sec 14, same township)
(29) Rock Creek	Yacolt 7 1/2	From the confluence of Rock Creek and unnamed creek (Sec.9,T3N,R4E) downstream to mouth at East Fork Lewis River (Sec.19,T4N,R4E)
(30) Salmon Creek	Yacolt 7 1/2 LaCenter 15 Orchards 7 1/2 Vancouver 7 1/2	From the confluence of Salmon Creek and unnamed creek (NW1/4 of Sec 10, T3N,R3E) downstream to mouth at Lake River (Sec 29,T3N R1E).
(31) Siouxon Creek (Cont.)	Lookout Mtn. 15 Yacolt 15	From the Skamania County line (Sec 36,T6N,R4E) downstream to mouth in Yale Lake (Sec 26, same township)
(32) Unnamed Creek (Tributary to Chelatchie Creek)	Amboy 7 1/2	From intersection of Eaton Road and unnamed creek (Sec.15,T5N,R3E) downstream to mouth at Chelatchie Creek (Sec 16, same township)
(33) Washougal River (Cont.)*	Bridal Veil 15 Washougal* 7 1/2 Camas 7 1/2	From the Skamania County line (Sec 36,T2N R4E) downstream to mouth at Columbia River near Camas (Sec 11,T1N,R3E). The 1,000 cfs MAF begins at mouth of Little Washougal River (Sec 32, T2N R4E)
(34) Yacolt Creek	Yacolt 7 1/2	From an approximate point (near SE corner of the NE1/4 of NW1/4 Sec 11 T4N,R3E) downstream to mouth at Big Tree Creek (Sec 13 T4N,R3E)

[Order DE 76-14, § 173-18-100, filed 5/3/76. Order 73-14, § 173-18-100, filed 8/27/73. Order DE 72-13, § 173-18-100, filed 6/30/72.]

WAC 173-18-110 Columbia County. Streams

Stream Name	Quadrangle Name and Size	Legal Description
(1) Pataha Creek (Cont.)	Hay 15	From the Garfield County line (Sec 12,T12N,R39E) downstream to mouth at Tucannon River (Sec 24,T12N R38E)
(2) Tucannon River*	Pomeroy 30 Hopkins Ridge 7 1/2 Zumwalt 7 1/2 Turner 7 1/2 Tucannon 7 1/2 Hay* 15 Starbuck 15	From the Umatilla National Forest boundary line (Sec 35,T10N,R41E) downstream to mouth at Snake River (Sec. 3,T12N,R37E). This stream has over 300 square miles of drainage area ending at Pataha Creek (Sec 24,T12N,R38E)
(3) Touchet River (S. Fk.)	Pomeroy 30 Robinette Mtn 7 1/2 Dayton 7 1/2	From a point of (SE1/4 of NE1/4 of Sec 5,T8N,R39E) downstream to mouth at Touchet River near Dayton (Sec 32,T10N,R39E).
(4) Touchet River (N. Fk.)	Pomeroy 30 Eckler Mtn 7 1/2 Cahill Mtn 7 1/2 Dayton 7 1/2	From the confluence of the North Fork Touchet River and unnamed creek (Sec.28 T8N,R40E) downstream to Touchet River near Dayton (Sec 32,T10N,R39E) (Note called North Fork on Quad.) Excluding all federal lands
(5) Tiguchet River	Pomeroy 30 Walla Walla 30 Dayton 7 1/2 Huntsville 7 1/2	From the confluence of North and South Forks of Touchet River (Sec 32, T10N,R39E) downstream to Walla Walla County line (Sec 7, T9N,R38E)
(6) Robinson Creek	Dayton 7 1/2	From north line (Sec 23 T9N,R39E) downstream to mouth at North Fork Touchet River (Sec.11, same township.)

[Order DE 76-14, § 173-18-110, filed 5/3/76. Order 73-14, § 173-18-110, filed 8/27/73. Order DE 72-13, § 173-18-110, filed 6/30/72.]

WAC 173-18-120 Cowlitz County. Streams

Stream Name	Quadrangle Name and Size	Legal Description
(1) Abernathy Creek	Ryderwood 15 Castlerock 15	From the confluence of Abernathy Creek and Ordway Creek (Sec 5,T9N,R4W) downstream to mouth at Columbia River (Sec 10,T8N,R4W)
(2) Alder Creek	Toutle 15	From the confluence of Alder Creek and unnamed creek (Sec 26,T10N,R2E) downstream to mouth at North Fork Toutle River (Sec 15, same township)
(3) Arkansas Creek	Ryderwood 15	From the confluence of Arkansas Creek and unnamed creek (NE1/4 Sec 26,T10N,R3W) downstream to mouth at Cowlitz River near Castle Rock (Sec.15 T9N,R2W)
(4) Baird Creek	Pigeon Springs 15	From an approximate point (SW1/4 of SW1/4 of SW1/4 of Sec 9,T8N,R2E) downstream to mouth at Coweeman River (Sec.19, same township)

Exhibit 29

David T. McDonald

Courtroom Lawyer

Admitted to Oregon and Washington State Bar

510 S.W. 3rd Ave., Suite 302 (503) 226-0188

Portland, OR 97204 Fax: (503) 226-1136

May 20, 1997

Larry Epstein
Larry Epstein, P.C.
Attorneys at Law
722 S.W. Second Avenue, Suite 400
Portland, OR 97204

Re: **In Re: Matter of J.L. Storedahl & Sons, Inc. Notice and Order**

Dear Mr. Epstein:

This letter is to supplement and correct my letter of May 16, 1997. There are three corrections:

1. Page 12, first full paragraph Under B, Line 8 of the paragraph please change "to allow for the **sixty** acres" to "to allow for the **19** acres".

2. On page 15 line 5 please add the word "not" so that the sentence now reads "...East Fork have **not** been adequately reclaimed"

3. On page 20, in the first full paragraph following the definition of structure, please change the dollar amount from $2,5000.00 to $2,500.00.

In addition, I have attached 1) the latest letter from Department of Natural Resources Assistant State Geologist, William S. Lingley, Jr, to Michael Butts, and 2) selected pages from the DOE Shoreline Master Program Handbook, 1994 Edition which defines mining and sets out policies.

Thank you for your attention to these matters.

Sincerely,

David T. McDonald

Enclosure
cc: Lois Miller, Chair of the FOEF (without exhibits)
Richard S. Lowry (without exhibits)
Gary Fish, Clark County Planner (without exhibits)

EXHIBIT #

Diane Murbach, C.E.G.

Engineering Geologist
DAVID J. NEWTON ASSOCIATES, INC.

Background Diane Murbach is a registered geologist and certified engineering geologist with over 15 years experience in engineering geology. At DNA, she serves as a project engineering geologist for mining projects, geologic hazard investigations/remediations and geotechnical services.

Education M.S. Geology, San Diego State University
B.S. Geology, Eastern Washington University

Registration Certified Engineering Geologist & Registered Geologist - OR & CA
Registered Geologist - AZ
Certified Professional Geologist - American Institute of Professional Geologists

Experience **Lone Star Northwest - Mining Expansion**, Columbia County, OR - Engineering geologist responsible for the geotechnical and reclamation plan studies in connection with the aggregate mine extension. Studies are in process for the site to secure appropriate zoning and permitting, and the acceptance of an environmental, social, economic and energy analysis for the extension. Diane assists in managing the Hydrological, Wetlands, Wildlife, Noise, Traffic, and Archaeology reports requirements and issues concerning zoning and permitting.

Bates & Roth Ranch/Ellis Property - Goal 5 Aggregate Inventory, Columbia County, OR - Project engineering geologist responsible for this aggregate inventory study. The purpose of the study was to define the aggregate location, quality and quantity information and submit the results to Columbia County, as part of their periodic review Goal 5 process. Diane performed research, detailed field mapping, logging of subsurface explorations, assigned laboratory testing, analyzed the data, and prepared the final report. In 1995 the Columbia County Planning Commission approved these sites as a "1-C" significant site based upon the State of Oregon Goal 5 process, and recommended these sites be included in the Mineral and Aggregate Inventory of Columbia County.

C.C. Meisel - Hydrogeologic & Mine Expansion, Yamhill County, OR - Diane assisted in the research and investigation phase characterizing the hydrogeologic conditions in the area of the planned expansion of Stephens Quarry.

City of Lake Elsinore/Engineering Dept. - Reclamation Review & Inspection, Lake Elsinore, CA - Project engineering geologist for completion of an annual surface mining reclamation plan review and provided inspection consulting services. (Prior to working at DNA, Diane provided this service to the City.) The State's Surface Mining and Reclamation Act (SMARA) requires the City to complete the State SMARA Form #MRRC-1, by inspecting each surface mining operation within their jurisdiction at least annually. Four existing mining operation files were reviewed; Brighton Alberhill, Mt. Avenue Pit #1, Wyroc Lake St. Quarry, and Pacific Clay Pits. Data was acquired through meetings and conversations with the State office, the County of Riverside, the City of Lake Elsinore, and the mine operators and/or owners. Field inspection meetings were conducted with the mine operator and/or owners to complete SMARA Form #MRRC-1. Consultations were held with the City Engineering Department staff to maintain an annual Surface Mining inspection system.

Clark County/Public Works Dept. - Reclamation Plan Consultation, Clark County, WA - Diane provided consulting services to this agency for the planned expansion of Livingston

Quarry in Washington. A field meeting was held to discuss the future reclamation plan needs for the quarry and the permit requirements of the State of Washington's Department of Natural Resources. Consultations were provided for specific geotechnical, groundwater and surface water design considerations.

Copeland Sand & Gravel - Goal 5 Aggregate Inventory, Josephine County, OR - Project engineering geologist responsible for this aggregate inventory study. The purpose of the study was to define the aggregate location, quality and quantity information and submit the results to Josephine County, as part of their periodic review Goal 5 process. Diane performed research, logging of subsurface explorations, assigned laboratory testing, analyzed the data, and prepared the final report.

Daybreak Gravel Pit - Mining Expansion, Clark County, WA - Engineering geologist responsible for the reclamation plan and Environmental Impact Statement in progress for 349 acres which consists of the existing mine and the planned expansion area. The project site is located in relatively flat terrain of the East Fork of the Lewis River floodplain. Diane assists in managing the environmental issues of fish, wildlife, wetlands, noise, air, traffic, groundwater and surface water.

St. Helens Rock Quarry - Goal 5 Aggregate Inventory, St. Helens, OR - Project engineering geologist for Goal 5 Aggregate analysis for mining operation expansion. Scope included performing geologic mapping and drilling, assigning laboratory tests for rock quality, and analyzing potential aggregate volumes.

Tide Creek Rock, Inc. - Goal 5 Aggregate Inventory, Deer Island, OR - Project engineering geologist responsible for providing aggregate location, quality and quantity information for the property owner/miners as a basis to recommend the Area B site for a 1-C significance determination to Columbia County, Oregon, as part of its periodic review Goal 5 process. Detailed field mapping and logging air track borings were performed, laboratory testing completed, and then an analysis of that data was presented in a report. DNA provided rock quality tests that surpassed the minimum requirements of the Oregon Department of Transportation (ODOT) and Columbia County. In 1995 the Columbia County Planning Commission approved this site as a "1-C" significant site based upon the State of Oregon Goal 5 process, and recommended the site be included in the Mineral and Aggregate Inventory of Columbia County.

Thurston County/Department of Public Works - Groundwater & Mine Expansion, Thurston County, WA - Diane assisted in the review process for groundwater consulting services related to the proposed deepening of Thurston County's Rainier quarry near Rainier, Washington. Thurston County Department of Public Work's objective is to obtain permits that will allow the existing gravel pit to be potentially deepened to near the top of the regional aquifer. Diane assisted in permitting requirements with respect to groundwater and groundwater protection, to provide a strategy for implementing the permit application process.

City of Oceanside - Surface Mining Reclamation, Oceanside, CA - The City was responsible for implementing the State of California Surface Mining and Reclamation Act of 1975 that required all lead agencies approve reclamation plans by July 1, 1990. Prior to working at DNA, Diane managed this process for the City. Consultation determined how many mining operations existed, which operations were active, what operations require a permit or reclamation plan, how the Cities 1986 Mining Reclamation Ordinance applied, and where the mining sites were located. Fifty potential mined locations were narrowed to 5 aggregate pits which would require reclamation plans\mining permits. Due to the urbanized nature of the City, support was provided in land use and stability\hazard issues that were the concerns of the City and the residents. During the process the State required the City to submit an Administrative record for two

existing mining operations. Diane organized this Administrative Record and coordinated the cities needs for meetings and hearings.

Columbia County/Land Development Services Dept. - Surface Mining Permit Review, Columbia County, OR - The County required assistance to review current regulations with respect to existing surface mining operation permit renewal. Prior to working at DNA, Diane provided consultation to the County by reviewing the 1972 Surface Mining Ordinance and the 1990 Surface Mining Ordinance, compiling checklists with charts for requirements contained within the Ordinances, and organizing Surface Mining permit files. Field meetings were held with the Operator/Owner and the Surface Mining Committee. Meetings were also conducted with the public, Surface Mining Committee, the Surface Mining Administrator, County Counsel, and the Board of Commissioners. Conclusions were provided for mining sites, and recommendations were presented for implementing a Surface Mining Administration and Enforcement System.

Fault Rupture Research Study - In January 1994, EERI/FEMA awarded Diane a research project titled "Characteristics of Fault Rupture Adjacent to Distressed Structures". This project entailed investigating excavated fault trenches through and adjacent to three structures that were damaged by direct fault displacement from the Landers 1992 earthquake fault rupture. The investigation documented surface and subsurface fault rupture geometry and described how ground movements resulting from fault rupture affected the structures. Other members of the research team included Dr. T.K. Rockwell, Geology/Neotectonics, San Diego State University and Dr. Jon Bray, Geotechnical Engineering, University of California at Berkeley.

Contract Engineering Geologist - 1987 to 1995, San Diego, CA - Prior to joining DNA, Diane served as a Certified M/WBE consulting engineering geologist on a contractual basis. In this capacity she performed various geologic services for agencies, geotechnical engineering firms and environmental consulting firms. She provided geotechnical report review and construction inspection management to the City of Oceanside, California for a three year period. Other services included: surface mining reclamation; research, plan review, subsurface exploration and report preparation for proposed site developments; seismic fault hazard review; environmental investigations (LUFT); and report preparation.

Engineering Geologist - 1983 to 1986, San Diego, CA - While employed with two consulting firms (Kleinfelder and Leighton & Associates), Diane conducted engineering geologic studies for residential and commercial developments. She also performed research, geologic field mapping, detailed logging of exploratory borings and trenches, aerial photo review, landslide investigations, laboratory assignment of soil samples, report preparation and in-grading geologic inspections and environmental site assessments.

Geologist - 1979 to 1983, Grand Coulee, WA - During temporary employment with United States Bureau of Reclamation, Diane worked on the Riverbank Stabilization Program. She performed logging of core, mapping, gravimeter, seismic reflection and refraction profiles. Other services included: reduced data form drill holes, pump tests, drainage wells and graphic water level recorders; installed, calibrated and maintained geotechnical instrumentation; and monitored earth pressure cells and water level readings in drill hole piezometers and measured stream flows.

Associations

State Board of Registration for Geologists, Sacramento, CA; appointed to the Professional Affairs Committee, August 1994
San Diego Association of Geologists; President, 1990; Vice President 1989, Secretary 1988
South Coast Geological Society; President 1994, Vice President 1993, Secretary 1992
Association of Engineering Geologists
Geological Society of America
Association of Civil Engineers, Geotechnical Section
Seismological Society of America
Earthquake Engineering Research Institute
Toastmasters; CTM; Vice President Administration 1991

Awards

1994 EERI/FEMA NEHRP 3rd Annual, PROFESSIONAL FELLOWSHIP AWARD - National Earthquake Hazards Reduction Program: Interdisciplinary Research Project, "Characteristics of Fault Rupture Adjacent to Distressed Structures", with Dr. T.K. Rockwell, Professor of Geology, San Diego State University & Dr. Jon Bray, University of California/Berkeley
1989 San Diego State University, Geological Sciences, Spring, Outstanding Research Award (Joint Project)

Publications

"Hillside Development Presenting Typical Mitigative Measures, San Diego County, California", Abstract and Poster Session Annual AEG Meeting (1986)

"Seismic Risk in the San Diego Region, Special Focus on the Rose Canyon Fault System/Proceedings"; Publication edited by Glenn Roquemore, Diane Murbach on Editorial Committee, 106 p.; includes abstract: Using Small Scale Fault Features to Discern the Overall Kinematic Fault Structure Along the Rose Canyon Fault System, San Diego, CA" by Chapman, D & M Murbach, Frost, et al., p. 21, and presented as an Abstract and Poster Session, GSA Annual Cordilleran and Rocky Mt. Section Meeting; includes paper: "Fault Features Between La Jolla, USA and Ensenada, Mexico, Field Trip", by D. Murbach, 23 p. (1989)

"AEG, 35th Annual Meeting, Proceedings"; A Geotechnical Reviewer for a Small Agency, City of Oceanside, CA, with a Comparison of Grading Code Enforcement within agencies in San Diego County, CA, paper and presentation by D. Murbach (1992)

"Preliminary Report on the Seismological and Engineering Aspects of the January 17, 1994 Northridge Earthquake", "Preliminary Report on the Principal Geotechnical Aspects of the January 17, 1994 Northridge Earthquake" by Stewart, Bray, Seed and Siltar; 245 p. (art of the reconnaissance team and contributions for the University of Berkeley). (1994)

"Mojave Desert", South Coast Geological Society Annual Field Trip Guidebook #22, Martin Stout Volume, edited by D. Murbach and Joan Baldwin, October, 672 p., includes "Preliminary Observations: Characteristics of the 1992 Landers Surface Fault Rupture Adjacent to Distressed Structures", by D. Murbach, Thomas K. Rockwell and Jonathan D. Bray, p. 590-598. (1994)

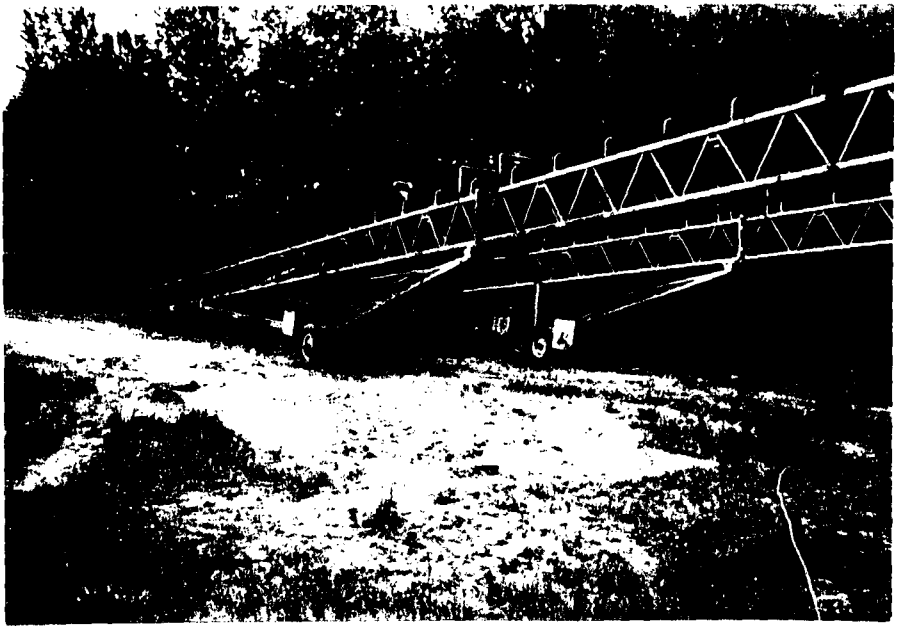
"On the Response of Foundations to Fault Rupture: During the 1992 Landers Earthquake", by D. Murbach, Thomas Rockwell, Jonathan Bray and Carlos Lazarte, GSA Annual Meeting Abstract and Presentation by D. Murbach. (1994)

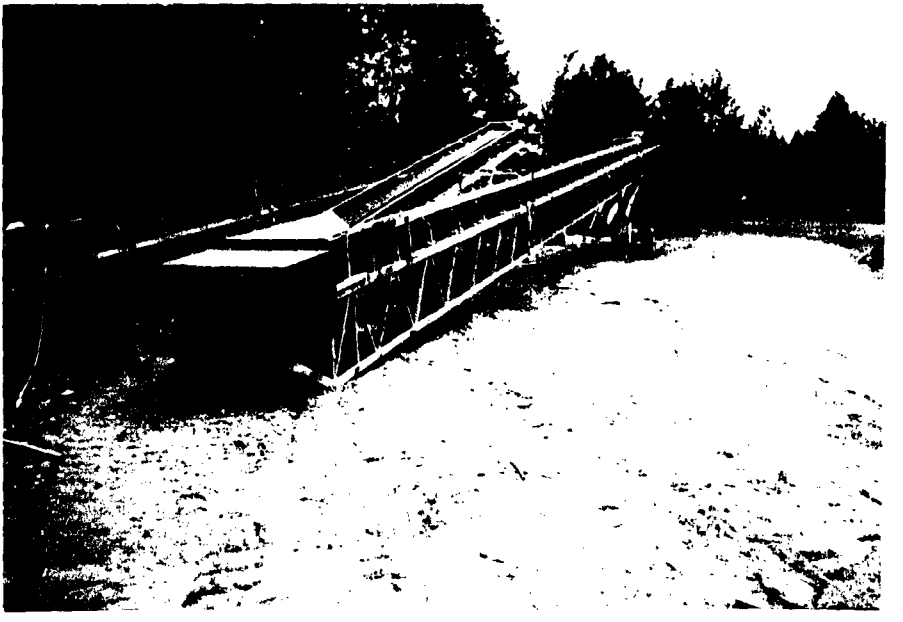
"Characteristics of the 1992 Fault Rupture Adjacent to Distressed Structures, Landers, CA", by D. Murbach, Thomas Rockwell and Jonath Bray, presented at the August S. Calif. Section AEG, by D. Murbach, and final report November-published by the Earthquake Engineering

Research Institute, 73 p. Also presented at the January 1995 San Diego Geotechnical Section of ASCE. (1994)

"Characteristics of Fault Rupture Adjacent to Distressed Structures, Landers, California", by D. Murbach, Master of Science in Geology thesis, San Diego State University, December 9, 108 p. (1994)

31





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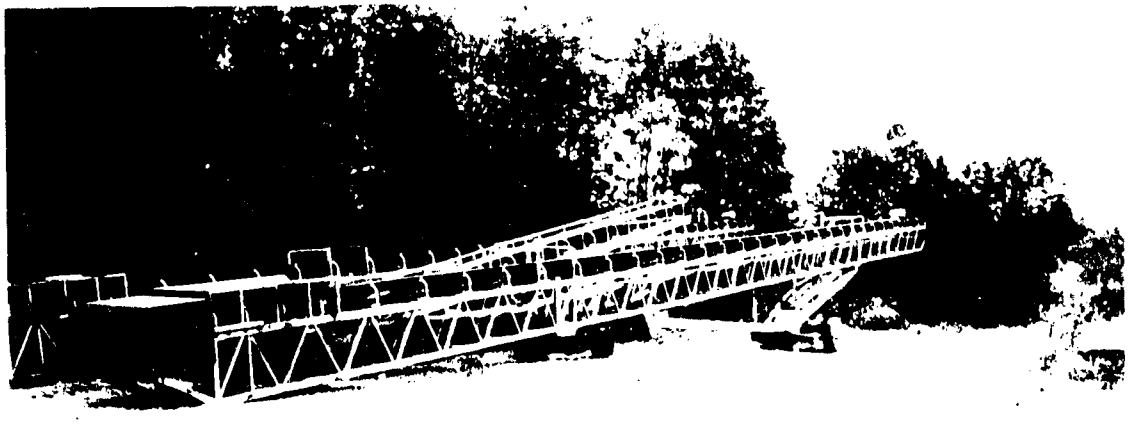

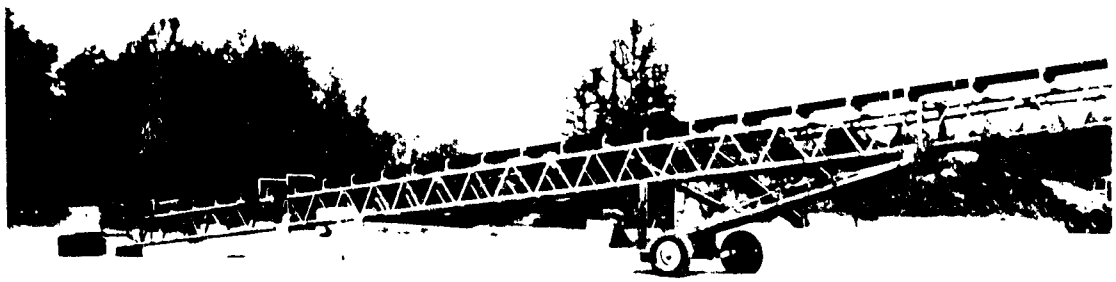

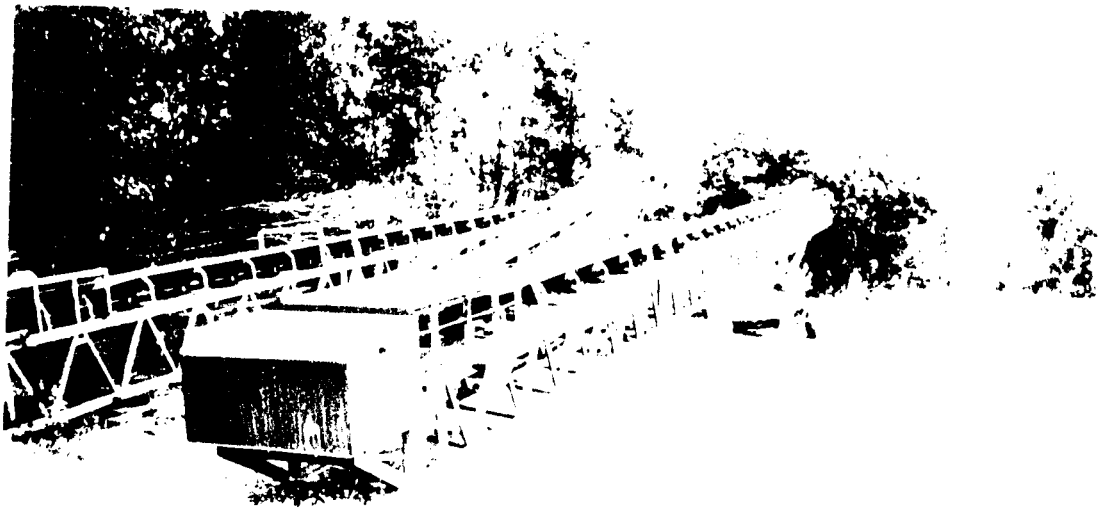

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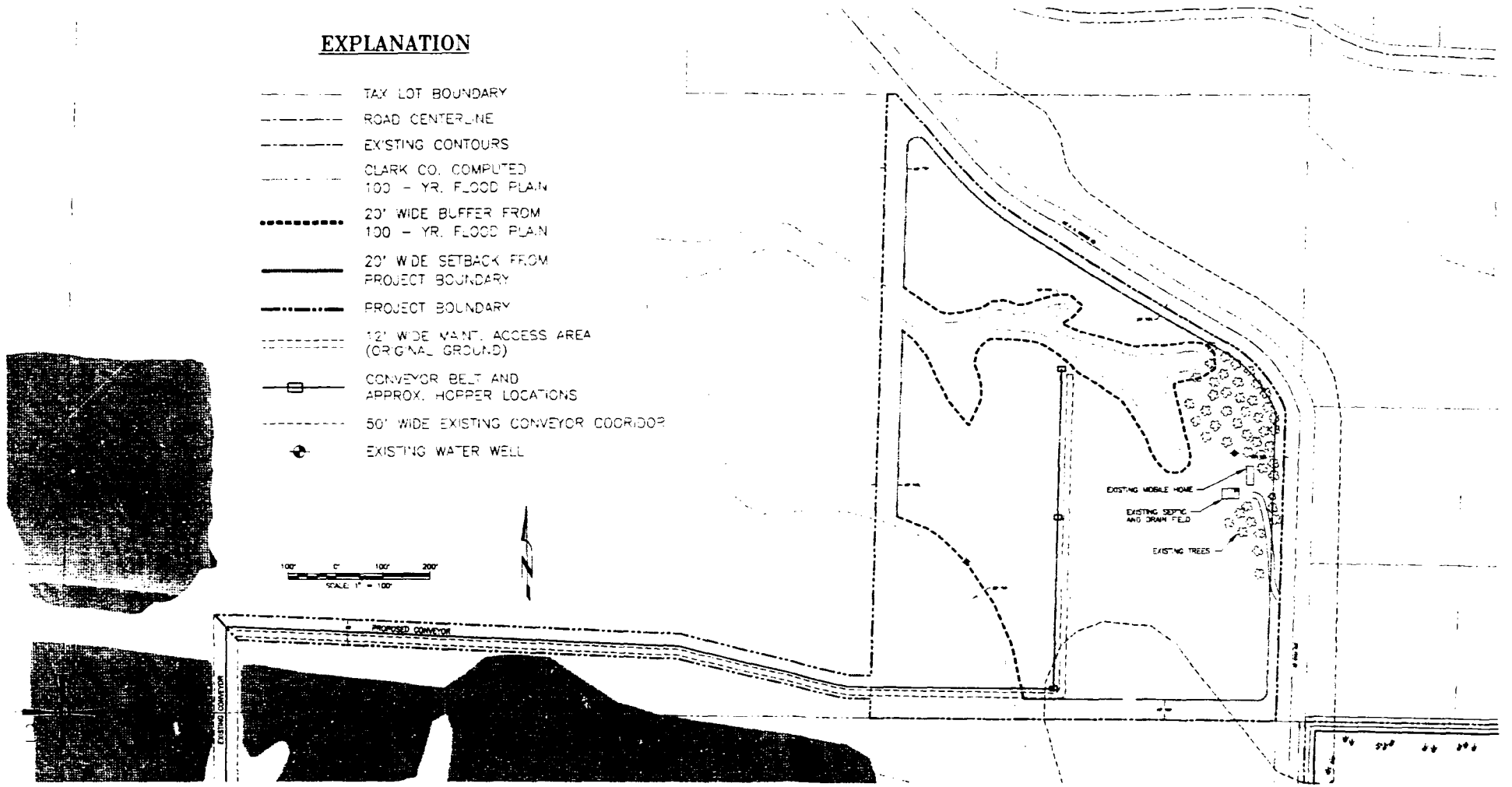
DAYBREAK RESOURCE PROJECT SPR 96092

EXHIBIT # 32



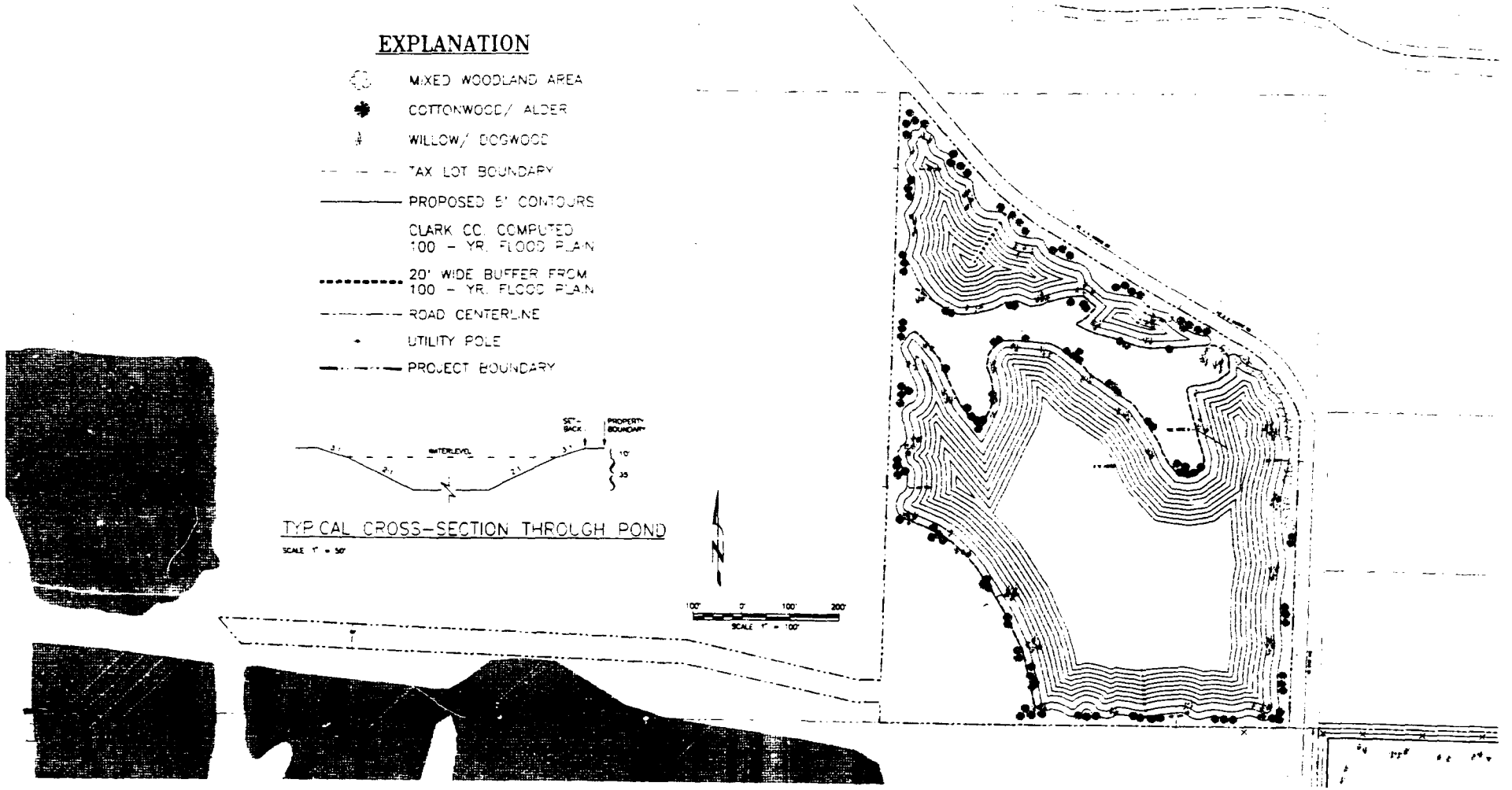
EXISTING CONDITIONS PLAN

DAVID J. NEWTON ASSOCIATES

33

EXHIBIT #

DAYBREAK RESOURCE PROJECT SPR 96092



PROPOSED LANDSCAPE PLAN

DAVID J. NEWTON ASSOCIATES

EXHIBIT #

Thomas R. Grindeland, P.E.

Mr. Grindeland is a registered professional engineer with over 17 years of experience in water resources and hydraulic engineering. His primary areas of technical expertise are hydrology, hydraulics, geomorphology, and sediment transport. He has used his skills in projects involving the characterization of baseline environmental conditions, delineation of flood hazards, development of management alternatives for fluvial systems, hydrologic and hydraulic engineering design, environmental impact assessment and mitigation, and litigation support. Most of the projects in which Mr. Grindeland has been involved have required extensive use of computer modeling.

Mr. Grindeland's experience includes hydrologic analyses for determination of Probable Maximum Floods, peak flow flood-frequency relationships, flow duration, water supply requirements, water budgets, and water quality. He is practiced in deterministic, empirical, and stochastic analytical techniques. He is experienced in flood hydrology analysis in urban, rural, mountainous, and desert areas using watershed modeling, statistical analysis of gage data, and regional hydrologic methods. He is well acquainted with standard hydrologic analysis methods, and most hydrologic computer models.

Mr. Grindeland has conducted flood insurance studies, dam-break flood studies, channel capacity analyses, bridge and channel design, spillway evaluation and design, mud flow hazard delineation, and local drainage plan design. He is thoroughly experienced in the application of 1 and 2 dimensional hydraulic models. His experience includes dozens of studies involving the delineation of flood plains and the evaluation of potential flood hazards. He is experienced in all aspects of riverine Flood Insurance Studies and is well acquainted with the Specifications and Guidelines of the Federal Emergency Management Agency (FEMA).

Mr. Grindeland has extensive experience in evaluating the stability of fluvial systems. He has conducted erosion and sedimentation studies along dozens of watercourses throughout the United States, using qualitative geomorphic assessments, quantitative engineering methods, and sophisticated sediment-routing computer models. These studies have included channel aggradation/degradation analyses, design of stable channels, evaluations of instream flow requirements for channel maintenance, bank protection design, hydraulic structure stability evaluations and erosion protection design, reservoir sedimentation studies, and mud/debris flow hazard delineation. Mr. Grindeland has used his sediment transport analysis skills in the development and evaluation of alternative river management plans, preparation of environmental impact reports, development of erosion or sedimentation protection designs for hydraulic structures, and preparation of licensing and permit applications for projects. Mr. Grindeland has developed numerous hydrologic, hydraulic, and sediment transport computer models. He has applied sediment-routing models to natural river systems as part of flood control channel designs, development of watershed erosion stabilization plans, and the environmental impact assessment of alternative fluvial system management plans.

Mr.Grindeland has conducted numerous studies to characterize watershed resources and develop management plans for objectives of sustainable forestry, water supply, water quality protection, erosion/sedimentation control, and protection or enhancement of fisheries and wildlife habitat. He is well-experienced in conducting inter-disciplinary assessments of environmental impacts and developing workable management plans. Mr. Grindeland is experienced in designing and constructing stream channel stabilization and fisheries habitat restoration projects.

Thomas R. Grindeland, P.E.

PROFESSIONAL REGISTRATION

- Professional Engineer, Colorado No. 24029
- Professional Engineer, Idaho No. 7632
- Professional Engineer, Washington No. 32644

EDUCATION

- M.S. (Civil Engineering) Colorado State University, Ft. Collins, Colorado, 1981
- B.S. (Civil Engineering) University of Massachusetts, Amherst, Massachusetts, 1979

TRAINING

- Expert Witness Short Course; U.S. Fish and Wildlife Service; 1988

PROFESSIONAL AFFLILIATIONS

- American Society of Civil Engineers, Member

Thomas R. Grindeland, P.E.

PROJECT EXPERIENCE

Hydrologic and Hydraulic Studies

- Probable Maximum Flood Analysis, Silver Lake Dam, Boulder County, Colorado
- Preliminary Data Collection and Hydrologic, Hydraulic, and Geomorphic Analysis for the Hickahala/Senatobia Creek Watershed, Yazoo River Basin, Mississippi
- Hydrologic and Hydraulic Analysis, Conceptual Flood Control Design, San Sevaine Alluvial Fan, San Bernardino County, California
- Hydrologic Analysis of the Coldwater River Watershed, Yazoo River Basin, Mississippi
- Fossil Creek Master Drainageway Planning Study, Fort Collins, Colorado
- Rillito River Corridor Planning Study, Tucson, Arizona
- Site Drainage Plan for the Transport Facility, Fort Collins, Colorado
- Analysis of Flood Level at Trojan Nuclear Power Plant Associated with a Hypothetical Failure of the Spirit Lake Blockage, Mount St. Helens, Washington
- Update and Verification of Hydraulic Computer Models for Maline Creek and its Tributaries, St. Louis County, Missouri
- Hydraulic Study of the Lake Hodgson Feeder Canal, Ohio
- Development of a Theoretical Rating Curve for the Highway 79 Gage of the Salt River, Missouri Unnamed Wash Alluvial Fan Hydraulic Study, Clark County, Nevada
- Streamflow Depletion Analysis for 62 Watersheds in Oregon
- Klamath and Sycan Marsh Studies for 2 Oregon Watersheds
- Clark Fork River Hydrology Model, Montana

Floodplain and Floodway Delineation Studies

- Flood Insurance Study for the Town of Rangely, Colorado
- Flood Insurance Study for the City of Rifle, Colorado
- Flood Insurance Study for Garfield County, Colorado
- Flood Insurance Study of Teton County, Wyoming
- Flood Insurance Study for the City of Jackson, Wyoming
- Flood Insurance Study for the Town of Estes Park and Larimer County, Colorado
- Flood Insurance Study for Lake County, Montana
- Flood Insurance Study for Flathead County, Montana
- Hydraulic Analysis and Floodplain Delineation for Proposed Development Conditions, Application for FEMA Conditional Letter of Map Revision (CLOMR), East Etiwanda/San Sevaine Alluvial Fan, San Bernardino County, California
- Flood Insurance Studies for the City of Fort Collins, Larimer County, and Weld County, Colorado
- Flood Insurance Study for the Town of Telluride, San Miguel County, Colorado
- Hydraulic Analysis for Letter of Map Revision (LOMR), Cache la Poudre River, Fort Collins, Colorado
- Hydrologic and Hydraulic Analysis for a Conditional Letter of Map Revision (CLOMR), Georgia Avenue Wash, Boulder City, Nevada

Thomas R. Grindeland, P.E.

Sedimentation and Erosion

- Sediment-Transport Study of Sowashee Creek Flood-Control Alternatives, Lauderdale County, Mississippi
- Soil Piping Study in the Vicinity of Pueblo Bonito, Chaco Culture National Historical Park, New Mexico
- Aggradation/Degradation Study of San Juan & Trabuco Creeks, Orange County, California
- Qualitative Erosion and Sedimentation Investigation of Maline Creek and its Tributaries, City and County of St. Louis, Missouri
- Debris and Sedimentation Assessment for a Potential Reservoir Site Near Thistle, Utah
- Aggradation/Degradation Analysis of Piedras Marcadas Arroyo, Bernalillo County, New Mexico
- Geomorphic Analysis of Cache Creek between Rumsey and Madison, Yolo County, California
- Hydraulic and Sediment Transport Evaluation of the Teichert Aggregate Mining Plan for Cache Creek, Yolo County, California
- Fluvial Study of the Santa Clara River and its Tributaries, Los Angeles County, California
- Detailed Field Data Collection and Sediment Continuity Analysis for the Hickahala/ Senatobia Watershed, Yazoo River Basin, Mississippi
- Quantitative Analysis of Baseline Conditions for the Hickahala/Senatobia Watershed, Yazoo River Basin, Mississippi
- Erosion Control project. Results of the study were used in subsequent studies to develop alternative erosion control plans for the watershed.
- Elwha River Fluvial System Analysis, Olympic National Park and Olympic National Forest, Washington
- Qualitative Geomorphic Analysis of Sediment Transport Conditions in Support of FERC Relicensing for Kern River No 3 Hydroelectric Project, Kern County, California
- Qualitative Geomorphic Analysis of Sediment Transport Conditions in Support of FERC Relicensing of the Kaweah River Hydroelectric Projects Nos. 1, 2, and 3, Sequoia National Park and Sequoia National Forest, California
- Data Summary Report for the Proposed Canada Reservoir Diversion Site Sedimentation Study, Carmel River, Monterey County, California
- Detailed Field Investigation and Geomorphic Study, Coldwater River and Tributaries, Coldwater River Watershed, Mississippi
- Qualitative Geomorphic Sediment-Transport Evaluation and Groundwater Quality Assessment, Kern River No. 1 Hydroelectric Project Relicensing Application, Kern County, California
- Idaho Instream Flow Studies, Bureau of Indian Affairs
- Upper Clark Fork River Sediment Study, Montana
- Des Moines Creek Stream Effects Study for SEA-TAC Airport
- Detailed Scour Evaluation, Columbia River Crossing, Cross Cascades Pipeline, Grant County, Washington
- Reconnaissance-Level Pipeline Scour Evaluation Cross Cascade Pipeline, Washington
- Screening-Level Pipeline Scour Evaluation, Cross Cascade Pipeline, Washington

- Field Review, Degradation Analysis, and Seismic Retrofit Impact Assessments, California

Hydraulic Structure Design Studies

- Conceptual Design of Channelization Alternatives for Planning Area 13, San Diego Creek, Orange County, California
- Boulder Reservoir Spillway Design and Construction Supervision, Boulder County, Colorado
- Hydrologic and Hydraulic Study and Channel Design for the Horse Creek Abandoned Mine Reclamation Project, Wyoming
- Development of Erosion Control Plans for the Upper Hickahala/Senatobia Watershed, Yazoo River Basin, Mississippi
- Hydraulic and Erosion-Protection Design for the Hanging Lake Viaduct Design, Interstate 70, Glenwood Canyon, Garfield County, Colorado
- Preparation of Plans to Provide Flood Control in the Vicinity of the Arkabutla Reservoir Boundary along Hickahala and Senatobia Creeks, Yazoo River Basin, Mississippi
- Development of Interim Sedimentation-Control Measures for Calleguas Creek, Ventura County, California
- Hydraulic Stability Assessment of Articulated Concrete Block Revetment for Channel Bank Erosion Protection, Santa Gertrudis and Tucalota Creeks, Rancho California, California
- Bridge Hydraulics Study Report, Bridge No. LR103-15.0-S14, Laramie River, Larimer County, Colorado
- Fisheries Habitat Enhancement Project, East Fork Salmon River, Idaho
- Bridge Hydraulics and Scour Assessment for Tom Music Bridge, Cispus River. Gifford Pinchot National Forest, Lewis County, Washington
- Design of Riprap Erosion Protection, Miller River Bridge, King County, Washington
- Design of Flood Debris Pretection for the Skagit River Span, Skagit County, Washington
- South Fork Toutle River Railroad Bridge Erosion Protection Design, Cowlitz County, Washington

Environmental Impact Studies/Permitting

- Hydraulic, Erosion, and Sedimentation Impact Analysis Associated with the Proposed Azure Hydroelectric Project, Colorado River, Grand County, Colorado
- Environmental Impact Analysis Related to Issues of River Hydrology, Beach Sand Supply, and Resource Depletion of Proposed Sand and Gravel Extraction, Santa Clara River, Ventura County, California
- Integrated Natural Resource Management Plans
- Sustained Yield Plans, Louisiana-Pacific Corporation
- Permitting Support for Reopening of Stampede Pass Rail Line; Cle Elum to Pasco, Washington

Environmental Compliance

Thomas R. Grindeland, P.E.

- Pollution Prevention Planning, Spokane Satellite Tracking Station, Washington
- Pollution Prevention Planning, Air National Guard Bases, Arizona, California, and Washington
- Industrial Wastewater/Sanitary/Stormwater Influent Sources Investigation, Environmental Compliance Assessment and Testing, Cheyenne Mountain AFB, Colorado
- Environmental Compliance Support, Hickam AFB, Hawaii

Dam Safety

- Flood Inundation Analysis for a Possible Dam Break at Silver Lake and Boulder Reservoirs, Boulder County, Colorado
- Emergency Preparedness Plan, Boulder Reservoir Dam, Boulder County, Colorado
- Inspection and Monitoring Program for Dams in the City of Boulder Watershed, Boulder County, Colorado
- Dam Safety Evaluation, Akungtien Reservoir, Republic of China (Taiwan)
- Handbook of Dam Safety Inspection Procedures, Taiwan Department of Water Resources, Dam Safety Evaluation Board

Water Supply Studies

- Master Plan for the City of Boulder's Mountain Reservoir Water Supply System, Boulder County, Colorado
- Water Supply Assessment, La Liebre Valley Ranch Residential Development, Antelope Valley, California

Water Quality

- Stormwater Treatment and Discharge - Fairchild Air Force Base, Washington
- Industrial Wastewater/Sanitary/Stormwater Influent Sources Investigation, Environmental Compliance Assessment and Testing, Cheyenne Mountain AFB, Colorado

Litigation Support

- Bisceglia vs. City of Fort Collins, Poudre River Bike Path Litigation, Colorado
- Uvas Creek Flood of 1986, Santa Clara County, California
- Flood of 1986, City of Roseville, California
- National Forest Reserved Water Rights Study

Thomas R. Grindeland, P.E.

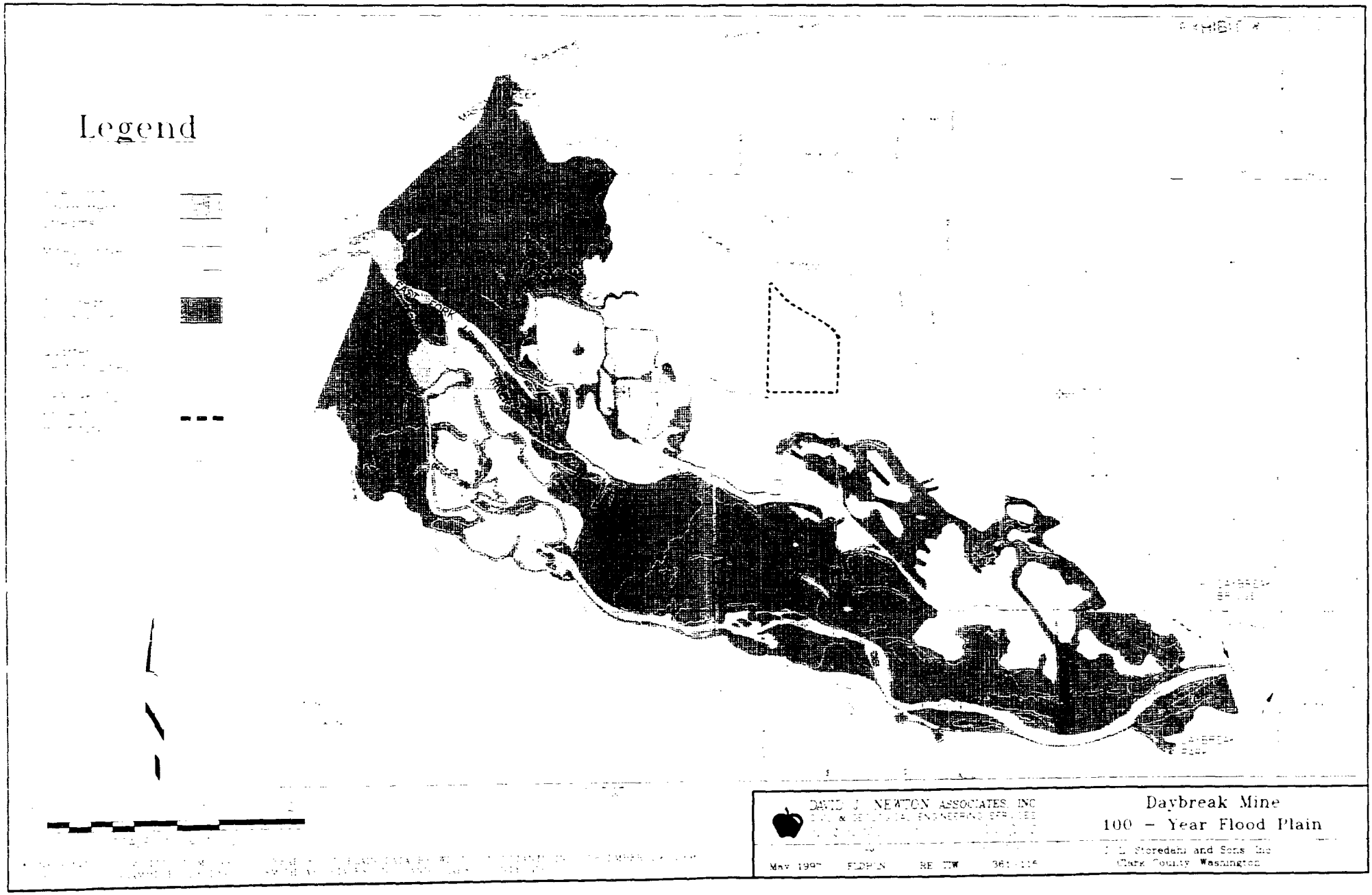
Selected Publications and Presentations

Simons, D.B., R.M. Li, W.T. Fullerton, and T.R. Grindeland. 1981. Storm Water and Sediment Runoff Simulation for a System of Multiple Watersheds, Volume II: Sediment Routing and Yield. Prepared by Colorado State University for USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

Li, R.M., R.A. Mussetter, and T.R. Grindeland. 1988. Sediment-Routing Model HEC-2SR. *in* Twelve Selected Computer Stream Sedimentation Models Developed In the United States. Prepared for Subcommittee on Sedimentation, Interagency Advisory Committee on Water Data. Federal Energy Regulatory Commission, Washington, D.C.

Grindeland, T.R., J.S. O'Brien, and R.M. Li. 1990. Flood-hazard delineation on alluvial fans, *in* Proc. Int. Symp. Hydraulics/Hydrology of Arid Lands (H^2AL) (Richard H. French, ed.). American Society of Civil Engineers, San Diego, California.

Walton, R., J.B. Bradley, and T.R. Grindeland. 1997. 1-D or 2-D Hydraulic Models ? Some Washington State Experiences, Presented at The Association of State Floodplain Managers 21st Annual Conference, Little Rock, Arkansas


Legend
EAST FORK
DAVID J. NEWTON ASSOCIATES, INC
Daybreak Mine
100 - Year Flood Plain
J. L. Storedahl and Sons Inc
Clark County Washington
May 1997
FLDPLN
RE TW
361-116

ATTACHMENT 2

AERIAL PHOTOGRAPH OF EAST FORK LEWIS RIVER

CIVIL ENGINEERING

OREGON STATE UNIVERSITY

College of Engineering

KLINGEMAN, Peter C.
Professor

BIRTH DATE
May 31, 1934

DEGREES

B.S., Civil Engineering, Northwestern University, 1957
M.S., Civil Engineering, Northwestern University, 1959
Ph.D., Civil Engineering, University of California, Berkeley, 1965

ACADEMIC POSITIONS

Assistant Professor, North Dakota State University, 1959
Teaching Associate, University of California, Berkeley, 1959-1962
Research Associate, University of California, Berkeley, 1959, 1962-1964
Visiting Assistant Professor, University of California, at Universidad Catolica de Chile, 1964-1965
Assistant Professor, Oregon State University, 1966-1968
Associate Professor, Oregon State University, 1968-1976
Assistant Director, Water Resources Research Institute, Oregon State University, 1968-1969
Acting Director, Water Resources Research Institute, Oregon State University, 1970, 1975
Academic Guest, Swiss Federal Institute of Technology, Zurich, 1973-1974
Director, Water Resources Research Institute, Oregon State University, 1975-1989
*Professor, Oregon State University, 1976-present
Acting Assistant Dean for Academic Affairs, OSU College of Engineering, July-Oct. 1989
Acting Department Head, Civil Engineering Department, Oregon State University, 1989-1991
*Head Undergraduate Advisor, Civil Engineering Department, Oregon State University, 1991-present

NON-ACADEMIC POSITIONS

City Engineer's Office, Highland Park, Illinois, 1954-1955 (Engineer Trainee; streets and water systems)
Harza Engineering Company, Chicago, Illinois, 1956-1957 (Engineer Trainee, Engineer; dam design, river and pipeline analyses)
Federal Highway Administration, Region 8 as Hydraulic Engineer, Summer, 1971 (Bridge pier scour study for Western Oregon)
Various consulting assignments involving public agencies, private organizations and firms, and individuals, through Peter C. Klingeman, Professional Engineer. Consulting activities have dealt with natural and artificial spawning beds, fish passage improvement in natural channels, river and reservoir sedimentation, river course changes, river bank and channel erosion, reservoir bank erosion, cofferdam scour and failure, dike construction, dike and levee failures, streambank stabilization techniques, sediment and erosion problems from highway construction, river gravel resource management, river impacts of airport expansion, flood control operation, and hydropower diversions, reservoir operation and irrigation water supplies, urban flood plain hydrology, urban flooding related to culvert design, upstream flooding due to dam backwater.
Technical Steering Panel, Hanford Environmental Dose Reconstruction Project, 1988-1994
Member, Snake River Salmon Recovery Team, National Marine Fisheries Service, 1991-1995

UNIVERSITY RESEARCH

University of California, Berkeley, 1962-1964
Wind-Blown Sands (University of California), 1960

Sediment-Radionuclide Transport in San Francisco Bay System (California State Legislature/U.S. Atomic Energy Commission), 1962-1964
Oregon State University, 1966-
Hydrology of Water Yield Prediction (USDI-OWRR), 1966-1972
Efficiency Tests of Subdrain Pipes (Oregon State Highway Department), 1967-1968
Studies on Effects of Watershed Practices on Streams (USDI-FWPCA), 1968-1970
Environmental Studies, Silvies River Basin (U.S. Army Corps of Engineers, Walla Walla District), 1970
Hills Creek Reservoir Turbidity Study (U.S. Army Corps of Engineers, Portland District), 1970-1971
General Planning Methodology for Analysis of Estuarine Natural Resources (Pacific Northwest River Basins Commission; Oregon Study Team), 1972
Streambed Degradation in Western Oregon (USDI-OWRR), 1972-1973
Dredge Spoil Distribution and Estuarine Effects (NSF-RANN), 1972-1974
Sediment Transport and River Development Practices in Switzerland (OSU Sabbatical Leave), 1973-1974
Study on Energy Costs of Water Quality Improvement (U.S. EPA), 1974-1976
Development of Methods to Stabilize Willamette Basin Streambanks by Natural Means (U.S. Army Corps of Engineers, Portland District), 1975-1976
Transport of Bed Sediments in Coarse-Bedded Streams During Transient Flows (NSF), 1975-1979
Huckleberry Mountain Hydrologic Monitoring Network (U.S. EPA), 1976
Snowload Case Studies (U.S. Army Cold Regions Research & Engineering Laboratory), 1976-1978
Water for Oregon's Future; Conference Background Paper (Portland State Univ. Institute for Policy studies), 1977
Berry Creek Hydrologic Monitoring Network (U.S. EPA), 1977
Water Resources Section for Draft Phase I of State Economic Development Plan (Oregon Department of Economic Development), 1977
Resource Survey of Low-Head Hydroelectric Potential -- Pacific Northwest Region (U.S. DOE), 1977-1979
Water Assessment for Energy Technologies (PNRBC), 1979-1980
Willamette River Sediment Transport Investigation (U.S. Army Corps of Engineers, Portland District), 1979-1980
Research Assessment and Coordination: Water-Related Aftereffects of the Mt. St. Helens Eruption (USDI-OWRT), 1980-1983
Sturgeon Lake Restoration: Phase I Diagnostic/Feasibility Study (U.S. EPA via state and local sponsors), 1980-1982
Information Program to Facilitate Small-Scale Hydroelectric Development (U.S. DOE), 1980-1981
Riparian Zone Task Force (USDI-OWRT), 1982-1984
Hydropower Steamflow Data Requirements; Hydrologic Research Services (Oregon DOE), 1982
Preliminary Appraisal of Salmonid Fishery Enhancement Using Rock Structures in Lower Meacham Creek (Umatilla Confederated Tribes), 1983
Sediment Monitoring Program - Sturgeon Lake Phase II Lake Restoration Project (West Multnomah Soil & Water Conservation District, Ore. DEQ, Ore. Dept. of Fish & Wildlife, U.S. EPA), 1986-1987
Application of Economic Analysis to Water Allocations and Fish Habitat Enhancements, John Day Basin (USDI-GS), 1987-1990
Restoration of the Salmon River Salt Marshes: Retrospect and Prospect (U.S. EPA; Region 10), 1988-1989
Wind Energy Data Base Management and Energy Forecasting: Climate Influences on Energy Planning (Bonneville Power Administration), 1988-1989
Motorboat-Induced Streambank Erosion on the Lower Deschutes River (Oregon State Marine Board and Oregon Department of Transportation, Parks and Recreation Division), 1989

Federal-State Cooperative Water Resources Research Institute Program (USDI), annually, 1975-1989
Sturgeon Lake Fecal Coliform Sampling, Testing and Data Interpretation (Oregon Department of Fish & Wildlife), 1991
Sturgeon Lake Sedimentation Monitoring Program, 1991-1994 (Oregon Department of Environmental Quality), 1991-1994
Gravel Management to Protect River Uses (USDI-Geological Survey), 1991-1993
Management of Human Waste in the Backcountry of Mt. Rainier National Park (USDI-National Park Service), 1991-1993
Rogue River Erosion/Deposition Study (USDI-Bureau of Land Management), 1992-1993
Tualatin River Basin Data Evaluation and Recommendations (Oregon DEQ), 1992-1993
Dredging Work Plan for Dairy Creek (Oregon DEQ), 1993-1994
Salmon Habitat Study: Gravel Removal, Salmon Habitat and Stream Health (Oregon DSL), 1994-1995
New River Instream Flow Study (USDI-Bureau of Land Management), 1995-1996
Low-Flow Augmentation through Market Transfers of Deschutes River Water (USDA-Cooperative State Research Service), 1995-1997
Water Quality Monitoring for Blaine Road Reconstruction; Nestucca River, Oregon (USDOT-Federal Highway Administration), 1995-1996

FIELDS OF SPECIALIZATION

Applied Hydrology
River and Estuarine Processes, Hydraulics and Sediment Transport
Water Resource Planning, Management and Development
Problem Analysis and Impact Assessment

PROFESSIONAL ACTIVITIES

Registration

State of Oregon, No. 5941

Professional Societies

American Society of Civil Engineers
International Association for Hydraulic Research

Professional Recognition

Phi Eta Sigma
Tau Beta Pi
Special Recognition as "Profesor Extraordinario" by the Fundacion de Ingenieros de la Universidad Catolica de Chile
Honorary Member of Fundacion de Ingenieros de la Universidad Catolica de Chile
Listings in *American Men and Women of Science*, *Who's Who in the West*, *Who's Who in Technology Today*, and *Who's Who in Technology*
1975 Winner of the Loyd Carter Award "For Outstanding and Inspirational Teaching," Oregon State University School of Engineering
1977 ASCE National Office Award for "Outstanding Service on Behalf of Students in Engineering Programs"
1983 Karl Emil Hilgard Hydraulic Prize for research paper of superior merit published by the Hydraulics Division, ASCE
1988: Sea Grant Pioneer Award, on 20th anniversary of OSU Sea Grant College Program

1994 Outstanding Civil Engineer; award by Oregon Section ASCE in recognition of contributions to profession and ASCE

Committees, Commissions and Boards

Member, Research Council, Oregon State University, 1971-1973
University Representative to Universities Council on Water Resources, 1968-1989
Member, Governing Board, Water Resources Research Institute, 1966-1969, 1972-1975
Member, Watershed Management Advisory Commission to the City Council, Corvallis, 1975-1986
Member, Scientific/Technical Advisory Group, South Slough Estuarine Sanctuary, 1978-1981
Member, Joint Committee of National Societies for Metrication in Water Resources, (also American National Metric Council, Water Resources Sector Committee, since 1982) (UCOWR Representative), 1978-1985
Member, Governor's Task Force on Hydropower, 1979-1980
Member, Hydroelectric Planning Group, Governor's Office, 1980-1985
Member, Board of Directors, Universities Council on Water Resources, 1980-1983
Member, Advisory Board, Oregon High Desert Museum, 1980-1983
Member, Corvallis-Philomath Buffer Committee, 1982-1983
Member, Advisory Committee on Water Data for Public Use, U.S. Geological Survey (UCOWR Representative), 1982-1985
Member and Chair, ASCE Hydraulics Division Awards Committee, 1983-1987
Corresponding Member, Secretary, Vice Chair, Chair, Post Chair, ASCE Hydraulics Division Sedimentation Committee, 1986-1993
Oregon Section ASCE: Director, 1986-1988; Secretary, 1991-1992; Vice President, 1992-1993; President-Elect, 1993-1994; President, 1994-1995; Past President, 1995-1996
Program Chair, Vice President, President, Past President, Willamette Branch ASCE, 1985-1989
Member, Technical Advisory Committee to Strategic Water Planning Group, Governor's Office, 1984-1985
Member and Chair, Statewide Basin Planning Advisory Committee, Oregon Water Resources Department, 1986-1988
Member, Water Conservation Committee, Oregon Water Resources Department, 1987-1988
Member, Oregon Drought Council, Oregon Emergency Management, Executive Department, 1991-1994
Member, Technical Working Group for Wetlands Rating Methodology, Oregon Department of Environmental Quality & Division of State Lands, 1991-1992
Member, U.S. Geological Survey Panel to Evaluate State Water Resources Research Institute Program, 1993-1994

PUBLICATIONS

Books, Booklets and Circulars

System International d'Unites: Metric Measurement in Water Resources Engineering, Universities Council on Water Resources, University of Nebraska, Lincoln, 1976, 11 pp.

Micro-Hydropower: Oregon Development Guide, (with Greg Wheeler), Extension Circular 1096, Oregon State University Extension Service, Corvallis, 1982, 12 pp.

Gravel Bedload Transport Processes, (with W.W. Emmett), Chapter 7 in *Gravel-Bed Rivers*, Hey, Bathurst and Thorne, Editors, John Wiley & Sons, 1982, pp. 141-180.

Discussion of Chapter 3, River Bed Gravels: Sampling and Analysis, in *Sediment Transport in Gravel-Bed Rivers*, Thorne, Bathurst, and Hey, Editors, John Wiley & Sons, 1987, pp. 81-83.

Discussion of Chapter 4, Bed Load Sampling and Analysis, in *Sediment Transport in Gravel-Bed Rivers*, Thorne, Bathurst, and Hey, Editors, John Wiley & Sons, 1987, p. 116.

Discussion of Chapter 19, Bed Load Transport Measurements by Vortex-Tube Trap in Virginia Creek, Italy, in *Sediment Transport in Gravel-Bed Rivers*, Thorne, Bathurst, and Hey, Editors, John Wiley & Sons, 1987, pp. 606-607.

Discussion of Chapter 30, A Case Study of Minimum Streamflow for Fishery Habitat in the Yampa River, in *Sediment Transport in Gravel-Bed Rivers*, Thorne, Bathurst, and Hey, Editors, John Wiley & Sons, 1987, pp. 944-945.

Technical Journals

"Drainage Density in Drift-Covered Basins," (with M.C. Roberts), discussion of paper by J.F. Orsborn, *Journal of the Hydraulics Division*, ASCE, Vol. 96, No. HY 7, July 1970, pp. 1656-1657.

"The Influence of Landform and Precipitation Parameters on Flood Hydrographs," (with M.C. Roberts), *Journal of Hydrology*, North-Holland Pub. Co., Amsterdam, Vol. XI, No. 4, November 1970, pp. 393-411.

"Hydrologic Evaluations in Bridge Pier Scour Design," *Journal of the Hydraulics Division*, ASCE, Vol. 99, No. HY 12, December 1973, pp. 2175-2184.

"Sediment Transport at Low Shields-Parameter Values," (with E. Helland-Hansen and R.T. Milhous), *Journal of the Hydraulics Division*, ASCE, Vol. 100, No. HY 1, January 1974, pp. 261-265.

"Restoring the Willamette River: Costs and Impacts of Water Pollution Control," (with E.S. Huff), *Journal of the Water Pollution Control Federation*, Vol. 48, No. 10, October 1976, pp. 2410-2415.

"Bedload and Size Distribution in Paved Gravel-Bed Streams," (with G. Parker and D.G. McLean), *Journal of the Hydraulics Division*, ASCE, Vol. 108, No. HY 4, April 1982, pp. 544-571.

"On Why Gravel Bed Streams are Paved," (with G. Parker), *Water Resources Research*, Vol. 18, No. 5, October 1982, pp. 1409-1423.

"Ensuring the Security of Public Water Supplies," (with P.J. Ownbey and F.D. Schaumburg), *Journal of the American Water Works Association*, Vol. 80, No. 2, February 1988, pp. 30-34.

"Suspension of Fine-Grained Sediment," (with N. Talebbeydokhti), *Iranian Journal of Science and Technology*, Vol. 16, No. 1, 1992, pp. 29-42.

"Developing a Bioeconomic Model for Riverine Management: Case of the John Day River, Oregon," (with R. Adams, R. Berrens, A. Cerda, and H. Li), *Rivers*, Vol. 4, No. 3, July 1993, pp. 213-226.

"Les impacts morphodynamiques sur un cours d'eau soumis a un amenagement hydroelectrique a derivation: le Rhone en Chautagne (France)," (with J-P. Bravard and Y. Giuliani), *Revue de Geographie de Lyon*, Vol. 69, No. 1/94, 1994, pp. 73-87.

Conference Proceedings (Published)

"Considerations on the Siting of Outfalls for the Sea Disposal of Radioactive Effluent in Tidal Waters," (with W.J. Kaufman), on discussion of paper by R.T.P. Whipple, *Advances in Water Pollution Research*, Vol. 3, Proc. of Conf. on Water Pollution Research, London, 1962, MacMillan Co., New York, 1964, pp. 18-26.

"Bed-Load Transport in Mountain Streams," (with R.T. Milhous), presented at the ASCE Hydraulics Division Specialty Conf., Iowa City, August 18-20, 1971 (Abstract).

"The Relationship of Drainage Net Fluctuations and Discharge," (with M.C. Roberts), *International Geography 1972*, Proc. of the 22nd International Geographical Congress, Canada, Adams and Helleiner, Editors, University of Toronto Press, 1972, pp. 189-191.

"General Planning Methodology for Estuarine Natural Resources," *Proceedings, Third Annual Technical Conference on Estuaries of the Pacific Northwest*, Oregon State University, Corvallis, 1973.

"Sediment Transport System in a Gravel-Bottomed Stream," (with R.T. Milhous), *Hydraulic Engineering and the Environment*, Proceedings of the 21st Annual Hydraulics Division Specialty Conference, ASCE, Bozeman, Montana, August 15-17, 1973.

"Surveys of Energy Potential: Introduction," in *Low Head Hydro, an Examination of an Alternative Energy Resource*, (Gladwell and Warnick, eds.), Idaho Water Resources Research Institute, University of Idaho, Moscow, September 1978.

"Hydropower Resource Survey of the Pacific Northwest, U.S.A.," (Gladwell, et al.), *Proceedings III World Congress on Water Resources*, The International Water Resources Association, Mexico City, Vol. 2, 1979, pp. 878-887.

"Short-Term Considerations on River Gravel Supply," *Salmon-Spawning Gravel: A Renewable Resource in the Pacific Northwest?* Proceedings of October 6-7, 1980 Conference, Seattle, State of Washington Water Research Center, Washington State University, Pullman, March 1981, pp. 123-139.

"The OSU-WRRI Inventory of Oregon's Hydroelectric Power Potential," Proceedings of October 5-6, 1981 Portland, Conference, *Megawatts for Small Hydro*, Oregon State University, Water Resources Research Institute, Corvallis, 1981.

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"Incipient Resuspension of Silt-Clay Sediment," (with N. Talebbeydokhti), *Water for Resource Development*, D.L. Schreiber, Editor, Proceedings of the Hydraulics Division Specialty Conference, ASCE, Coeur d'Alene, Idaho, August 14-17, 1984, pp. 72-76.

"Flow and Scour Patterns Around Gabion Structures," (with Y.A. Owusu), *Water for Resource Development*, D.L. Schreiber, Editor, Proceedings of the Hydraulics Division Specialty Conference, ASCE, Coeur d'Alene, Idaho, August 14-17, 1984, pp. 281-285.

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"Evaluating Hydrologic Needs for Design of Stream Habitat Modification Structures," *Pacific Northwest Stream Habitat Management Workshop*, T.J. Hassler, Editor, Proceedings of American Fisheries Society Workshop, Arcata, California, October 10-12, 1984, pp. 191-213.

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"Flushing of Fine Sediment From a Coarse-Bed Stream," (with A. Mohammadi), Proceedings (Abstract), Third International Iranian Congress of Civil Engineering, University of Shiraz, Shiraz, Iran, May 14-18, 1990, pp. 41-42.

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"Incipient Motion in Gravel-Bed Rivers," (with H. Matin), *Hydraulic Engineering '93*, H.W. Shen, S.T. Su and F. Wen, Editors, Proceedings of the 1993 National Conference, Hydraulics Division, ASCE, San Francisco, California, July 25-30, 1993, pp. 707-712.

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"Radionuclide Transport in the Columbia River from Hanford Operations," (with M. Richmond, W. Walters and B. Gilmore), *Environmental Restoration*, Proceedings of the 1994 Annual Meeting of the Universities Council on Water Resources, Big Sky, Montana, August 2-5, 1994, pp. .....

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"A Preliminary Investigation of Radioactivity and the Estuarine Environment," presented at the Berkeley Meeting on Isotope Applications to Surface and Ground Water Hydrology, September 5-7, 1962.

"Use of Radioactive Fallout in Tracing the Movement of Sediments in a River-Estuary System," (with W.J. Kaufman), presented at the ASCE Environmental Engineering Conference, Salt Lake City, May 11-15, 1964.

"Characteristics of Fallout Movement with Suspended Sediment in a River-Estuary System," presented at 13th Annual Meeting of the Pacific Northwest Region, American Geophysical Union, Corvallis, Oregon, August 15-16, 1966.

"Oak Creek Vortex Bed-Load Sampler," (with R.T. Milhous), presented at 17th Annual Pacific Northwest Regional Meeting, American Geophysical Union, Tacoma, Washington, October 14-16, 1970.

"Hydrologic Aspects of Bridge Pier Scour Design in the Pacific Northwest," presented at 19th Annual Pacific Northwest Regional Meeting, American Geophysical Union, Vancouver, B.C., Canada, October 16-17, 1972.

"Restoring the Willamette River: Costs and Impacts of Water Pollution Control," (with E.S. Huff), presented at the 48th Annual Conference, Water Pollution Control Federation, Miami, Florida, October 6, 1975.

"Restoring the Willamette River: Costs and Impacts of Water Pollution Control," (with E.S. Huff), presented at the 42nd Annual Conference, Pacific Northwest Pollution Control Association, Boise, Idaho, October 22-24, 1975.

"Physical Data Needs for Evaluation Programs," *Stream Habitat Enhancement Evaluation Technical/Training Workshop*, J. Buell, Editor, Portland, Oregon, October 21-23, 1986.

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"Fluid Jetster Teaches Basics to Juniors," (with D.A. Bella), presented at 52nd Annual Meeting, Pacific Northwest Section, American Society for Engineering Education, Seattle, Washington, May 18-19, 1990.

Reports and Others

"The Development, Construction and Utilization of an Electrolytic Analog System," M.S. Project Report, Northwestern University, Evanston, Illinois, 1958.

"Nature and Disposition of Sediment Sorbed Radionuclides Entering San Francisco Bay," (with W.J. Kaufman), *Transport of Radionuclides in Fresh Water Systems*, U.S. Atomic Energy Commission Publication TID-7664, 1963, pp. 149-159.

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Transport of Radionuclides with Suspended Sediment in Estuarine Systems, (with W.J. Kaufman), University of California, Sanitary Engineering Research Laboratory, SERL Report No. 65-15, Berkeley, 1965.

"Engineering Aspects of Diversion Proposals," *Northwest-Southwest Water Diversion Issues*, Oregon State University, Water Resources Research Institute, Corvallis, 1967, pp. 11-30.

Efficiency Tests of Subdrain Pipes, (with L.S. Slotta), Oregon State University, Corvallis. Report submitted to Oregon State Highway Commission and the Bureau of Public Roads, U.S. Dept. of Commerce, 1968.

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"Some Thoughts on Western Oregon 100 Years from Now," *Oregon State Engineer*, Corvallis, Vol. 6, No. 2, January 1971.

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Studies on Effects of Watershed Practices on Streams, (with Krygier and Brown), Oregon State University, Schools of Forestry and Engineering, Corvallis. Project completion report to Environmental Protection Agency, U.S. Environmental Protection Agency Water Pollution Control Research Series 13010 EGA 02/71, February 1971.

Prediction of Pier Scour in Western Oregon, Report submitted to the Federal Highway Administration, U.S. Department of Transportation, Region 8, Portland, Oregon, 1971.

Hills Creek Reservoir Turbidity Study, (Klingeman, et al.), Oregon State University, Water Resources Research Institute, Report No. WRRI-14, Corvallis, 1971.

PIA Environmental Impact Study; Natural Resource Study Phase; Chapter B: Potential Hydrologic and Hydraulic Impacts of the PIA Expansion Plan and Alternatives, (with R.T. Milhous), Oregon State University, Water Resources Research Institute, Corvallis, 1972.

General Planning Methodology for Oregon's Estuarine Natural Resources, (with D.A. Bella), Oregon State University, Water Resources Research Institute, Corvallis, 1973.

Descriptions and Information Sources for Oregon's Estuaries, (with K.L. Percy, D.A. Bella), Oregon State University, Water Resources Research Institute, Report No. WRRI-19-1, Corvallis, 1973.

"What is an Environmental Impact Statement?", *How Effective are Environmental Impact Statements?*, Oregon State University, Water Resources Research Institute, Corvallis, 1973, pp. 1-9.

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Willamette River Basin Streambank Stabilization by Natural Means, (with J.B. Bradley), Oregon State University, Water Resources Research Institute, Corvallis, Project report for U.S. Army Corps of Engineers, Portland District, June 1976.

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"Energy and Water Diversion," *Energy and Water Resources*, Oregon State University, Water Resources Research Institute, Corvallis, March 1977.

Oregon's Water Resource: A Summary of Available Information, Oregon State University, Water Resources Research Institute, Corvallis, March 1977.

Western Oregon Snowload Case Studies, (with H.I. Laursen, J. Erwin, T. Howell), Progress Report, Oregon State University, Civil Engineering Department, Corvallis, June 1977.

Survey of the Potential for Hydroelectric Energy with Solar Energy Development, (with W.H. Buckley), Oregon State University, Water Resources Research Institute, Corvallis, November 1977.

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Western Oregon Snowload Case Studies, (with H.I. Laursen, D. Nicoli, J. Erwin, T. Howell), Final Report, Oregon State University, Civil Engineering Department, Corvallis, June 1978.

Sediment Transport Research Facilities at Oak Creek, Report F1, 1979.

A Resource Survey of Low-Head Hydroelectric Potential, Pacific Northwest Region, (Gladwell, et al.), Completion Report, Phase I (in 10 volumes), U.S. Department of Energy, Report No. DOE/RA/01691-1, March 1979.

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A Resource Survey of Low-Head Hydroelectric Potential at Existing Dams and Proposed Sites in the Pacific Northwest Region, (Gladwell, et al.), Completion Report, Phase II, U.S. Department of Energy, Report No. DOE/RA/01691-2, September 1979.

A Resource Survey of the Hydroelectric Potential at Existing and Proposed Dams in Oregon, Oregon State University, Water Resources Research Institute, Report No. WRRI-62 (main report and 1 appendix), Corvallis, 1980.

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Riparian Zone Systems, Uses, and Management: Phase I, (with W.D. Honey and R.J. Seidler), Oregon State University, Water Resources Research Institute, Corvallis, September 1983.

Preliminary Appraisal of Salmonid Fishery Enhancement Using Rock Structures in Lower Meacham Creek, Oregon State University, Water Resources Research Institute, Corvallis, September 1983.

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Estimating and Measuring Impacts of Non-Structural Methods for Increasing Basin Water Yield, Report of the Third Interuniversity Water Resources Workshop, held May 9, 1986 at Portland State University, Oregon State University, Water Resources Research Institute, Corvallis.

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EXHIBIT #

April 28, 1997

John L. Dentler, Attorney
Perkins Coie Partnership, P.C.
1110 Capitol Way South, Suite 405
Olympia, Washington 98501-2251

REF. East Fork Lewis River -- Stordahl Inc.

Dear Mr. Dentler:

I was requested by you to review the analyses made and conclusions reached by WEST Consultants, Inc. regarding the Stordahl property on the north side of the East Fork Lewis River in an area referred to here as the Daybreak area. In particular, I was to direct my evaluation to a 20-acre parcel on the north edge of the larger Stordahl tract and just south of J.A. Moore Road.

My background regarding the East Fork Lewis River includes two visits to the former gravel pits on the south side of the river. In October 1995 I was guest of a technical advisory group for the Pacific Rock Environmental Enhancement Group and pointed out the impending breach of the road between the river and the eastern-most former pit (expected by erosion or avulsion, depending on the specific nature of flood events). This opinion was re-confirmed when I next saw that site in September 1996, with the road no longer passable due to erosion that had occurred in the intervening period.

I have carefully reviewed the report submitted by WEST Consultants to J.L. Stordahl & Sons, Inc., as well as the supporting analyses, other recent documentation, and correspondence submitted by WEST Consultants to Clark County. In addition, I inspected the subject property with Mr. Virgle Barnett of Stordahl Inc on April 23, 1997, and made a supplemental inspection of the more extensive Daybreak area and environs, including the river and floodplain in the vicinity, upstream and downstream of the subject property.

I find that WEST Consultant's research methods are entirely appropriate and adequate for evaluating the hydrology, hydraulics and river mechanics in the vicinity of the 20-acre parcel and the larger tract of land.

Furthermore, I concur with the conclusions reached by WEST Consultants in the June 1996 report titled East Fork Lewis River Hydrology, Hydraulics and River Mechanics Study. These conclusions, with which I agree, may be restated as follows:

(1) There is a need to correct the FEMA maps to adjust the position of the 100-year floodplain; the limits of the February 1996 flood represent a rarer event that may be used to shift the 100-year floodplain closer to the river; and
(2) It is extremely unlikely that the main channel of the river will move to the north of its former position or its current position in the foreseeable future.

The initial analysis of flood frequency made for the FEMA National Flood Insurance Program was duplicated by WEST Consultants as part of their updated analysis. The newer analysis had the benefit of 67 years (1929-1996) of flood records on the East Fork Lewis River, rather than just the 46 years of records (1929-1974) used in the earlier study. This significantly longer record provides superior statistical definition of extreme flood events and gives a far better estimate of the likely magnitude of the February 1996 flood. The WEST Consultants analysis followed proper procedures and showed that this flood well exceeded the 100-year event. From my analysis of the flood data, I agree with WEST Consultants that the newer analysis places the February 1996 flood at about a 300-year recurrence interval.

The channel change in winter 1996-97 has shifted the river farther to the south, abandoning the former channel except to carry high water. Thus, the river will not pose a threat of erosive or avulsive channel shift with respect to the 20-acre parcel in the Daybreak area.

From my observations, confirmed from the 12-18-96 aerial photos, the channel break-through into the gravel pond zone on the south side of the former channel has also set into action some bed downcutting at and upstream of the break-through point. This is evidenced by the lower elevation of the present bed adjacent to the former bed at the point of break-through and the apparent abandonment of another former bend of river a short distance upstream. Such bed degradation (lowering of elevation) is to be expected to extend upstream but will become limited as the bed self-armors with the large-size cobbles present. A consequence of such changes will be the lowering of water surface profiles compared to past elevations. Thus, the profile of the 100-year flood may be expected to become slightly lower in the future for the zone upstream of the break-through point, compared to what it was before break-through occurred. This will place the 20-acre parcel even higher above the 100-year floodplain over time and will further diminish the likelihood of channel shifting into the Daybreak area. In particular, the parcel is situated outside the route of future channel locations.

I also observed that the 20-acre parcel is subject to storm-water runoff from upland sources, particularly where development adds

additional impervious surfaces (e.g., new homes, driveways, and streets). Such flowing water and associated erosion should not be confused with river water from East Fork Lewis River; the source is quite different. [Note: During field inspection, I also saw a zone where concentrated flow had entered a gravel pit in the Daybreak area, causing local bank erosion and gullying into adjacent land (see 2-10-96 photo); this may have been partly caused by river overflow from this rare flood and partly by concentrated land runoff.]

I understand that there is concern about avulsive channel changes associated with gravel pit operations -- a subject that is not well understood even in the technical community. Clearly, anticipation and prevention of potential channel shifts are important aspects of land development. To this end, river processes must be carefully evaluated, not only for proposed new gravel mining but also to restore areas of past gravel mining. WEST Consultants has provided a thorough evaluation and has provided information to the developer and to Clark County that may be used to plan careful development of future mining areas. WEST Consultants letter to Clark County Department of Community Development on 13 March 1997 provides a fair and unbiased assessment. I agree with the seven points made in that letter and with other conclusionary statements contained therein (without reiterating them here, as the letter is on file with Clark County).

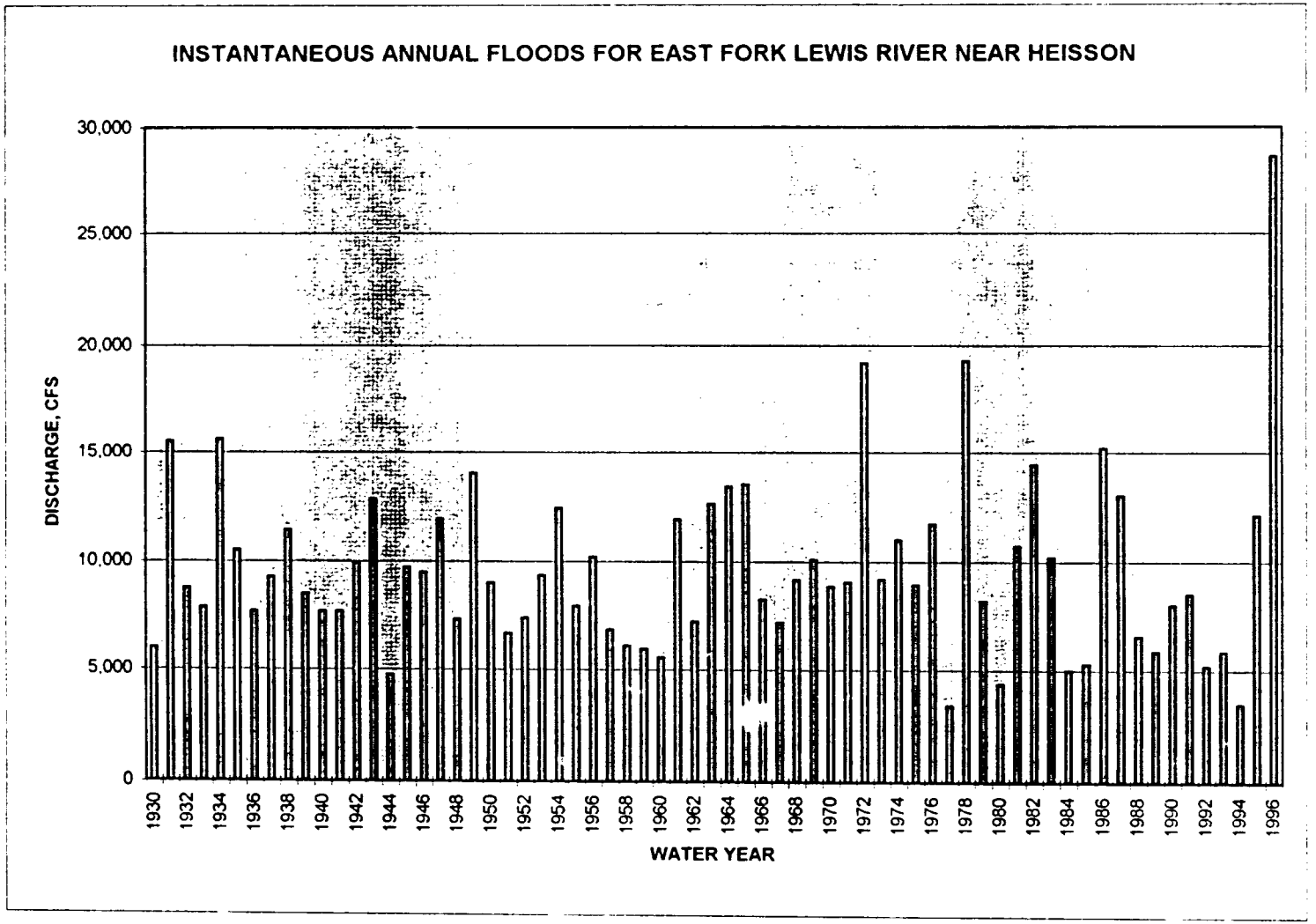
As a more general comment, I understood that rehabilitation was underway for the former gravel pits on the south side of the river. Although circumstances have been severely altered by the change of channel course, I think that rehabilitation efforts are still feasible (albeit different). The river changes are now allowing a riverine system to re-establish itself over a wider zone than was possible when those pits were isolated from the river. In other words, the recent river changes may turn out to be beneficial for riverine ecologic conditions even if not particularly favorable to pond environments. The Pacific Rock Environmental Enhancement Area may gradually acquire a more natural appearance over time as the river develops a more stable long-term pathway through that area.

If I may provide additional information, please contact me at my day phone (541) 737-4977 or evening phone (541) 753-3350 or by fax (541) 737-3052.

Sincerely,

Peter C. Klingeman

Peter C. Klingeman, PhD, PE



EFKLEWIS.XLS

EXHIBIT #

EAST FORK LEWIS RIVER -- FLOOD FREQUENCY ANALYSIS

Instantaneous Annual Flood					LP3 Analysis for 67 Years			LP3 Analysis for 66 Years			FEMA 1929-1974 Analysis (45 years)			
Chron Number	Water Year	Month	Day	Peak Discharge cfs	Log Peak Discharge	(X-Xbar)^2	(X-Xbar)^3	Log Peak Discharge	(X-Xbar)^2	(X-Xbar)^3	Chron Number	Log Peak Discharge	(X-Xbar)^2	(X-Xbar)^3
1	1930	12	14	6,000	3.7782	0.0299	-0.0052	3.7782	0.0273	-0.0045	1	3.7782	0.0350	-0.0065
2	1931	3	31	15,500	4.1903	0.0573	0.0137	4.1903	0.0610	0.0151	2	4.1903	0.0507	0.0114
3	1932	3	5	8,740	3.9415	0.0001	0.0000	3.9415	0.0000	0.0000	3	3.9415	0.0006	0.0000
4	1933	1	8	7,860	3.8954	0.0031	-0.0002	3.8954	0.0023	-0.0001	4	3.8954	0.0049	-0.0003
5	1934	12	22	15,600	4.1931	0.0586	0.0142	4.1931	0.0624	0.0156	5	4.1931	0.0519	0.01 8
6	1935	12	21	10,500	4.0212	0.0049	0.0003	4.0212	0.0061	0.0005	6	4.0212	0.0031	0.0002
7	1936	1	12	7,670	3.8848	0.0044	-0.0003	3.8848	0.0034	-0.0002	7	3.8848	0.0065	-0.0005
8	1937	12	23	9,260	3.9666	0.0002	0.0000	3.9666	0.0005	0.0000	8	3.9666	0.0000	0.0000
9	1938	12	29	11,400	4.0569	0.0112	0.0012	4.0569	0.0129	0.0015	9	4.0569	0.0084	0.0008
10	1939	2	14	8,450	3.9269	0.0006	0.0000	3.9269	0.0003	0.0000	10	3.9269	0.0015	-0.0001
11	1940	12	15	7,670	3.8848	0.0044	0.0003	3.8848	0.0034	0.0002	11	3.8848	0.0065	-0.0005
12	1941	11	29	7,670	3.8848	0.0044	-0.0003	3.8848	0.0034	-0.0002	12	3.8848	0.0065	-0.0005
13	1942	12	19	9,920	3.9965	0.0021	0.0001	3.9965	0.0028	0.0002	13	3.9965	0.0010	0.0000
14	1943	11	23	12,800	4.1072	0.0244	0.0038	4.1072	0.0269	0.0044	14	4.1072	0.0202	0.0029
15	1944	2	6	4,730	3.6749	0.0762	-0.0210	3.6749	0.0721	-0.0193	15	3.6749	0.0843	-0.0245
16	1945	2	7	9,710	3.9872	0.0013	0.0000	3.9872	0.0019	0.0001	16	3.9872	0.0005	0.0000
17	1946	11	27	9,500	3.9777	0.0007	0.0000	3.9777	0.0012	0.0000	17	3.9777	0.0002	0.0000
18	1947	12	11	11,900	4.0755	0.0155	0.0019	4.0755	0.0175	0.0023	18	4.0755	0.0122	0.0013
19	1948	1	7	7,320	3.8645	0.0075	-0.0006	3.8645	0.0062	-0.0005	19	3.8645	0.0101	-0.0010
20	1949	2	17	14,000	4.1461	0.0381	0.0074	4.1461	0.0411	0.0083	20	4.1461	0.0327	0.0059
21	1950	2	24	8,990	3.9538	0.0000	0.0000	3.9538	0.0001	0.0000	21	3.9538	0.0001	0.0000
22	1951	12	23	6,690	3.8254	0.0158	-0.0020	3.8254	0.0139	-0.0016	22	3.8254	0.0195	-0.0027
23	1952	2	4	7,380	3.8681	0.0069	-0.0006	3.8681	0.0057	-0.0004	23	3.8681	0.0094	-0.0009
24	1953	1	18	9,350	3.9708	0.0004	0.0000	3.9708	0.0008	0.0000	24	3.9708	0.0000	0.0000
25	1954	12	9	12,400	4.0934	0.0203	0.0029	4.0934	0.0225	0.0034	25	4.0934	0.0164	0.0021
26	1955	12	20	7,930	3.8993	0.0027	-0.0001	3.8993	0.0019	-0.0001	26	3.8993	0.0043	-0.0003
27	1956	12	11	10,200	4.0086	0.0033	0.0002	4.0086	0.0043	0.0003	27	4.0086	0.0019	0.0001
28	1957	3	7	6,860	3.8363	0.0131	-0.0015	3.8363	0.0114	-0.0012	28	3.8363	0.0166	-0.0021
29	1958	4	20	6,110	3.7860	0.0272	-0.0045	3.7860	0.0247	-0.0039	29	3.7860	0.0321	-0.0058
30	1959	11	18	5,960	3.7752	0.0309	-0.0054	3.7752	0.0282	-0.0047	30	3.7752	0.0361	-0.0069
31	1960	10	11	5,540	3.7435	0.0430	-0.0089	3.7435	0.0399	-0.0080	31	3.7435	0.0492	-0.0109
32	1961	11	24	11,900	4.0755	0.0155	0.0019	4.0755	0.0175	0.0023	32	4.0755	0.0122	0.0013
33	1962	11	22	7,240	3.8597	0.0083	-0.0008	3.8597	0.0070	-0.0006	33	3.8597	0.0111	-0.0012
34	1963	11	20	12,600	4.1004	0.0223	0.0033	4.1004	0.0247	0.0039	34	4.1004	0.0183	0.0025
35	1964	1	25	13,400	4.1271	0.0310	0.0055	4.1271	0.0338	0.0062	35	4.1271	0.0262	0.0042
36	1965	12	22	13,500	4.1303	0.0322	0.0058	4.1303	0.0350	0.0065	36	4.1303	0.0273	0.0045
37	1966	3	9	8,240	3.9159	0.0012	0.0000	3.9159	0.0007	0.0000	37	3.9159	0.0024	-0.0001
38	1967	12	13	7,190	3.8567	0.0089	-0.0008	3.8567	0.0075	-0.0006	38	3.8567	0.0118	-0.0013
39	1968	2	19	9,140	3.9609	0.0001	0.0000	3.9609	0.0003	0.0000	39	3.9609	0.0000	0.0000
40	1969	1	5	10,100	4.0043	0.0028	0.0002	4.0043	0.0037	0.0002	40	4.0043	0.0015	0.0001
41	1970	1	22	8,840	3.9465	0.0000	0.0000	3.9465	0.0000	0.0000	41	3.9465	0.0004	0.0000
42	1971	1	19	9,040	3.9562	0.0000	0.0000	3.9562	0.0002	0.0000	42	3.9562	0.0001	0.0000
43	1972	1	20	19,200	4.2833	0.1104	0.0367	4.2833	0.1156	0.0393	43	4.2833	0.1012	0.0322
44	1973	12	21	9,160	3.9619	0.0001	0.0000	3.9619	0.0003	0.0000	44	3.9619	0.0000	0.0000
45	1974	1	15	11,000	4.0414	0.0082	0.0007	4.0414	0.0096	0.0009	45	4.0414	0.0058	0.0004
46	1975	1	14	8,910	3.9499	0.0000	0.0000	3.9499	0.0000	0.0000				
47	1976	12	4	11,700	4.0682	0.0137	0.0016	4.0682	0.0156	0.0019				
48	1977	3	7	3,390	3.5302	0.1770	-0.0745	3.5302	0.1707	-0.0705				
49	1978	12	2	19,300	4.2856	0.1119	0.0375	4.2856	0.1171	0.0401				
50	1979	2	7	8,140	3.9106	0.0016	-0.0001	3.9106	0.0011	0.0000				
51	1980	1	14	4,390	3.6425	0.0952	-0.0294	3.6425	0.0905	-0.0272				
52	1981	12	25	10,700	4.0294	0.0061	0.0005	4.0294	0.0074	0.0006				
53	1982	1	24	14,400	4.1584	0.0430	0.0089	4.1584	0.0462	0.0099				
54	1983	12	3	10,200	4.0086	0.0033	0.0002	4.0086	0.0043	0.0003				
55	1984	1	25	4,990	3.6981	0.0639	-0.0162	3.6981	0.0601	-0.0147				
56	1985	11	28	5,260	3.7210	0.0529	-0.0122	3.7210	0.0494	-0.0110				
57	1986	2	23	15,200	4.1818	0.0533	0.0123	4.1818	0.0569	0.0136				
58	1987	2	1	13,000	4.1139	0.0266	0.0043	4.1139	0.0291	0.0050				
59	1988	1	14	6,580	3.8182	0.0176	-0.0023	3.8182	0.0156	-0.0020				
60	1989	1	9	5,860	3.7679	0.0335	-0.0061	3.7679	0.0308	-0.0054				
61	1990	1	9	8,000	3.9031	0.0023	-0.0001	3.9031	0.0016	-0.0001				
62	1991	4	5	8,490	3.9289	0.0005	0.0000	3.9289	0.0002	0.0000				
63	1992	12	6	5,190	3.7152	0.0556	-0.0131	3.7152	0.0520	-0.0119				
64	1993	1	9	5,860	3.7679	0.0335	-0.0061	3.7679	0.0308	-0.0054				
65	1994	1	5	3,480	3.5416	0.1676	-0.0686	3.5416	0.1614	-0.0648				
66	1995	11	30	12,100	4.0828	0.0174	0.0023	4.0828	0.0195	0.0027				
67	1996	2	8	28,600	4.4564	0.2554	0.1291							
Sum of values				647,900	264.7149	1.9819	0.0154	260.2586	1.7226	-0.0741		178.4349	0.7406	0.0156
Average of values				9,670	3.9510	0.0296	0.0002	3.9433	0.0261	-0.0011		3.9652	0.0165	0.0003
Mean of LogQ					3.9510			3.9433				3.9652		
Standard Deviation of LogQ					0.1733			0.1628				0.1297		
Skewness CS1					0.0461			0.2726				0.1700		
Skewness CS2					0.0502			-0.2974				0.1927		

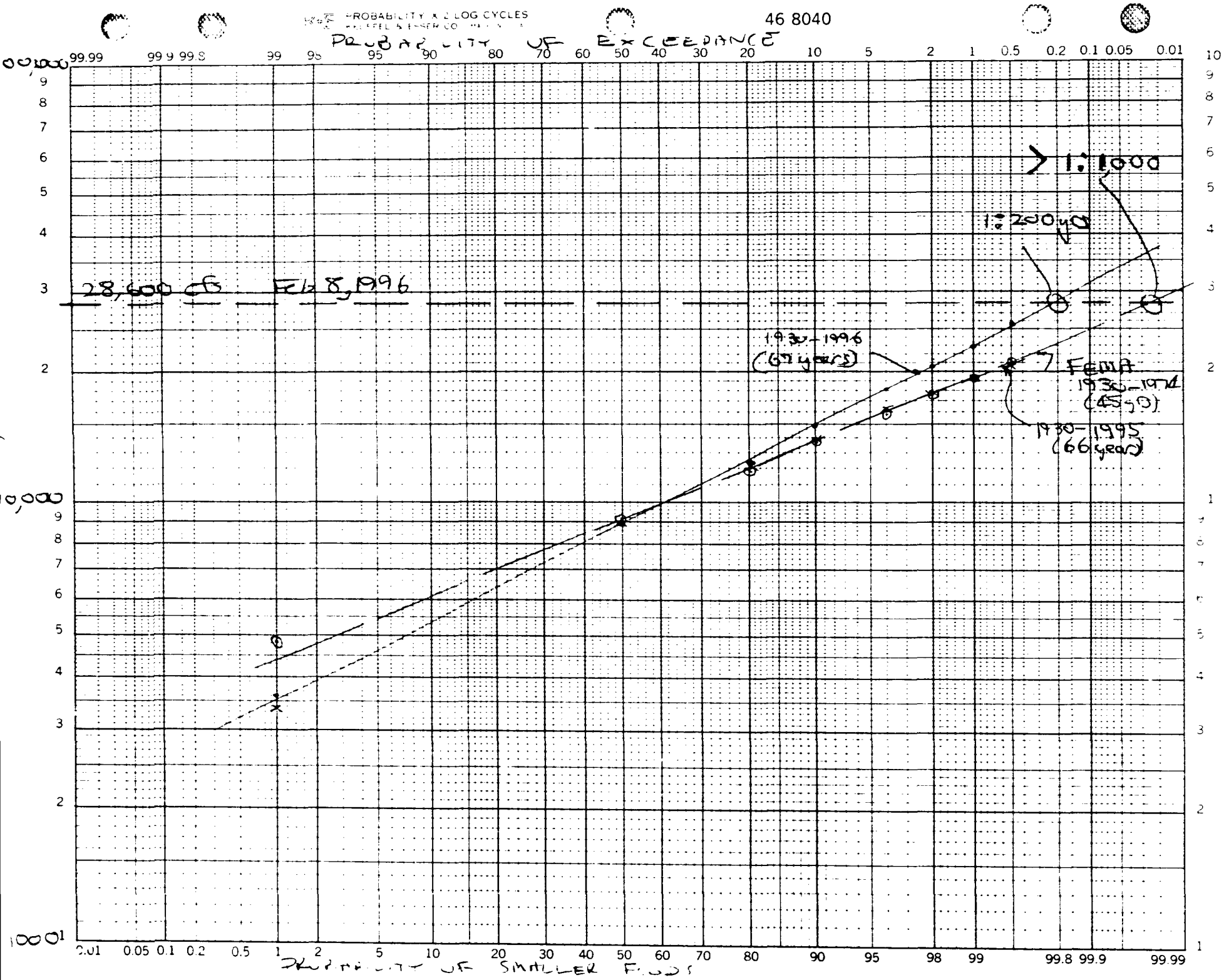
Return Period, years	Percent Chance, %	Based on 67 Years			Based on 66 Years			Based on 45 Years		
		K	log10Qtr	Qtr	K	log10Qtr	Qtr	K	log10Qtr	Qtr
200	0.5	2.623	4.4055	25,439	2.294	4.3168	20,737	2.763	4.3237	21,071
100	1	2.363	4.3604	22,932	2.104	4.2858	19,312	2.472	4.2859	19,316
50	2	2.081	4.3116	20,492	1.890	4.2510	17,823	2.159	4.2453	17,592
25	4	1.768	4.2573	18,086	1.643	4.2108	16,247	1.818	4.2011	15,888
10	10	1.287	4.1740	14,928	1.245	4.1460	13,995	1.301	4.1340	13,615
5	20	0.839	4.0964	12,484	0.853	4.0822	12,083	0.830	4.0729	11,828
2	50	-0.008	3.9496	8,904	0.050	3.9515	8,942	-0.033	3.9609	9,140
1.0101	99	-2.289	3.5543	3,584	-2.544	3.5292	3,382	-2.178	3.6827	4,816

TABLE 3.4

Frequency Factors *K* for Gamma and log Pearson Type 3 Distributions (Haan, 1977, Table 7.7)

SKEW COEFFICIENT C_s	RECURRENCE INTERVAL IN YEARS: 1.0101	2	5	10	25	50	100	200
	PERCENT CHANCE (≥) = 1 − *F*: 99	50	20	10	4	2	1	0.5
3.0	−0.667	−0.396	0.420	1.180	2.278	3.152	4.051	4.970
2.9	−0.690	−0.390	0.440	1.195	2.277	3.134	4.013	4.904
2.8	−0.714	−0.384	0.460	1.210	2.275	3.114	3.973	4.847
2.7	−0.740	−0.376	0.479	1.224	2.272	3.093	3.932	4.783
2.6	−0.769	−0.368	0.499	1.238	2.267	3.071	3.889	4.718
2.5	−0.799	−0.360	0.518	1.250	2.262	3.048	3.845	4.652
2.4	−0.832	−0.351	0.537	1.262	2.256	3.023	3.800	4.584
2.3	−0.867	−0.341	0.555	1.274	2.248	2.997	3.753	4.515
2.2	−0.905	−0.330	0.574	1.284	2.240	2.970	3.705	4.444
2.1	−0.946	−0.319	0.592	1.294	2.230	2.942	3.656	4.372
2.0	−0.990	−0.307	0.609	1.302	2.219	2.912	3.605	4.298
1.9	−1.037	−0.294	0.627	1.310	2.207	2.881	3.553	4.223
1.8	−1.087	−0.282	0.643	1.318	2.193	2.848	3.499	4.147
1.7	−1.140	−0.268	0.660	1.324	2.179	2.815	3.444	4.069
1.6	−1.197	−0.254	0.675	1.329	2.163	2.780	3.388	3.990
1.5	−1.256	−0.240	0.690	1.333	2.146	2.743	3.330	3.910
1.4	−1.318	−0.225	0.705	1.337	2.128	2.706	3.271	3.828
1.3	−1.383	−0.210	0.719	1.339	2.108	2.666	3.211	3.745
1.2	−1.449	−0.195	0.732	1.340	2.087	2.626	3.149	3.661
1.1	−1.518	−0.180	0.745	1.341	2.066	2.585	3.087	3.575
1.0	−1.588	−0.164	0.758	1.340	2.043	2.542	3.022	3.489
.9	−1.660	−0.148	0.769	1.339	2.018	2.498	2.957	3.401
.8	−1.733	−0.132	0.780	1.336	1.993	2.453	2.891	3.312
.7	−1.806	−0.116	0.790	1.333	1.967	2.407	2.824	3.223
.6	−1.880	−0.099	0.800	1.328	1.939	2.359	2.755	3.132
.5	−1.955	−0.083	0.808	1.323	1.910	2.311	2.686	3.041
.4	−2.029	−0.066	0.816	1.317	1.880	2.261	2.615	2.949
.3	−2.104	−0.050	0.824	1.309	1.849	2.211	2.544	2.856
.2	−2.178	−0.033	0.830	1.301	1.818	2.159	2.472	2.763
.1	−2.252	−0.017	0.836	1.292	1.785	2.107	2.400	2.670
0	−2.326	0	0.842	1.282	1.751	2.054	2.326	2.576
−.1	−2.400	0.017	0.846	1.270	1.716	2.000	2.252	2.482
−.2	−2.472	0.033	0.850	1.258	1.680	1.945	2.178	2.388
−.3	−2.544	0.050	0.853	1.245	1.643	1.890	2.104	2.294
−.4	−2.615	0.066	0.855	1.231	1.606	1.834	2.029	2.201
−.5	−2.686	0.083	0.856	1.216	1.567	1.777	1.955	2.108
−.6	−2.755	0.099	0.857	1.200	1.528	1.720	1.880	2.016
−.7	−2.824	0.116	0.857	1.183	1.488	1.663	1.806	1.926
−.8	−2.891	0.132	0.856	1.166	1.448	1.606	1.733	1.837
−.9	−2.957	0.148	0.854	1.147	1.407	1.549	1.660	1.749
−1.0	−3.022	0.164	0.852	1.128	1.366	1.492	1.588	1.664
−1.1	−3.087	0.180	0.848	1.107	1.324	1.435	1.518	1.581
−1.2	−3.149	0.195	0.844	1.086	1.282	1.379	1.449	1.501
−1.3	−3.211	0.210	0.838	1.064	1.240	1.324	1.383	1.424
−1.4	−3.271	0.225	0.832	1.041	1.198	1.270	1.318	1.351
−1.5	−3.330	0.240	0.825	1.018	1.157	1.217	1.256	1.282
−1.6	−3.388	0.254	0.817	0.994	1.116	1.166	1.197	1.216
−1.7	−3.444	0.268	0.808	0.970	1.075	1.116	1.140	1.155
−1.8	−3.499	0.282	0.799	0.945	1.035	1.069	1.087	1.097
−1.9	−3.553	0.294	0.788	0.920	0.996	1.023	1.037	1.044
−2.0	−3.605	0.307	0.777	0.895	0.959	0.980	0.990	0.995
−2.1	−3.656	0.319	0.765	0.869	0.923	0.939	0.946	0.949
−2.2	−3.705	0.330	0.752	0.844	0.888	0.900	0.905	0.907
−2.3	−3.753	0.341	0.739	0.819	0.855	0.864	0.867	0.869
−2.4	−3.800	0.351	0.725	0.795	0.823	0.830	0.832	0.833
−2.5	−3.845	0.360	0.711	0.771	0.793	0.798	0.799	0.800
−2.6	−3.889	0.368	0.696	0.747	0.764	0.768	0.769	0.769
−2.7	−3.932	0.376	0.681	0.724	0.738	0.740	0.740	0.741
−2.8	−3.973	0.384	0.666	0.702	0.712	0.714	0.714	0.714
−2.9	−4.013	0.390	0.651	0.681	0.683	0.689	0.690	0.690
−3.0	−4.051	0.396	0.636	0.660	0.666	0.666	0.667	0.667

Interagency Advisory Committee on Water Data (1982).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46 8040
PROBABILITY OF EXCEEDANCE
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100,000
10,000
1000
28,600 cfs Feb 8, 1996
> 1:1000
1:200 yr
1930-1996 (67 years)
FEMA 1930-1974 (45 yr)
1930-1995 (66 years)
0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
PROBABILITY OF SMALLER FLOODS

EXHIBIT #

8 26 93 A 28 73 185

7540-RES-030

RES 25-1313 (9-78)

STATE OF WASHINGTON
Department of
Natural Resources

AERIAL PHOTO ACETATE

(Align onto photo and trace photo number)

By R. HAPPALA

Owner #70-010139

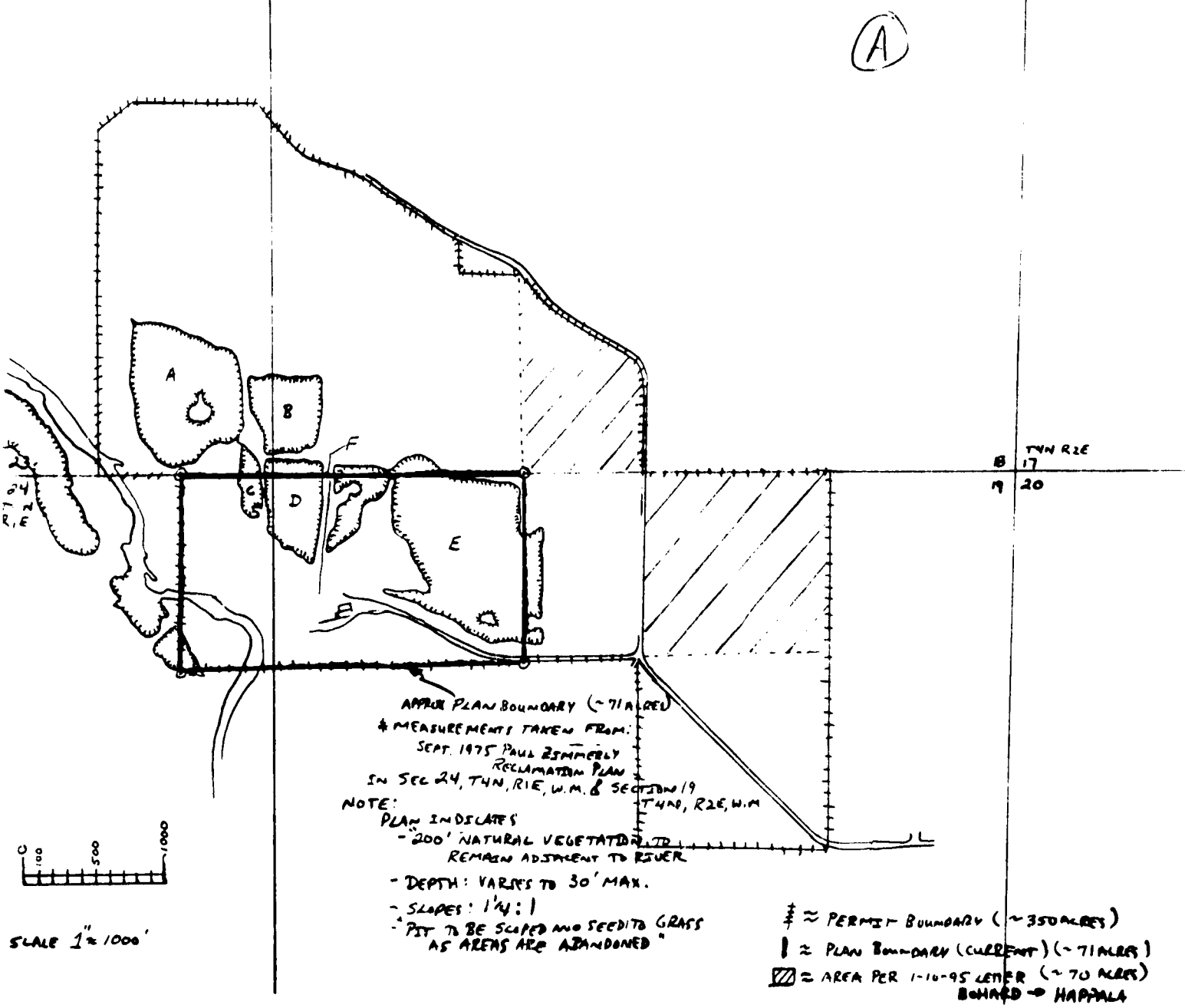
Sec. ..... T. ..... N. R. .....

District .....

Date 4-19-96

Subd. .....

* NOTE: ROUGH DATA, NOT FOR PRECISE DETERMINATION



Chapter 78.44
SURFACE MINING

Sections

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78.44.010 Legislative finding. The legislature recognizes that the extraction of minerals by surface mining is an essential activity making an important contribution to the economic well-being of the state and nation. It is not possible to extract minerals without producing some environmental impacts. At the same time, comprehensive regulation of mining and thorough reclamation of mined lands is necessary to prevent or mitigate conditions that would be detrimental to the environment and to protect the general welfare, health, safety, and property rights of the citizens of the state. Surface mining takes place in diverse areas where the geologic, topographic, climatic, biologic, and social conditions are significantly different, and reclamation specifications must vary accordingly. Therefore, the legislature finds that a balance between appropriate environmental regulation and the production and conservation of minerals is in the best interests of the citizens of the state. [1993 c 518 § 2; 1970 ex.s. c 64 § 2.]

Captions—1993 c 518: "Captions used in this act do not constitute any part of the law." [1993 c 518 § 41.]

Severability—1993 c 518: "If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected." [1993 c 518 § 43.]

Effective date—1993 c 518: "This act is necessary for the immediate preservation of the public peace, health, or safety, or support of the state government and its existing public institutions, and shall take effect July 1, 1993." [1993 c 518 § 44.]

78.44.011 Intent. The legislature recognizes that the extraction of minerals through surface mining has historically included regulatory involvement by both state and local governments.

It is the intent of the legislature to clarify that surface mining is an appropriate land use, subject to reclamation authority exercised by the department of natural resources and land use and operation regulatory authority by counties, cities, and towns. [1993 c 518 § 1.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.020 Purposes. The purposes of this chapter are to:

(1) Provide that the usefulness, productivity, and scenic values of all lands and waters involved in surface mining within the state will receive the greatest practical degree of protection and reclamation at the earliest opportunity following completion of surface mining;

(2) Provide for the greatest practical degree of statewide consistency in the regulation of surface mines;

(3) Apportion regulatory authority between state and local governments in order to minimize redundant regulation of mining;

(4) Ensure that reclamation is consistent with local land use plans; and

(5) Ensure the power of local government to regulate land use and operations pursuant to *section 16 of this act. [1993 c 518 § 3; 1970 ex.s. c 64 § 3.]

***Reviser's note:** 1993 c 518 § 16 was vetoed by the governor.

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.031 Definitions. Unless the context clearly indicates otherwise, the definitions in this section apply throughout this chapter.

(1) "Approved subsequent use" means the post surface-mining land use contained in an approved reclamation plan and approved by the local land use authority.

(2) "Completion of surface mining" means the cessation of mining and directly related activities in any segment of a surface mine that occurs when essentially all minerals that can be taken under the terms of the reclamation permit have been depleted except minerals required to accomplish reclamation according to the approved reclamation plan.

(3) "Department" means the department of natural resources.

(4) "Determination" means any action by the department including permit issuance, reporting, reclamation plan approval or modification, permit transfers, orders, fines, or refusal to issue permits.

(5) "Disturbed area" means any place where activities clearly in preparation for, or during, surface mining have physically disrupted, covered, compacted, moved, or otherwise altered the characteristics of soil, bedrock, vegetation, or topography that existed prior to such activity. Disturbed areas may include but are not limited to: Working faces, water bodies created by mine-related excavation, pit floors, the land beneath processing plant and stock pile sites, spoil pile sites, and equipment staging areas.

Disturbed areas do not include:

(a) Surface mine access roads unless these have characteristics of topography, drainage, slope stability, or ownership that, in the opinion of the department, make reclamation necessary; and

(b) Lands that have been reclaimed to all standards outlined in this chapter, rules of the department, any applicable SEPA document, and the approved reclamation plan.

(6) "Miner" means any person or persons, any partnership, limited partnership, or corporation, or any association of persons, including every public or governmental agency engaged in mining from the surface.

(7) "Minerals" means clay, coal, gravel, industrial minerals, metallic substances, peat, sand, stone, topsoil, and any other similar solid material or substance to be excavated from natural deposits on or in the earth for commercial, industrial, or construction use.

(8) "Operations" means all mine-related activities, exclusive of reclamation, that include, but are not limited to activities that affect noise generation, air quality, surface and ground water quality, quantity, and flow, glare, pollution, traffic safety, ground vibrations, and/or significant or substantial impacts commonly regulated under provisions of land use or other permits of local government and local ordinances, or other state laws.

Operations specifically include:

(a) The mining or extraction of rock, stone, gravel, sand, earth, and other minerals;

(b) Blasting, equipment maintenance, sorting, crushing, and loading;

(c) On-site mineral processing including asphalt or concrete batching, concrete recycling, and other aggregate recycling;

(d) Transporting minerals to and from the mine, on site road maintenance, road maintenance for roads used extensively for surface mining activities, traffic safety, and traffic control.

(9) "Overburden" means the earth, rock, soil, and topsoil that lie above mineral deposits.

(10) "Permit holder" means any person or persons, any partnership, limited partnership, or corporation, or any association of persons, either natural or artificial, including every public or governmental agency engaged in surface mining and/or the operation of surface mines, whether individually, jointly, or through subsidiaries, agents, employees, operators, or contractors who holds a state reclamation permit.

(11) "Reclamation" means rehabilitation for the appropriate future use of disturbed areas resulting from surface mining including areas under associated mineral processing equipment and areas under stockpiled materials. Although both the need for and the practicability of reclamation will control the type and degree of reclamation in any specific surface mine, the basic objective shall be to reestablish on a perpetual basis the vegetative cover, soil stability, and water conditions appropriate to the approved subsequent use of the surface mine and to prevent or mitigate future environmental degradation.

(12) "Reclamation setbacks" include those lands along the margins of surface mines wherein minerals and overburden shall be preserved in sufficient volumes to accomplish reclamation according to the approved plan and the minimum reclamation standards. Maintenance of reclamation setbacks may not preclude other mine-related activities within the reclamation setback.

(13) "Recycling" means the reuse of minerals or rock products.

(14) "Screening" consists of vegetation, berms or other topography, fencing, and/or other screens that may be required to mitigate impacts of surface mining on adjacent properties and/or the environment.

(15) "Segment" means any portion of the surface mine that, in the opinion of the department:

(a) Has characteristics of topography, drainage, slope stability, ownership, mining development, or mineral distribution, that make reclamation necessary;

(b) Is not in use as part of surface mining and/or related activities; and

(c) Is larger than seven acres and has more than five hundred linear feet of working face except as provided in a segmental reclamation agreement approved by the department.

(16) "SEPA" means the state environmental policy act, chapter 43.21C RCW and rules adopted thereunder.

(17)(a) "Surface mine" means any area or areas in close proximity to each other, as determined by the department, where extraction of minerals from the surface results in:

(i) More than three acres of disturbed area;

(ii) Mined slopes greater than thirty feet high and steeper than 1.0 foot horizontal to 1.0 foot vertical; or

(iii) More than one acre of disturbed area within an eight acre area, when the disturbed area results from mineral prospecting or exploration activities.

(b) Surface mines include areas where mineral extraction from the surface occurs by the auger method or by reworking mine refuse or tailings, when these activities exceed the size or height thresholds listed in (a) of this subsection.

(c) Surface mining shall exclude excavations or grading used:

(i) Primarily for on-site construction, on-site road maintenance, or on-site landfill construction;

(ii) For the purpose of public safety or restoring the land following a natural disaster;

(iii) For the purpose of removing stockpiles;

(iv) For forest or farm road construction or maintenance on site or on contiguous lands;

(v) For sand authorized by RCW 43.51.685; and

(vi) For underground mines.

(18) "Topsoil" means the naturally occurring upper part of a soil profile, including the soil horizon that is rich in

humus and capable of supporting vegetation together with other sediments within four vertical feet of the ground surface. [1993 c 518 § 4.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.040 Administration of chapter—Rule-making authority. The department of natural resources is charged with the administration of reclamation under this chapter. In order to implement and enforce this chapter, the department, under the administrative procedure act (chapter 34.05 RCW), may from time to time adopt those rules necessary to carry out the purposes of this chapter. [1993 c 518 § 6; 1984 c 215 § 2; 1970 ex.s. c 64 § 5.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.045 Surface mining reclamation account. The surface mining reclamation account is created in the state treasury. Annual mining fees, funds received by the department from state, local, or federal agencies for research purposes, as well as other mine-related funds and fines received by the department shall be deposited into this account. The surface mine reclamation account may be used by the department only to:

(1) Administer its regulatory program pursuant to this chapter;

(2) Undertake research relating to surface mine regulation, reclamation of surface mine lands, and related issues; and

(3) Cover costs arising from appeals from determinations made under this chapter.

Fines, interest, and other penalties collected by the department under the provisions of this chapter shall be used to reclaim surface mines abandoned prior to 1971. [1993 c 518 § 10.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.050 Department may delegate to counties, cities, towns—Other laws not affected. The department shall have the exclusive authority to regulate surface mine reclamation except that, by contractual agreement, the department may delegate some or all of its enforcement authority to a county, city, or town. All counties, cities, or towns shall have the authority to zone surface mines and adopt ordinances regulating operations pursuant to *section 16 of this act, except that county, city, or town operations ordinances may be preempted by the department during the emergencies outlined in RCW 78.44.200 and related rules.

This chapter shall not alter or preempt any provisions of the state fisheries laws (Title 75 RCW), the state water allocation and use laws (chapters 90.03 and 90.44 RCW), the state water pollution control laws (chapter 90.48 RCW), the state wildlife laws (Title 77 RCW), state noise laws or air quality laws (Title 70 RCW), shoreline management (chapter 90.58 RCW), the state environmental policy act (chapter 43.21C RCW), state growth management (chapter 36.70A RCW), state drinking water laws (chapters 43.20 and 70.119A RCW), or any other state statutes. [1993 c 518 § 7; 1970 ex.s. c 64 § 6.]

*Reviser's note: 1993 c 518 § 16 was vetoed by the governor.

Model ordinance advisory committee—1993 c 518: "A surface mining model ordinance advisory committee is hereby created. The committee shall be composed of representatives of local government, state agencies, surface mining interests, and the environmental community. The department of natural resources shall appoint the members of the committee and the department shall staff the committee. This temporary advisory committee shall draft model ordinances for different surface-mining settings and shall assist counties, cities, and towns in developing ordinances. The committee shall complete its work and shall expire by December 31, 1994. Participants on the committee shall pay their own expenses, and the department of natural resources shall fund the department's involvement." [1993 c 518 § 17.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.055 Surface mining of coal—Preemption of chapter by federal laws, programs. In the event state law is preempted under federal surface mining laws relating to surface mining of coal or the department of natural resources determines that a federal program and its rules and regulations relating to the surface mining of coal are as stringent and effective as the provisions of this chapter, the provisions of this chapter shall not apply to such surface mining for which federal permits are issued until such preemption ceases or the department determines such chapter should apply. [1984 c 215 § 8. Formerly RCW 78.44.175.]

78.44.060 Investigations, research, etc.—Dissemination of information. The department shall have the authority to conduct, authorize, and/or participate in investigations, research, experiments, and demonstrations, and to collect and disseminate information relating to surface mining and reclamation of surface mined lands. [1993 c 518 § 8; 1970 ex.s. c 64 § 7.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.070 Cooperation with other agencies—Receipt and expenditure of funds. The department may cooperate with other governmental and private agencies and agencies of the federal government, and may reasonably reimburse them for any services the department requests that they provide. The department may also receive any federal funds, state funds and any other funds and expend them for reclamation of land affected by surface mining and for purposes enumerated in RCW 78.44.060. [1993 c 518 § 9; 1970 ex.s. c 64 § 8.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.081 Reclamation permits required—Applications. After July 1, 1993, no miner or permit holder may engage in surface mining without having first obtained a reclamation permit from the department. Operating permits issued by the department between January 1, 1971, and June 30, 1993, shall be considered reclamation permits provided such permits substantially meet the protections, mitigations, and reclamation goals of RCW 78.44.091 and 78.44.131 within five years after July 1, 1993. State agencies and local government shall be exempt from this time limit for inactive sites. Prior to the use of an inactive site, the reclamation plan must be brought up to current

standards. A separate permit shall be required for each noncontiguous surface mine. The reclamation permit shall consist of the permit forms and any exhibits attached thereto. The permit holder shall comply with the provisions of the reclamation permit unless waived and explained in writing by the department.

Prior to receiving a reclamation permit, an applicant must submit an application on forms provided by the department that shall contain the following information and shall be considered part of the reclamation permit:

(1) Name and address of the legal landowner, or purchaser of the land under a real estate contract;

(2) The name of the applicant and, if the applicants are corporations or other business entities, the names and addresses of their principal officers and resident agent for service of process;

(3) A reasonably accurate description of the minerals to be surface mined;

(4) Type of surface mining to be performed;

(5) Estimated starting date, date of completion, and date of completed reclamation of surface mining;

(6) Size and legal description of the permit area and maximum lateral and vertical extent of the disturbed area;

(7) Expected area to be disturbed by surface mining during (a) the next twelve months, and (b) the following twenty-four months;

(8) Any applicable SEPA documents; and

(9) Other pertinent data as required by the department.

The reclamation permit shall be granted for the period required to deplete essentially all minerals identified in the reclamation permit on the land covered by the reclamation plan. The reclamation permit shall be valid until the reclamation is complete unless the permit is canceled by the department. [1993 c 518 § 11.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.083 Reclamation permit—Refusal to issue. The department shall refuse to issue a reclamation permit if it is determined during the SEPA process that the impacts of a proposed surface mine cannot be adequately mitigated.

The department or county, city, or town may refuse to issue any other permit at any other location to any miner or permit holder who fails to rectify deficiencies set forth in an order of the department within the requisite time schedule. However, the department or county, city, or town shall issue all appropriate permits when all deficiencies are corrected at each surface mining site. [1993 c 518 § 33.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.085 Application fee—Annual permit fee—Modification—Appeals. (1) An applicant for a public or private reclamation permit shall pay an application fee to the department before being granted a surface mining permit. The amount of the application fee shall be six hundred fifty dollars.

(2) After June 30, 1993, each public or private permit holder shall pay an annual permit fee of six hundred fifty dollars. The annual permit fee shall be payable to the department on the first anniversary of the permit date and each year thereafter. Annual fees paid by a county for small mines used exclusively for public works projects shall be paid on those small mines from which the county elects to extract minerals in the next calendar year and shall not exceed one thousand dollars.

(3) After July 1, 1995, the department may modify annual permit fees by rule if:

(a) The total annual permit fees are reasonably related to the approximate costs of administering the department's surface mining regulatory program;

(b) The annual fee does not exceed five thousand dollars; and

(c) The mines are small mines in remote areas that are used primarily for public service, then lower annual permit fees may be established.

(4) Appeals from any determination of the department shall not stay the requirement to pay any annual permit fee. Failure to pay the annual fee may constitute grounds for an order to suspend surface mining or cancellation of the reclamation permit as provided in this chapter.

(5) All fees collected by the department shall be deposited into the surface mining reclamation account.

(6) If the department delegates enforcement responsibilities to a county, city, or town, the department may allocate funds collected under this section to such county, city, or town. [1993 c 518 § 14.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.087 Performance security required—Department authority. The department shall not issue a reclamation permit until the applicant has deposited with the department an acceptable performance security on forms prescribed and furnished by the department. A public or governmental agency shall not be required to post performance security nor shall a permit holder be required to post surface mining performance security with more than one state or local agency.

This performance security may be:

(1) Bank letters of credit acceptable to the department;

(2) A cash deposit;

(3) Negotiable securities acceptable to the department;

(4) An assignment of a savings account;

(5) A savings certificate in a Washington bank on an assignment form prescribed by the department;

(6) Assignments of interests in real property within the state of Washington; or

(7) A corporate surety bond executed in favor of the department by a corporation authorized to do business in the state of Washington under Title 48 RCW and authorized by the department.

The performance security shall be conditioned upon the faithful performance of the requirements set forth in this chapter and of the rules adopted under it.

The department shall have the authority to determine the amount of the performance security using a standardized performance security formula developed by the department. The amount of the security shall be determined by the department and based on the estimated costs of completing reclamation according to the approved reclamation plan or minimum standards and related administrative overhead for the area to be surface mined during (a) the next

twelve-month period, (b) the following twenty-four months, and (c) any previously disturbed areas on which the reclamation has not been satisfactorily completed and approved.

The department may increase or decrease the amount of the performance security at any time to compensate for a change in the disturbed area, the depth of excavation, a modification of the reclamation plan, or any other alteration in the conditions of the mine that affects the cost of reclamation. The department may, for any reason, refuse any performance security not deemed adequate.

Liability under the performance security shall be maintained until reclamation is completed according to the approved reclamation plan to the satisfaction of the department unless released as hereinafter provided. Liability under the performance security may be released only upon written notification by the department. Notification shall be given upon completion of compliance or acceptance by the department of a substitute performance security. The liability of the surety shall not exceed the amount of security required by this section and the department's reasonable legal fees to recover the security.

Any interest or appreciation on the performance security shall be held by the department until reclamation is completed to its satisfaction. At such time, the interest shall be remitted to the permit holder; except that such interest or appreciation may be used by the department to effect reclamation in the event that the permit holder fails to comply with the provisions of this chapter and the costs of reclamation exceed the face value of the performance security.

Except as provided in this section, no other state agency or local government shall require performance security for the purposes of surface mine reclamation and only one agency of government shall require and hold the performance security. The department may enter into written agreements with federal agencies in order to avoid redundant bonding of surface mines straddling boundaries between federally controlled and other lands within Washington state.

The department and the department of ecology shall jointly require performance security for metals mining and milling operations regulated under chapter 232, Laws of 1994. [1994 c 232 § 23; 1993 c 518 § 15.]

Severability—1994 c 232: See RCW 78.56.900.

Effective date—1994 c 232 §§ 1-5, 9-17, and 23-31: See RCW 78.56.901.

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.091 Reclamation plans—Approval process. An applicant shall provide a reclamation plan and copies acceptable to the department prior to obtaining a reclamation permit. The department shall have the sole authority to approve reclamation plans. Reclamation plans or modified reclamation plans submitted to the department after June 30, 1993, shall meet or exceed the minimum reclamation standards set forth in this chapter and by the department in rule. Each applicant shall also supply copies of the proposed plans and final reclamation plan approved by the department to the county, city, or town in which the mine will be located. The department shall solicit comment from local government prior to approving a reclamation plan. The reclamation plan shall include:

(1) A written narrative describing the proposed mining and reclamation scheme with:

(a) A statement of a proposed subsequent use of the land after reclamation that is consistent with the local land use designation. Approval of the reclamation plan shall not vest the proposed subsequent use of the land;

(b) If the permit holder is not the sole landowner, a copy of the conveyance or a written statement that expressly grants or reserves the right to extract minerals by surface mining methods;

(c) A simple and accurate legal description of the permit area and disturbed areas;

(d) The maximum depth of mining;

(e) A reasonably accurate description of the minerals to be mined;

(f) A description of the method of mining;

(g) A description of the sequence of mining that will provide, within limits of normal procedures of the industry, for completion of surface mining and associated disturbance on each portion of the permit area so that reclamation can be initiated at the earliest possible time on each segment of the mine;

(h) A schedule for progressive reclamation of each segment of the mine;

(i) Where mining on flood plains or in river or stream channels is contemplated, a thoroughly documented hydrogeologic evaluation that will outline measures that would protect against or would mitigate avulsion and erosion as determined by the department;

(j) Where mining is contemplated within critical aquifer recharge areas, special protection areas as defined by chapter 90.48 RCW and implementing rules, public water supply watersheds, sole source aquifers, wellhead protection areas, and designated aquifer protection areas as set forth in chapter 36.36 RCW, a thoroughly documented hydrogeologic analysis of the reclamation plan may be required; and

(k) Additional information as required by the department including but not limited to: The positions of reclamation setbacks and screening, conservation of topsoil, interim reclamation, revegetation, postmining erosion control, drainage control, slope stability, disposal of mine wastes, control of fill material, development of wetlands, ponds, lakes, and impoundments, and rehabilitation of topography.

(2) Maps of the surface mine showing.

(a) All applicable data required in the narrative portion of the reclamation plan;

(b) Existing topographic contours;

(c) Contours depicting specifications for surface gradient restoration appropriate to the proposed subsequent use of the land and meeting the minimum reclamation standards;

(d) Locations and names of all roads, railroads, and utility lines on or adjacent to the area;

(e) Locations and types of proposed access roads to be built in conjunction with the surface mining;

(f) Detailed and accurate boundaries of the permit area, screening, reclamation setbacks, and maximum extent of the disturbed area; and

(g) Estimated depth to ground water and the locations of surface water bodies and wetlands both prior to and after mining.

(3) At least two cross sections of the mine including all applicable data required in the narrative and map portions of the reclamation plan.

(4) Evidence that the proposed surface mine has been approved under local zoning and land use regulations.

(5) Written approval of the reclamation plan by the landowner for mines permitted after June 30, 1993.

(6) Other supporting data and documents regarding the surface mine as reasonably required by the department.

If the department refuses to approve a reclamation plan in the form submitted by an applicant or permit holder, it shall notify the applicant or permit holder stating the reasons for its determination and describe such additional requirements to the applicant or permit holder's reclamation plan as are necessary for the approval of the plan by the department. If the department refuses to approve a complete reclamation plan within one hundred twenty days, the miner or permit holder may appeal this determination under the provisions of this chapter.

Only insignificant deviations may occur from the approved reclamation plan without prior written approval by the department for the proposed change.

The department retains the authority to require that the reclamation plan be updated to the satisfaction of the department at least every ten years. [1993 c 518 § 12.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.101 Joint reclamation plans may be required. Where two or more surface mines join along a common boundary, the department may require submission of a joint reclamation plan in order to provide for optimum reclamation or to avoid waste of mineral resources. Such joint reclamation plans may be in the form of a single collaborative plan submitted by all affected permit holders or as individual reclama ion plans in which the schedule of reclamation, finished contours, and revegetation match reclamation plans of adjacent permit holders. [1993 c 518 § 13.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.111 Segmental reclamation—Primary objective. The permit holder shall reclaim each segment of the mine within two years of completion of surface mining on that segment except as provided in a segmental reclamation agreement approved in writing by the department. The primary objective of a segmental reclamation agreement should be to enhance final reclamation. [1993 c 518 § 5.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.121 Reclamation setbacks—Exemption. Reclamation setbacks shall be as follows unless waived by the department:

(1) The reclamation setback for unconsolidated deposits within mines permitted after June 30, 1993, shall be equal to the maximum anticipated height of the adjacent working face or as determined by the department. Setbacks and buffers may be destroyed as part of final reclamation of each segment if approved by the department.

(2) The minimum reclamation setback for consolidated materials within mines permitted after June 30, 1993, shall be thirty feet or as determined by the department.

(3) An exemption from this section may be granted by the department following a written request. The department may consider submission of a plan for backfilling acceptable to the department, a geotechnical slope-stability study, proof of a dedicated source of fill materials, written approval of contiguous landowners, and other information before granting an exemption. [1993 c 518 § 18.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.131 Reclamation specifics—Basic objective—Modifications for metals mining and milling operations—Timeline. The need for, and the practicability of, reclamation shall control the type and degree of reclamation in any specific instance. However, the basic objective of reclamation is to reestablish on a continuing basis the vegetative cover, slope stability, water conditions, and safety conditions suitable to the proposed subsequent use consistent with local land use plans for the surface mine site.

Each permit holder shall comply with the minimum reclamation standards in effect on the date the permit was issued and any additional reclamation standards set forth in the approved reclamation plan. The department may modify, on a site specific basis, the minimum reclamation standards for metals mining and milling operations regulated under chapter 232, Laws of 1994 in order to achieve the reclamation and closure objectives of that chapter. The basic objective of reclamation for these operations is the reestablishment on a continuing basis of vegetative cover, slope stability, water conditions, and safety conditions.

Reclamation activities, particularly those relating to control of erosion and mitigation of impacts of mining to adjacent areas, shall, to the extent feasible, be conducted simultaneously with surface mining, and in any case shall be initiated at the earliest possible time after completion of surface mining on any segment of the permit area.

All reclamation activities shall be completed not more than two years after completion or abandonment of surface mining on each segment of the area for which a reclamation permit is in force.

The department may by contract delegate enforcement of provisions of reclamation plans to counties, cities, and towns. A county, city, or town performing enforcement functions may not impose any additional fees on permit holders. [1994 c 232 § 24; 1993 c 518 § 20.]

Severability—1994 c 232: See RCW 78.56.900.

Effective date—1994 c 232 §§ 1-5, 9-17, and 23-31: See RCW 78.56.901.

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.141 Reclamation—Minimum standards—Waiver. Reclamation of surface mines permitted after June 30, 1993, and reclamation of surface mine segments addressed by reclamation plans modified after June 30, 1994, shall meet the following minimum standards except as waived in writing by the department.

(1) Prior to surface mining, permit holders shall carefully stockpile all topsoil on the site for use in reclamation, or

immediately move topsoil to reclaim adjacent segments, except when the approved subsequent use does not require replacing the topsoil. Topsoil needed for reclamation shall not be sold as a mineral nor mixed with sterile soils. Stockpiled materials used as screening shall not be used for reclamation until such time as the appropriate county or municipal government has given its approval.

(2) The department may require that clearly visible, permanent monuments delineating the permit boundaries and maximum extent of the disturbed area be set at appropriate places around the mine site. The permit holder shall maintain the monuments until termination of the reclamation permit.

(3) All minimum reclamation standards may be waived in writing by the department in order to accommodate unique and beneficial reclamation schemes such as parks, swimming facilities, buildings, and wildlife reserves. Such waivers shall be granted only after written approval by the department of a reclamation plan describing the variances to the minimum reclamation standards, receipt of documentation of SEPA compliance, and written approvals from the landowner and by the local land use authority.

(4) All surface-mined slopes shall be reclaimed to the following minimum standards:

(a) In surface mines in soil, sand, gravel, and other unconsolidated materials, all reclaimed slopes shall:

(i) Have varied steepness;

(ii) Have a sinuous appearance in both profile and plan view;

(iii) Have no large rectilinear topographic elements;

(iv) Generally have slopes of between 2.0 and 3.0 feet horizontal to 1.0 foot vertical or flatter except in limited areas where steeper slopes are necessary in order to create sinuous topography and to control drainage;

(v) Not exceed 1.5 feet horizontal to 1.0 foot vertical except as necessary to blend with adjacent natural slopes;

(vi) Be compacted if significant backfilling is required to produce the final reclaimed slopes and if the department determines that compaction is necessary.

(b) Slopes in consolidated materials shall have no prescribed slope angle or height, but where a severely hazardous condition is created by mining and that is not indigenous to the immediate area, the slopes shall not exceed 2.0 feet horizontal to 1.0 foot vertical. Steeper slopes shall be acceptable in areas where evidence is submitted that demonstrates that the geologic or topographic characteristics of the site preclude reclamation of slopes to such angle or height or that such slopes constitute an acceptable subsequent use under local land use regulations.

(c) Surface mines in which the seasonal or permanent water tables have been penetrated, thereby creating swamps, ponds, or lakes useful for recreational, wildlife habitat, water quality control, or other beneficial wetland purposes shall be reclaimed in the following manner:

(i) For slopes that are below the permanent water table in soil, sand, gravel, and other unconsolidated materials, the slope angle shall be no steeper than 1.5 feet horizontal to 1.0 foot vertical;

(ii) Generally, solid rock banks shall be shaped so that a person can escape from the water, however steeper slopes and lack of water egress shall be acceptable in rural, forest, or mountainous areas or where evidence is provided that such slopes would constitute an acceptable subsequent use under local land use regulations;

(iii) Both standpipes and armored spillways or other measures to prevent undesirable overflow or seepage shall be provided to stabilize all such water bodies within the disturbed area; and

(iv) Where lakes, ponds, or swamps are created, the permit holder shall provide measures to establish a beneficial wetland by developing natural wildlife habitat and incorporating such measures as irregular shoreline configurations, sinuous bathymetry and shorelines, varied water depths, peninsulas, islands, and subaqueous areas less than 1.5 foot deep during summer low-water levels. Clay-bearing material placed below water level may be required to avoid creating sterile wetlands.

(d) Final topography shall generally comprise sinuous contours, chutes and buttresses, spurs, and rolling mounds and hills, all of which shall blend with adjacent topography to a reasonable extent. Straight planar slopes and right angles should be avoided.

(e) The floors of mines shall generally grade gently into postmining drainages to preclude sheet-wash erosion during intense precipitation, except where backgrading is appropriate for drainage control, to establish wetlands, or to trap sediment.

(f) Topsoil shall be restored as necessary to promote effective revegetation and to stabilize slopes and mine floors. Where limited topsoil is available, topsoil shall be placed and revegetated in such a way as to ensure that little topsoil is lost to erosion.

(g) Where surface mining has exposed natural materials that may create polluting conditions, including but not limited to acid-forming coals and metalliferous rock or soil, such conditions shall be addressed according to a method approved by the department. The final ground surface shall be graded so that surface water drains away from these materials.

(h) All grading and backfilling shall be made with nonnoxious, noncombustible, and relatively incompactible solids unless the permit holder provides:

(i) Written approval from all appropriate solid waste regulatory agencies; and

(ii) Any and all revisions to such written approval during the entire time the reclamation permit is in force.

(i) Final reclaimed slopes should be left roughly graded, preserving equipment tracks, depressions, and small mounds to trap clay-bearing soil and promote natural revegetation. Where reasonable, final equipment tracks should be oriented in order to trap soil and seeds and to inhibit erosion.

(j) Pit floors should be bulldozed or ripped to foster revegetation.

(5) Drainages shall be graded and contain adequate energy dissipation devices so that essentially natural conditions of water velocity, volume, and turbidity are reestablished within six months of reclamation of each segment of the mine. Ditches and other artificial drainages shall be constructed on each reclaimed segment to control surface water, erosion, and siltation and to direct runoff to a safe outlet. Diversion ditches including but not limited to channels, flumes, tightlines and retention ponds shall be capable of carrying the peak flow at the mine site that has the probable recurrence frequency of once in twenty-five years

as determined from data for the twenty-five year, twenty-four hour precipitation event published by the national oceanic and atmospheric administration. The grade of such ditches and channels shall be constructed to limit erosion and siltation. Natural and other drainage channels shall be kept free of equipment, wastes, stockpiles, and overburden.

(6) Impoundment of water shall be an acceptable reclamation technique provided that approvals of other agencies with jurisdiction are obtained and:

(a) Proper measures are taken to prevent undesirable seepage that could cause flooding outside the permitted area or adversely affect the stability of impoundment dikes or adjacent slopes;

(b) Both standpipes and armored spillways or other measures necessary to control overflow are provided.

(7) Revegetation shall be required as appropriate to stabilize slopes, generate new topsoil, reduce erosion and turbidity, mask rectilinear contours, and restore the scenic value of the land to the extent feasible as appropriate to the approved subsequent use. Although the scope of and necessity for revegetation will vary according to the geography, precipitation, and approved subsequent use of the site, the objective of segmental revegetation is to reestablish self-sustaining vegetation and conditions of slope stability, surface water quality, and appearance before release of the reclamation permit. Revegetation shall normally meet the following standards:

(a) Revegetation shall commence during the first proper growing season following restoration of slopes on each segment unless the department has granted the permit holder a written time extension.

(b) In eastern Washington, the permit holder may not be able to achieve continuous ground cover owing to arid conditions or sparse topsoil. However, revegetation shall be as continuous as reasonably possible as determined by the department.

(c) Revegetation generally shall include but not be limited to diverse evergreen and deciduous trees, shrubs, grasses, and deep-rooted ground cover.

(i) For western Washington, nitrogen-fixing species including but not limited to alder, white clover, and lupine should be included in dry areas. In wet areas, tubers, sedges, wetland grasses, willow, cottonwood, cedar, and alder are appropriate.

(ii) In eastern Washington, lupine, white clover, Russian olive, black locust, junipers, and pines are among appropriate plants. In wet areas, cottonwood, tubers, and sedges are appropriate.

(d) The requirements for revegetation may be reduced or waived by the department where erosion will not be a problem in rural areas where precipitation exceeds thirty inches per annum, or where revegetation is inappropriate for the approved subsequent use of the surface mine.

(e) In areas where revegetation is critical and conditions are harsh, the department may require irrigation, fertilization, and importation of clay or humus-bearing soils to establish effective vegetation.

(f) The department may refuse to release a reclamation permit or performance security until it deems that effective revegetation has commenced. [1993 c 518 § 21.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.151 Reclamation plans—Modification—SEPA. The department and the permit holder may modify the reclamation plan at any time during the term of the permit for any of the following reasons:

(1) To modify the requirements so that they do not conflict with existing or new laws;

(2) If the department determines that the previously adopted reclamation plan is impossible or impracticable to implement and maintain; or

(3) The previously approved reclamation plan is not accomplishing the intent of this chapter as determined by the department.

Modified reclamation plans shall be reviewed by the department as lead agency under SEPA. Such SEPA analyses shall consider only those impacts relating directly to the proposed modifications. Copies of proposed and approved modifications shall be sent to the appropriate county, city, or town. [1993 c 518 § 23.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.161 Reclamation compliance—Inspection of disturbed area. (Effective until July 1, 1995.) The department may order at any time an inspection of the disturbed area to determine if the miner or permit holder has complied with the reclamation permit, rules, and this chapter. [1993 c 518 § 25.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.161 Reclamation compliance—Inspection of disturbed area—Special inspection requirements for metals mining and milling operations. (Effective July 1, 1995.) The department may order at any time an inspection of the disturbed area to determine if the miner or permit holder has complied with the reclamation permit, rules, and this chapter.

The department shall have special inspection requirements for metals mining and milling operations regulated under chapter 232, Laws of 1994. The department shall inspect these mining operations at least quarterly, unless prevented by inclement weather conditions, in order to ensure that the permit holder is in compliance with the reclamation permit, rules, and this chapter. The department shall conduct additional inspections as needed during the construction phase of these mining operations in order to ensure compliance with the reclamation permit, rules, and this chapter. [1994 c 232 § 22; 1993 c 518 § 25.]

Severability—1994 c 232: See RCW 78.56.900.

Effective date—1994 c 232 §§ 6-8 and 18-22: See RCW 78.56.902.

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.171 Reclamation—Transfer of permits. Reclamation permits shall be transferred to a subsequent permit holder and the department shall release the former permit holder from the duties imposed by this chapter if:

(1) Both permit holders comply with all rules of the department addressing requirements for transferring a permit; and

(2) Unless waived by the department, the mine and all others operated by both the former and subsequent permit holders and their principal officers or owners are in compliance with this chapter and rules. [1993 c 518 § 22.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.181 Reclamation—Report by permit holder on anniversary date. On the anniversary date of the reclamation permit and each year thereafter until reclamation is completed and approved, the permit holder shall file a report of activities completed during the preceding year. The report shall be on a form prescribed by the department. [1993 c 518 § 24.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.190 Deficiencies—Order to rectify—Time extension. The department may issue an order to rectify deficiencies when a miner or permit holder is conducting surface mining in any manner not authorized by:

(1) This chapter;

(2) The rules adopted by the department;

(3) The authorized reclamation plan; or

(4) The reclamation permit.

The order shall describe the deficiencies and shall require that the miner or permit holder correct all deficiencies no later than sixty days from issuance of the order. The department may extend the period for correction for delays clearly beyond the miner or permit holder's control, but only when the miner or permit holder is, in the opinion of the department, making every reasonable effort to comply. [1993 c 518 § 26.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.200 Immediate danger—Emergency notice and order to rectify deficiencies—Emergency order to suspend surface mining. When the department finds that a permit holder is conducting surface mining in any manner not authorized by:

(1) This chapter;

(2) The rules adopted by the department;

(3) The approved reclamation plan; or

(4) The reclamation permit;

and that activity has created a situation involving an immediate danger to the public health, safety, welfare, or environment requiring immediate action, the department may issue an emergency notice and order to rectify deficiencies, and/or an emergency order to suspend surface mining. These orders shall be effective when entered. The department may take such action as is necessary to prevent or avoid the danger to the public health, safety, welfare, or environment that justifies use of emergency adjudication. The department shall give such notice as is practicable to the permit holder or miner who is required to comply with the order. The order shall comply with the requirements of the administrative procedure act.

Regulations of surface mining operations administered by other state and local agencies shall be preempted by this section to the extent that the time schedule and procedures necessary to rectify the emergency situation, as determined by the department, conflict with such local regulation. [1993 c 518 § 27.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.210 Order to suspend surface mining—Injunction. Upon the failure of a miner or permit holder to comply with a department order to rectify deficiencies, the department may issue an order to suspend surface mining when a miner or permit holder is conducting surface mining in any manner not authorized by:

(1) This chapter;

(2) The rules adopted by the department;

(3) The approved reclamation plan;

(4) The reclamation permit; or

(5) If the miner or permit holder fails to comply with any final order of the department.

The order to suspend surface mining shall require the miner or permit holder to suspend part or all of the miner's or permit holder's mining operations until the conditions resulting in the issuance of the order have been mitigated to the satisfaction of the department.

The attorney general may take the necessary legal action to enjoin, or otherwise cause to be stopped, surface mining in violation of an order to suspend surface mining. [1993 c 518 § 28.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.220 Declaration of abandonment—Reclamation—Subsequent miner. The department may issue a declaration of abandonment when it determines that all surface mining has ceased for a period of one hundred eighty consecutive days not set forth in the permit holder's reclamation plan or when, by reason of inspection of the permit area, or by any other means, the department determines that the mine has in fact been abandoned by the permit holder except that abandonment shall not include normal interruptions of surface mining resulting from labor disputes, economic conditions associated with lack of smelting capacity or availability of appropriate transportation, war, social unrest, demand for minerals, maintenance and repairs, and acts of God.

Following a declaration of abandonment, the department shall require the permit holder to complete reclamation in accordance with this chapter. If the permit holder fails to do so, the department shall proceed to do the necessary reclamation work pursuant to RCW 78.44.240.

If another miner applies for a permit on a site that has been declared abandoned, the department may, in its discretion, cancel the reclamation permit of the permit holder and issue a new reclamation permit to the applicant. The department shall not issue a new permit unless it determines that such issuance will be an effective means of assuring that the site will ultimately be reclaimed. The applicant must agree to assume the reclamation responsibilities left unfinished by the first miner, in addition to meeting all requirements for issuance of a new permit. [1993 c 518 § 29.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.230 Abandonment—Cancellation of the reclamation permit. When the department determines that a surface mine has been abandoned, it may cancel the reclamation permit. The permit holder [illegible] be informed of such actions by a department notification of illegal abandonment and cancellation of the reclamation permit. [1993 c 518 § 30.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.240 Reclamation by the department—Order to submit performance security—Cost recovery. The department may, with the staff, equipment, and material under its control, or by contract with others, reclaim the disturbed areas when it finds that reclamation has not occurred in any segment of a surface mine within two years of completion of mining or of declaration of abandonment and the permit holder is not actively pursuing reclamation.

If the department intends to undertake the reclamation, the department shall issue an order to submit performance security requiring the permit holder or surety to submit to the department the amount of moneys posted pursuant to RCW 78.44.087. If the amount specified in the order to submit performance security is not paid within twenty days after issuance of the notice, the attorney general upon request of the department shall bring an action on behalf of the state in a superior court to recover the amount specified and associated legal fees.

The department may proceed at any time after issuing the order to submit performance security with reclamation of the site according to the approved reclamation plan or according to a plan developed by the department that meets the minimum reclamation standards.

The department shall keep a record of all expenses incurred in carrying out any reclamation project or activity authorized under this section, including:

(1) Reclamation;

(2) A reasonable charge for the services performed by the state's personnel and the state's equipment and materials utilized; and

(3) Administrative and legal expenses related to reclamation of the surface mine.

The department shall refund to the surety or permit holder all amounts received in excess of the amount of expenses incurred. If the amount received is less than the expenses incurred, the attorney general, upon request of the department, may bring an action against the permit holder on behalf of the state in the superior court to recover the remaining costs listed in this section. [1993 c 518 § 31.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.250 Fines—Civil penalties—Damage recovery. Each order of the department may impose a fine or fines in the event that a miner or permit holder fails to obey the order of the department. When a miner or permit holder fails to comply with an order of the department, the miner or permit holder shall be subject to a civil penalty in an amount not more than ten thousand dollars for each violation plus interest based upon a schedule of fines set forth by the department in rule. Procedures for imposing a penalty and setting the amount of the penalty shall be as provided in RCW 90.48.144. Each day on which a miner or permit holder continues to disobey any order of the department shall constitute a separate violation. If the penalty and interest is not paid to the department after it becomes due and payable, the attorney general, upon the request of the department, may bring an action in the name of the state of Washington to recover the penalty, interest, mitigation for environmental damages, and associated legal fees. Decisions of the department are subject to review by the pollution control hearings board.

All fines, interest, penalties, and other damage recovery costs from mines regulated by the department shall be credited to the surface mining reclamation account. [1993 c 518 § 32.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.260 Operating without permit—Penalty. Any miner or permit holder conducting surface mining within the state of Washington without a valid reclamation permit shall be guilty of a gross misdemeanor. Surface mining outside of the permitted area shall constitute illegal mining without a valid reclamation permit. Each day of mining without a valid reclamation permit shall constitute a separate offense. [1993 c 518 § 34; 1970 ex.s. c 64 § 16. Formerly RCW 78.44.150.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.270 Appeals—Standing. Appeals from department determinations under this chapter shall be made as follows:

Appeals from department determinations made under this chapter shall be made under the provisions of the Administrative Procedure Act (chapter 34.05 RCW), and shall be considered an adjudicative proceeding within the meaning of the Administrative Procedure Act, chapter 34.05 RCW. Only a person aggrieved within the meaning of RCW 34.05.530 has standing and can file an appeal. [1993 c 518 § 35; 1989 c 175 § 166; 1970 ex.s. c 64 § 18. Formerly RCW 78.44.170.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

Effective date—1989 c 175: See note following RCW 34.05.010.

78.44.300 Reclamation awards—Recognition of excellence. The department shall create reclamation awards in recognition of excellence in reclamation or reclamation research. Such awards shall be presented to individuals, miners, operators, companies, or government agencies performing exemplary surface mining reclamation in the state of Washington. The department shall designate a percent of the state annual fees as funding of the awards. [1993 c 518 § 37.]

Captions—Severability—Effective date—1993 c 518: See notes following RCW 78.44.010.

78.44.310 Reclamation consulting—No cost service. The department may establish a no-cost consulting service within the department to assist miners, permit holders, local

EXHIBIT # 4 of 4

WASHINGTON STATE DEPARTMENT OF
Natural Resources

September 13, 1995

J.L. Storedahl & Sons
2233 Talley Way
Kelso, WA 98626

RE: Reclamation Permit No. 70-011236; "Ridgefield Pit"

As requested, this permit is terminated effective July 5, 1995. Reclamation is adequate and all monetary considerations have been met.

Please be advised that closure of this permit means no further mining can occur on this site under Permit No. 70-011236. Should you wish to mine on this site in the future, a new application and permit process will be required.

In view of the reclamation and closure of this permit, the State relinquishes all interest and claim against Reclamation Security No. 600948087, issued by MID CENTURY INSURANCE COMPANY.

Sincerely,

Jan G. Gano
Southwest Region Manager

c: MID CENTURY INSURANCE COMPANY
Geology & Earth Resources Division
File #11236

SOUTHWEST REGION ▮ 601 BOND RD ▮ PO BOX 280 ▮ CASTLE ROCK, WA 98611-0280 ▮ FAX: (360) 274-4196 ▮ TEL: (360) 577-2025
RECYCLED PAPER

EXHIBIT #

WASHINGTON STATE DEPARTMENT OF
Natural Resources

BRIAN BOYLE
Commissioner of Public Lands

Southwest Region
601 Bond Dr S-12
P.O. Box 280
Castle Rock, WA 98611

May 25, 1990

Ken Mohoric
Department of Fisheries
P.O. Box 999 S-13
Battle Ground, Washington 98604

Dear Mr. Mohoric:

Subject: East Fork of the Lewis River, Surface Mine Permit #70-011236

In regard to the meeting at Storedahls' East Fork of the Lewis River - South Pit with Steve Keller (Biologist-Fisheries), Steve Wille (SW Washington Anglers), Seth Mackie (District Manager-DNR), Kimball and Kevin Storedahl and myself the following items were discussed:

1) Fisheries would like to see a series of interconnected ponds with 60 foot wide channels as per the reclamation plan.

2) Dikes should be left as is along the river. Earth work will be kept to the inside of the ponds to minimize silt in the river. The reclamation plan that was agreed to, calls for a 1.5:1 slope 5 feet below the low water mark.

3) Man-made debris will be removed from the shoreline. Brush piles will be removed by burning.

4) The unnamed creek that flows from the west through the pond should be left as is.

5) No rip rap will be placed along the main river channel to prevent the river from establishing hydrological equilibrium.

6) Allow the main river channel to erode through the haul road and therefore enter the pit at some later date to re-establish hydrological balance.

7) The in-flow channel into the pit which has Hydraulic Permit Approval, will be allowed to continue to find its own hydrological equilibrium.

8) Since the river has entered the pit the Department of Natural Resources is of the understanding that the Fisheries Department will require an HPA for any work along the shorelines of the pit.

If you have any further thoughts or if you disagree with any of the above items please contact me. Reclamation work is scheduled for August 1990 by Storedahl.

Sincerely,

David K. Norman
Regional Geologist

DKN:la

cc: Lloyd Handlos
Seth Mackie
Bill Lingley - Geology
Carl Dugger - DOW
Steve Wille - SW WA. Anglers
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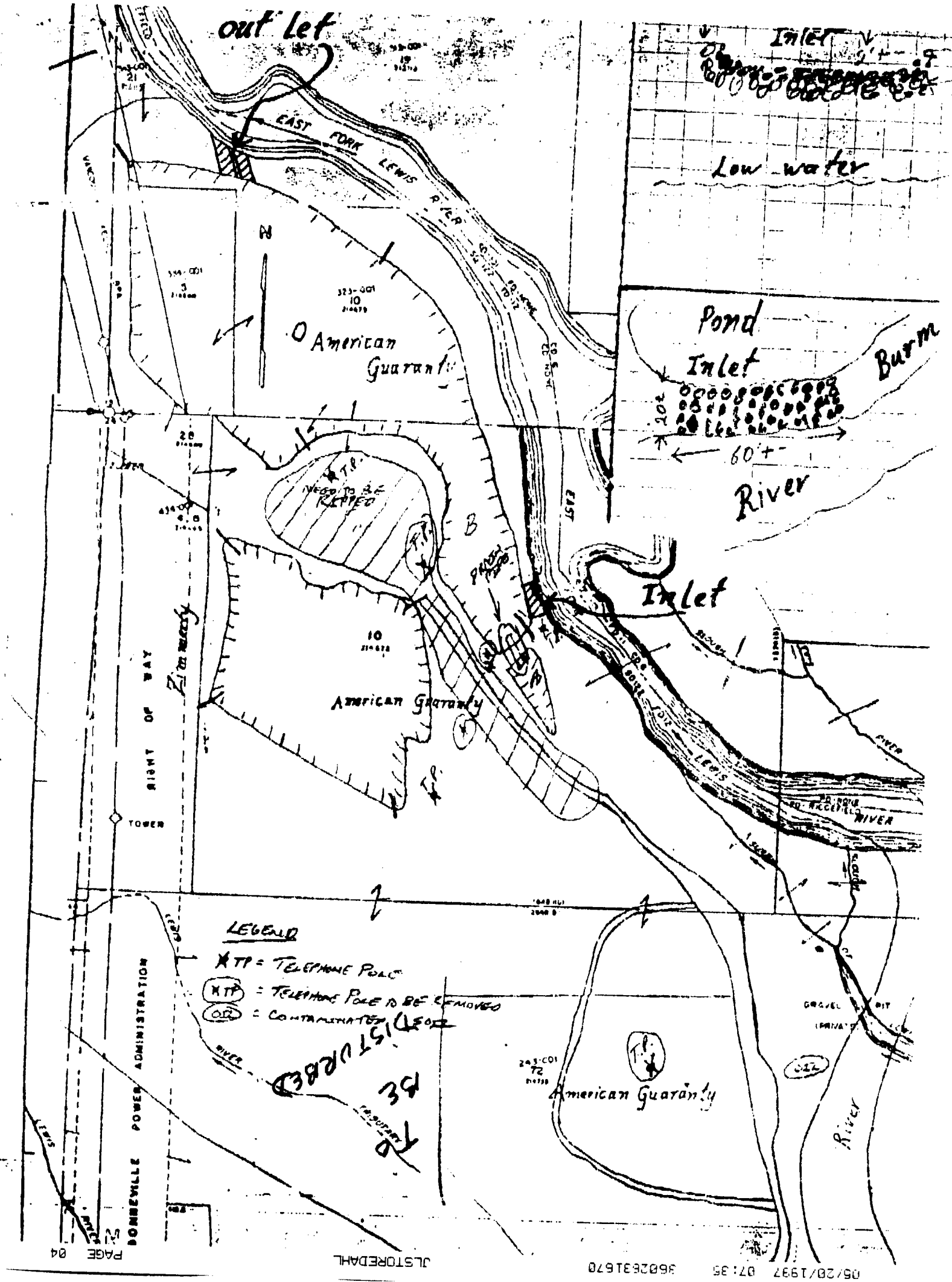

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TP = TELEPHONE POLE
TP = TELEPHONE POLE TO BE REMOVED
OIL = CONTAMINATED SOIL
DISTURBED
TO BE
American Guaranty
GRAVEL PIT
River
BONNEVILLE POWER ADMINISTRATION

EXHIBIT # #46

Friends of the East Fork
P. O. Box 1277,
Battle Ground, WA
98604

May 20, 1997

Mr. Larry Epstein
Larry Epstein, P.C.
Attorneys at Law
722 S.W. Second Avenue, Suite 400
Portland, OR 97204

Re: In Re: Matter of J.L. Storedahl & Sons, Inc. Notice and Order

Dear Mr. Epstein:

On January 29, 1997, the Planning Director for Clark County made a finding that the County would not require the applicant in SPR #96-092 (Daybreak Gravel Mine) to apply for a Shoreline Permit under the Shoreline Management Act. Friends of the East Fork, Department of Natural Resources, and the Department of Ecology all believe that the Planning Director's determination is in error and that it should be reversed.

I would like to present several reasons why I think that the County's reasoning is flawed and why I believe that the County's decision should be overturned.

1. Parts of the 19 acre parcel in question are within the 100-yr flood plain.
According to the FEMA flood plain map (fig. 1) and Clark County's flood plain map (fig. 2), parts of the applicant's proposed 19 acre site are within the designated 100-yr flood plain. Furthermore, according the Storedahl's 1991 Daybreak Pit Reclamation Plan (fig. 3) and their own 1996 Site Plan Application map (fig. 4), Storedahl and their consultants, David J. Newton and Associates, also recognized that parts of the 19 acre parcel are within the 100-yr flood plain. In their Site Plan Application and DEIS, Storedahl actually proposed mining the entire 19 acre parcel (fig. 5) even though some of it is within the 100-yr flood plain. After Friends of the East Fork reviewed their DEIS and pointed out that Storedahl planned to mine parts of the 100-yr flood plain, Storedahl took a different tack and hired consultants to try to convince FEMA to alter the boundaries of the 100-yr flood plain at the Storedahl site. When that failed, Storedahl hired other consultants to convince Clark County that none of the proposed 19 acre site is within the 100-yr flood plain. It appears that Storedahl has hired consultants to circumvent, by any means, County and State statutes designed to protect and regulate activities within flood plains, sensitive lands, and state shorelines. As you know, Clark County has designated the FEMA 100-yr flood plain as a critical area for special protection under the GMP.

Furthermore, according to the Storedahl Site Plan map, which shows contours (fig. 4), all of the 19 acre site is within 2 feet vertically of the 100-yr flood plain. Thus the site is wholly within the flood plain of the East Fork and excavation of 2 feet of rock will put all of the site within the 100-yr flood plain.

2. All of the products mined at the 19 acre site will be processed within the 100-yr flood plain. According to the Storedahl proposal, all of the rock mined from the site, (1,820,000 tons of rock), representing more than 100,000 truckloads of rock over the life of the site, are to be conveyed across the 100-yr flood plain, through parts of the 50-yr and 10-yr flood plains (see fig. 3; Storedahl's 1991 Flood plain map) to a processing site within the 100-yr flood plain. Thus, crushing, washing, screening, stockpiling, loading, and trucking activities associated with this mining operation all will take place within the 100-yr flood plain and within a 100-150 feet of the active river channel (closer during floods). Furthermore, according to Storedahl's 1991 flood plain map (fig. 3), sedimentation ponds utilized for crushing/washing will all be within the 10-yr flood plain of the East Fork. These ponds were flooded in February and December, 1996. It is the view of Friends of the East Fork that such processing activities must not be allowed within the 100-yr flood plain, without a Shoreline Permit and a complete EIS.

3. Applicant's faulty reasoning about the East Fork's future meander paths.
The applicant's hired consultants have tried to minimize the possibility of the East Fork meandering back across its flood plain to the north in the vicinity of the site. Of course, by definition, the flood plain is an area produced by the river meandering back and forth and is also subject to inundation during episodes of flooding. In the vicinity of the Storedahl site, the East Fork has meandered to the southern limit of the flood plain, where, in places, it is up against the valley wall. The East Fork has nowhere else to go now, except back to the north! Parts of the present channel have already begun to meander back toward the north. It is impossible to predict how rapidly the East Fork will move toward the north, but, past evidence of migration can provide some ideas. According to Clark County documents in the Chronology of Events Woodside/Daybreak Surface Mine (fig. 6), the East Fork migrated about 600 feet from 1968 to 1974. Over that 6-year interval, the migration rate was about 100 feet per year! Note from figure 6 that part of the channel migrated toward the south, while part of the channel migrated toward the north.

The applicant's consultants have stated that the East Fork is 1300 feet away from the proposed site and therefore not a threat. It is clear that in slightly more than a decade the East Fork could migrate from its present position to the proposed mining site based on past migration rates in that reach of the river.

I would like to note that during future channel migrations northward, the East Fork will enter and migrate through all of Storedahl's present mining ponds in the flood plain as well as through the proposed processing site and the proposed new mining site. There is nothing that can be done to keep the East Fork from entering and flowing through mining pits in the flood plain as was graphically illustrated during the December 1996 floods, which breached the margins of mining

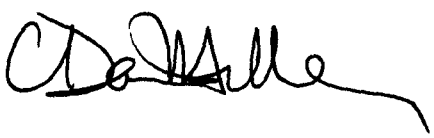
ponds on the south side of the river, allowing the East Fork to flow through all of the mining ponds created by Storedahl on the south side of their present mining site.

In summary,
I believe that it is clear that the proposed 19 acre site is within the flood plain of the East Fork and that parts of it are within the 100-yr flood plain. Furthermore, all of the nearly 2 million tons of rock would have to be conveyed through the 100-yr flood plain and through parts of the 50-yr and 10-yr flood plains to reach a processing site within the 100-yr flood plain. Now that the East Fork has migrated to the south wall of the flood plain, I believe that it is virtually certain that it will begin to migrate back toward the north. Based on past migration rates, it could reach the proposed mining pit within 13 years, after having migrated through all of the Storedahl mining pits and through the processing site.

It appears to Friends of the East Fork that Mr. Storedahl and his consultants are trying to circumvent all County and State statutes designed to protect sensitive lands, critical areas designated by FEMA, and shorelines. Their consultants appear to have modified their own maps according to their needs. The proposed Storedahl operation is the very kind of activity that the Shoreline Substantial Development and Shoreline Conditional Use Permits were designed for. How Mr. Lowry reached his decision not to require a Shoreline Permit for this project is unclear, but we ask you not to repeat this mistake and we ask you to reverse this clearly erroneous decision.

Thank you for the opportunity to comment on this issue.

Sincerely,

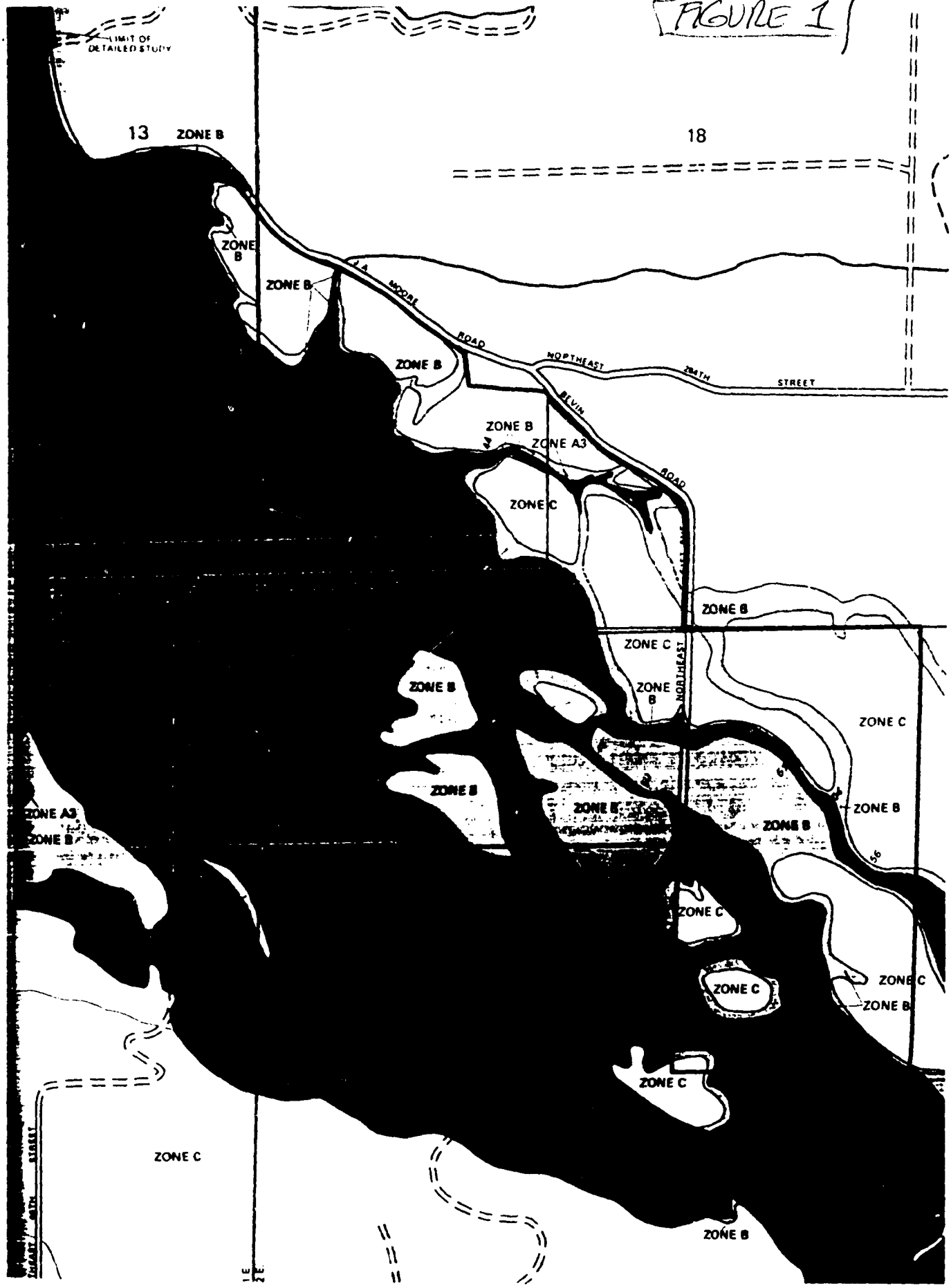


C. Dan Miller, Ph.D.
Geologist
Friends of the East Fork

enclosures: 6 figures

cc
David T. McDonald

FIGURE 1



FEMA FLOOD PLAIN MAP

N

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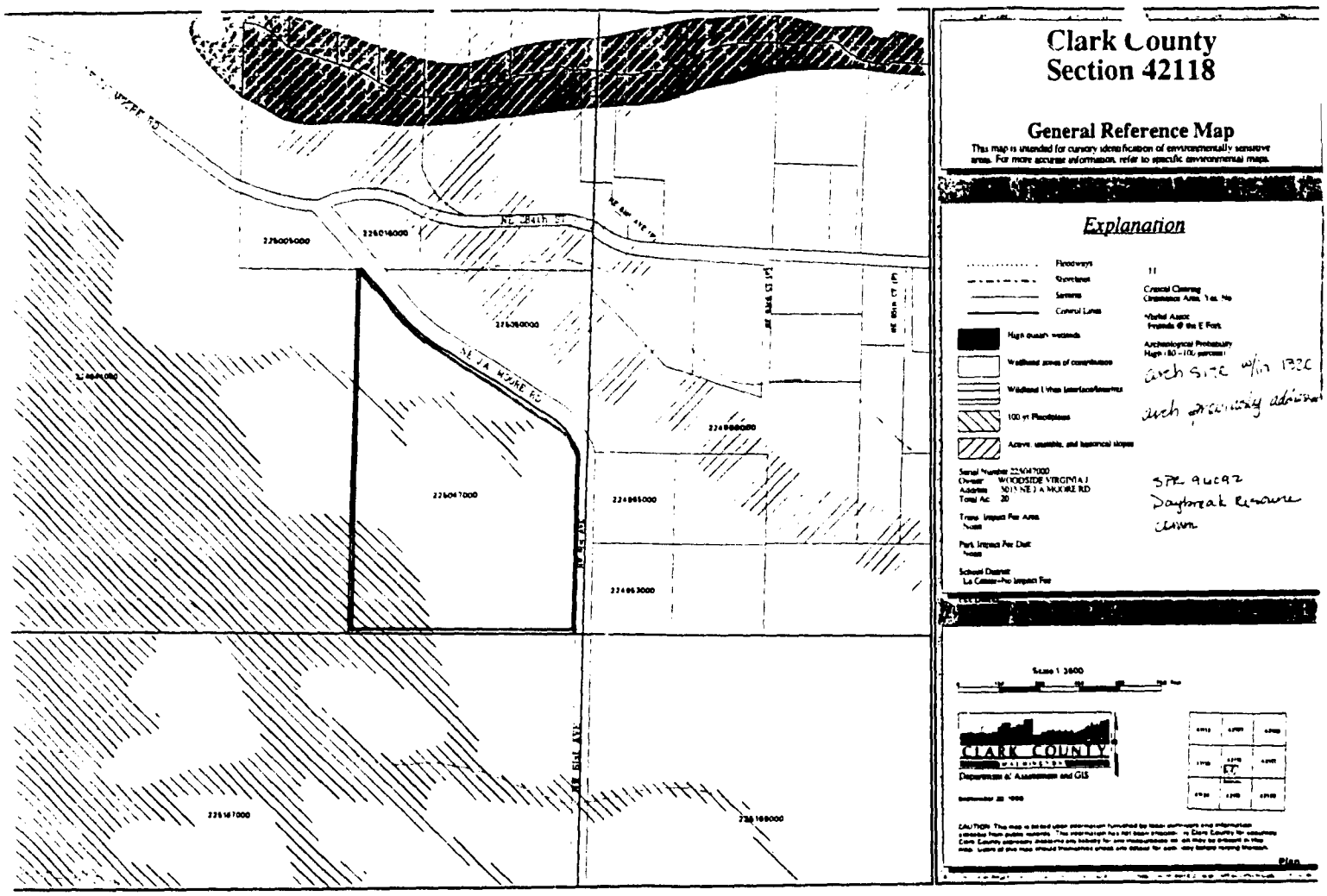
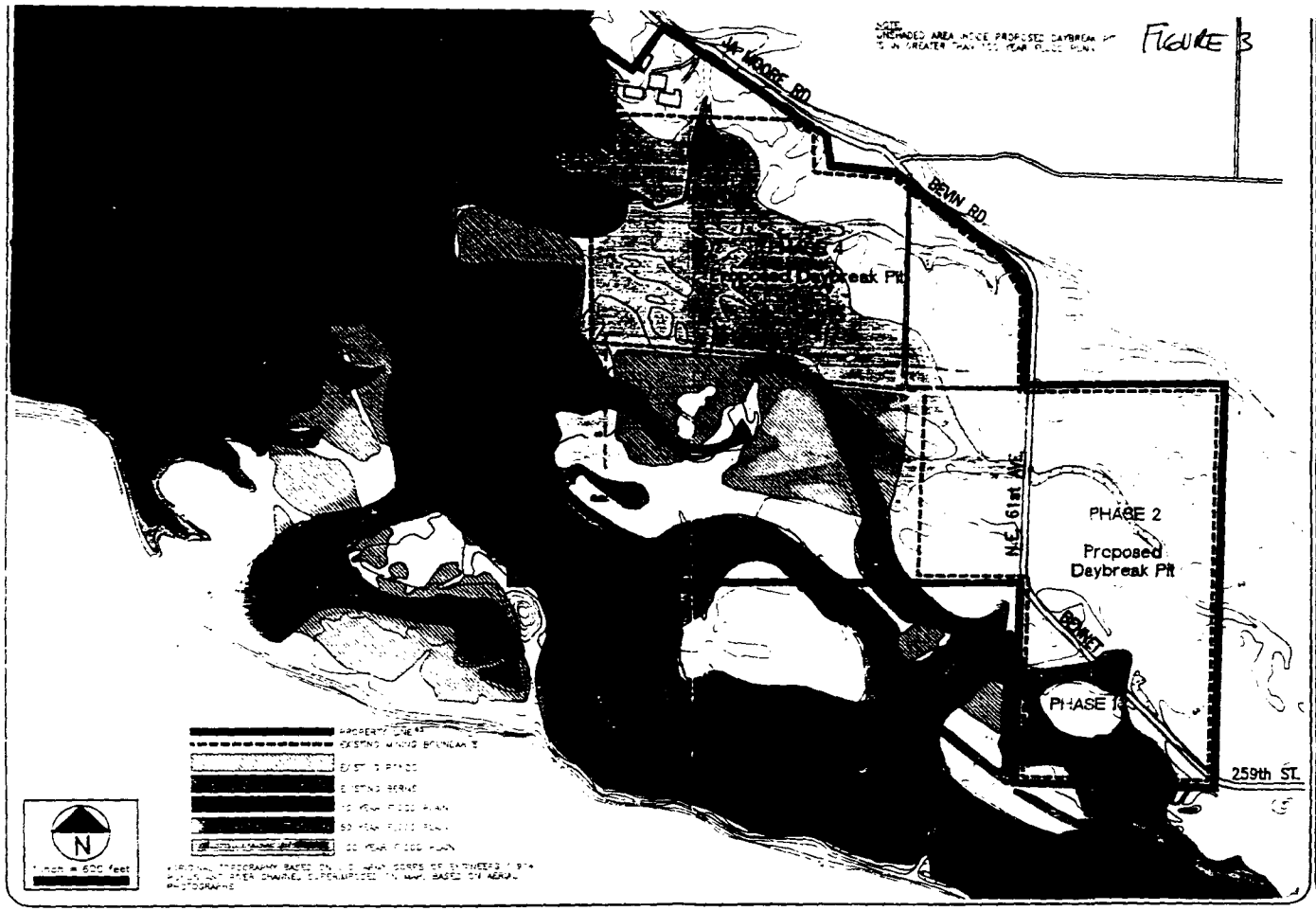
FIGURE 2



Clark County
Section 42118
General Reference Map
This map is intended for cursory identification of environmentally sensitive areas. For more accurate information, refer to specific environmental maps.
Explanation
Floodways
Shorelines
Streams
Control Lines
High quality wetlands
Wildland zones of contribution
Wildland Urban Interface/Intermix
100 yr Floodplains
Active, unstable, and historical slopes
Critical Clearing Ordinance Area, Yes, No
Archaeological Probability High (80 - 100 percent)
arch site w/in 1320
arch previously addressed
Serial Number 225047000
Owner WOODSIDE VIRGINIA J
Address 3013 NE J A MOORE RD
Total Ac 20
Trans Impact Fee Area
Park Impact Fee Dist
School District
La Center-No Impact Fee
SPR 96092
Daybreak Resource
CLARK COUNTY
Department of Assessment and GIS
Plan
NE 284th ST
NE J A MOORE RD
NE 51st AVE
225005000
225016000
225050000
225047000
224965000
224963000
225167000
225169000

FLOOD PLAINS

DAVID J. NEWTON ASSOC



7

DAVID J. NEWTON ASSOC.
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1205 SW 12TH AVE., SUITE 400
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IRAQ 1 767 WILLAMETTE ST., SUITE 306
EUGENE, ORE 97401 • 344-0955 • FAX 344-1827

FLOOD PLAINS

DAYBREAK PIT RECLAMATION PLAN

DATE
MAR. 1991

PROJECT NO.
361 GE 11

FIGURE 4

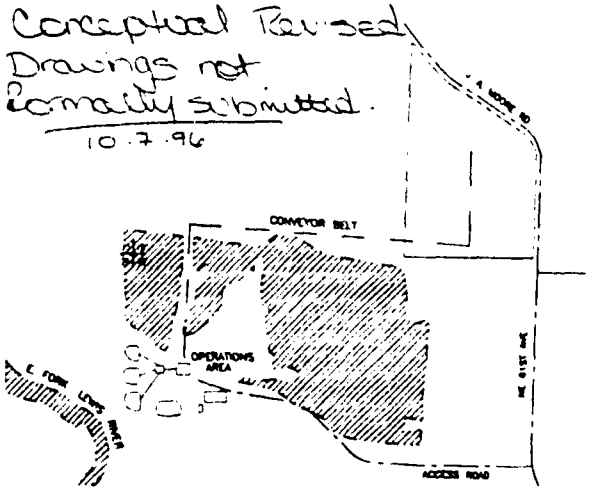
DAYBREAK RESOURCE PROJECT

J. L. STOREDAHL AND SONS, INC.

EXISTING CONDITIONS PLAN

S.E.1/4, S.W.1/4 SECTION 18 T4N, R2E
CLARK COUNTY, WASHINGTON

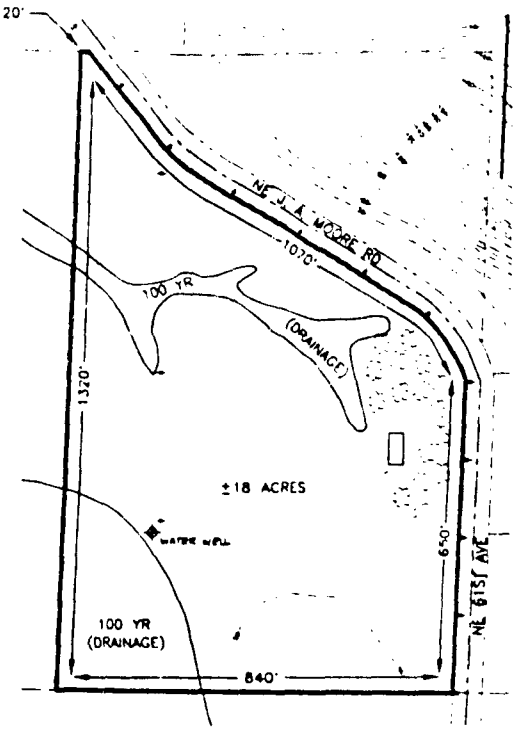
Conceptual Revised Drawings not formally submitted.
10.7.96



VICINITY MAP

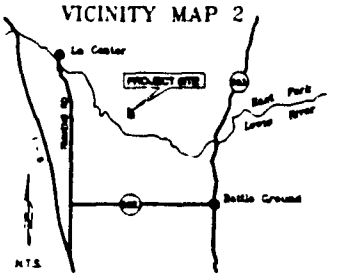
NOTE:
NO TRANSIT STOPS, PEDESTRIAN, OR BICYCLE PATHWAYS.

600' 0' 600' 1200'
SCALE: 1" = 600'



200' 0' 200' 400'
SCALE: 1" = 200'

VICINITY MAP 2



EXPLANATION

- TREES/ SHRUBS (REPRESENTATIVE)
- CLARK CO COMPUTED 100 - YR FLOODPLAIN
- TAX LOT BOUNDARY
- 10' TOPO CONTOURS
- ROAD CENTERLINE
- UTILITY POLE
- PROJECT BOUNDARY
- EASEMENTS
- DWELLING STRUCTURE

DAVID J. NEWTON ASSOCIATES, INC. CIVIL & GEOLOGICAL ENGINEERING SERVICES					EXISTING CONDITIONS PLAN	
DATE	FILE NAME	PLOT FILE	SCALE	PROJECT NO	Daybreak Site Clark County, Washington	FIG. NO
Oct. 1996	SITE1	DNA-256	TIV	361-118		1

FIGURE 5

DAYBREAK RESOURCE PROJECT

J. L. STOREDAHL AND SONS, INC.

LANDSCAPE PLAN

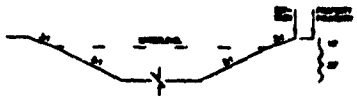
S.E.1/4, S.W.1/4 SECTION 18 T4N, R2E
CLARK COUNTY, WASHINGTON

EXPLANATION

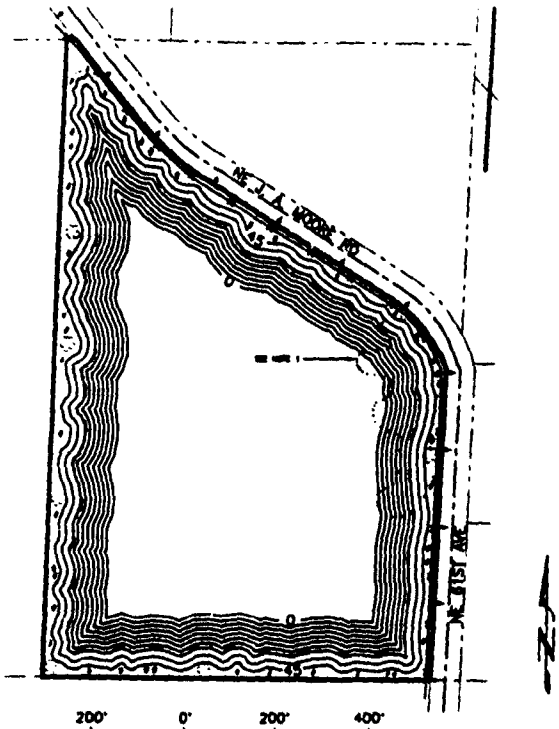
- PROPOSED 4' HIGH 3 STRAND BARBED WIRE FENCE
- TAX LOT BOUNDARY
- ROAD CENTERLINE
- UTILITY POLE
- PROJECT BOUNDARY
- EASEMENTS
- PLANTINGS

NOTES

1. MATURE MIXED DECIDUOUS/CONIFEROUS WOODLAND. TREES TO 70 FT. HIGH, 3FT. DIAMETER. ALL TO BE REMOVED.
2. APPROX. 12.7 ACRE OPEN LAKE, 35-45FT. DEEP; 15-20FT. SETBACKS. 3:1 SHORELINE TO WATERS EDGE; 1.5:1 TO 2:1 UNDERWATER SLOPES.
3. PROPOSED 4FT. HIGH, 3-STRAND BARBED WIRE FENCE.
4. APPROX. 4.3 ACRES OF SHORELINE TO BE RECLAIMED WITH GRASS AND LEGUME SEED (8 LBS./AC. AND 15 LBS./AC.) AND WILLOW SLASH BUNDLES, AND COTTONWOOD AND RED ALDER PLANTINGS. WILLOW SLASH BUNDLES EVERY 150FT. TREE PLANTINGS EVERY 200FT.



SCALE: 1" = 100'
CROSS - SECTION



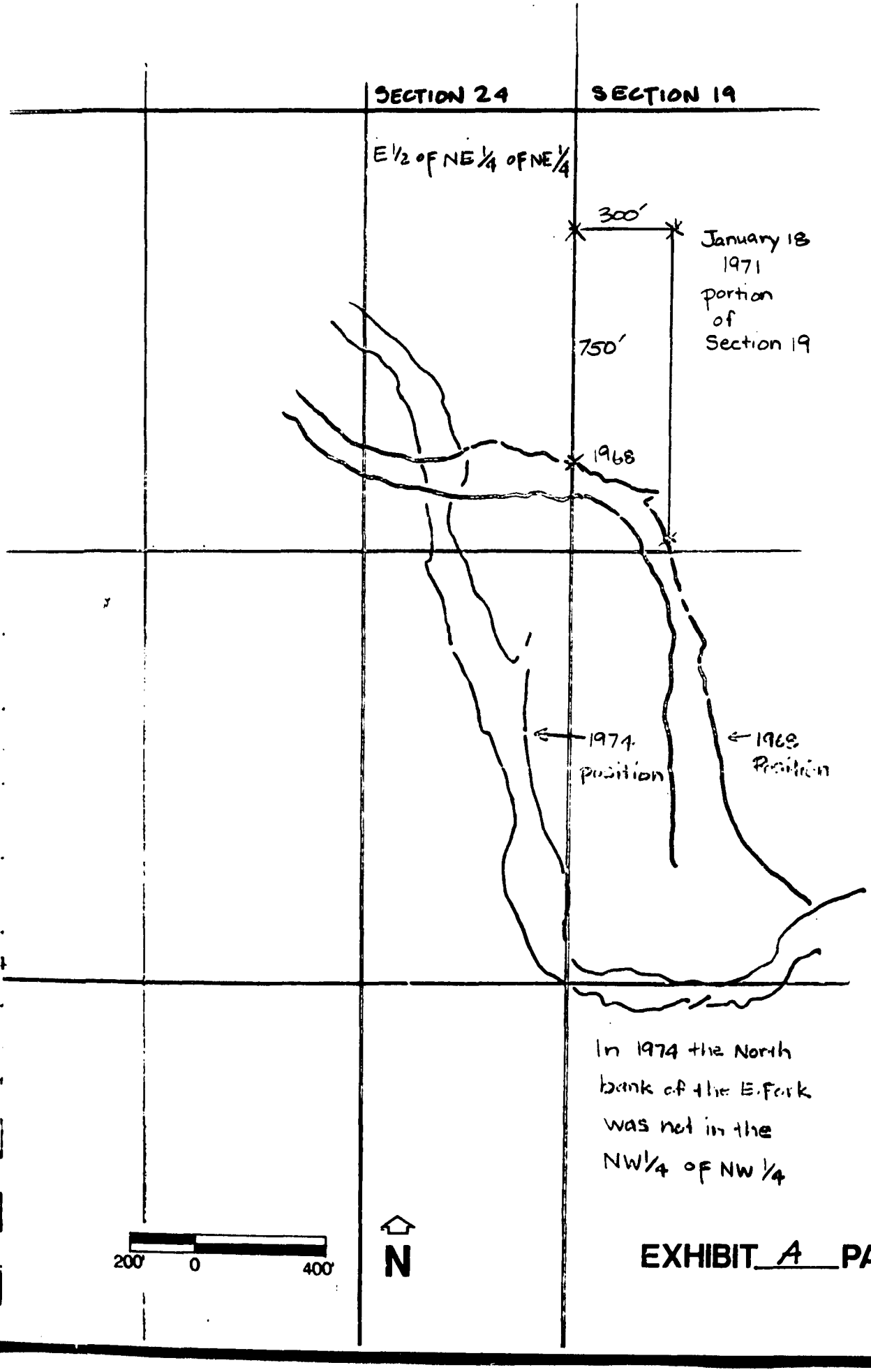
DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES

LANDSCAPE PLAN

DATE	FILE NAME	PLOT FILE	INITIALS	PROJECT NO		FIGURE
Oct. 1988	SITE3	DNA-386	TIW	361-118	Daybreak Site Clark County, Washington	3

FIGURE 6

AERIAL PHOTOGRAPH OVERLAY



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#47

EXHIBIT #

May 17, 1997

Larry Epstein, Appeals Hearing Examiner
Clark County, Vancouver, WA

Re: **SPR #96-092 (Daybreak Resource Project/Storedahl Mining Operation on or near the East Fork of the Lewis River**

Dear Mr. Epstein:

My name is Richard Dyrland and I am a graduate hydrologist representing the Friends of the East Fork. My past 31 years of experience in hydrology and watershed management included duties as Regional Hydrologist for the Intermountain Region, Regional Hydrologist for the Pacific Southwest Region, and member of the National Watershed Management and Flood Rehabilitation Team, and review person for the watershed and hydrology components of all Forest Service Forest Plans in the Pacific Northwest Region. Recently I took early retirement to do consulting in watershed management and environmental analysis.

The items of interest that I will address are:

What are the functioning characteristics of the flood plain in the area of the proposed project, and the relationship to the East Fork of the Lewis River <u>NOW</u> ---including the 100-year 1% annual chance flood.

The various reaches of the stream channel below the area where the flood plane widens dramatically have gone through many changes in the last 60 years, some of this was due to natural causes and much to the increase in human related activities.

Allow me to clarify the hydrologic environment of the stream reaches in the proposed project area in relation to the stream gage at Heisson (USGS 14222500 - East Fork Lewis River) that has been used as a source of flood flow data.

The stream gage drains approximately 125 square miles of upland and mountainous area and is characterized by a relatively narrow flood plain and entrenched often bedrock channels --see Figure 1. The area below from the gage to the proposed project area, adds about 31 square miles, and is a mixture of foothills and valley lowlands. About 3.3 miles below the gage the shape of the floodplain changes into a broad meandering lowland floodplain with wider and less entrenched channels whose stream banks and bottoms are composed of cobble, gravel, and sand materials --see Figures 2, and 3.

Point 1: The proposed project area is about 10.5 miles below the gage and about 7 miles below the point where the lowland floodplain begins --see Figure 4. It is essential that the gage data although useful, should be applied and interpreted with caution as the stream flow data at the gage represents conditions and events happening in the watershed area above the gage. Its application to the area below is limited. In addition, an increasing rate of vegetation modification, roading, mining, and urbanization have changed the hydrologic condition of the watershed and affected the stream flow runoff relationships in the last 40 years (Leopold - 1994, USGS - 1979)..

Figure 1. Upland Channel Cross Section

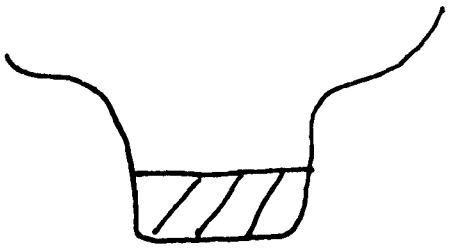


Figure 2. Lowland-Valley, Channel Cross Section

Figure 3. Comparison Of Valley Lowland Flood Plain Width To Upland Flood Plain Width -East Fork Lewis River Watershed

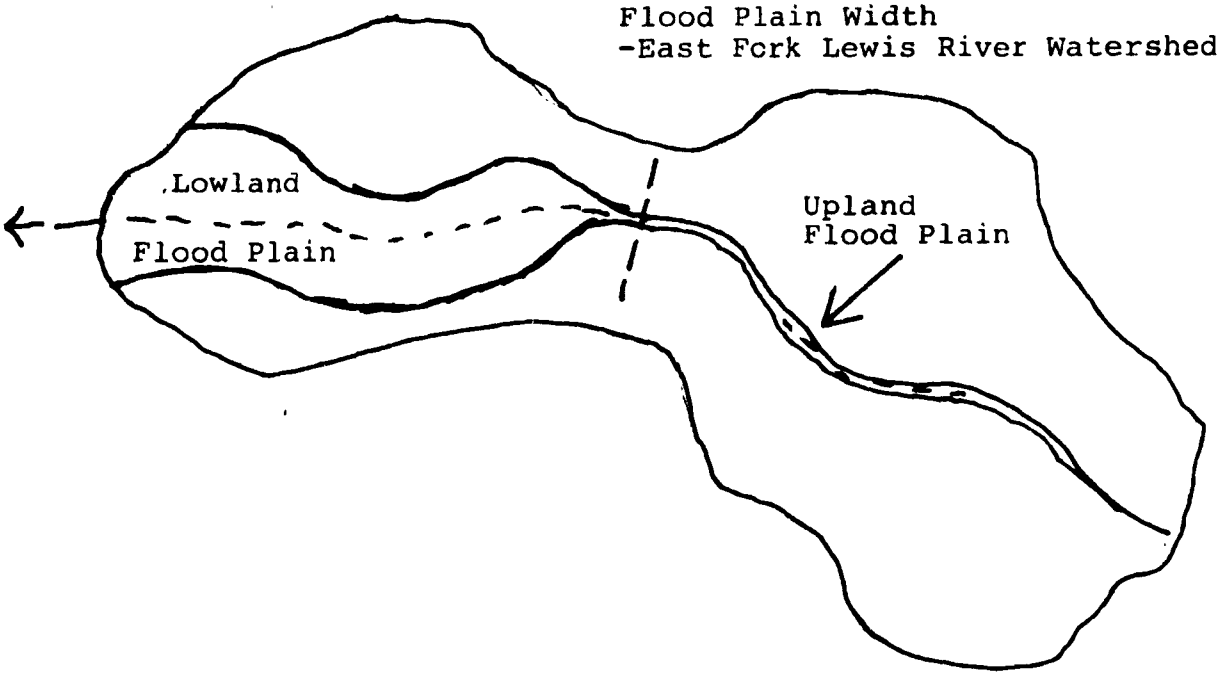
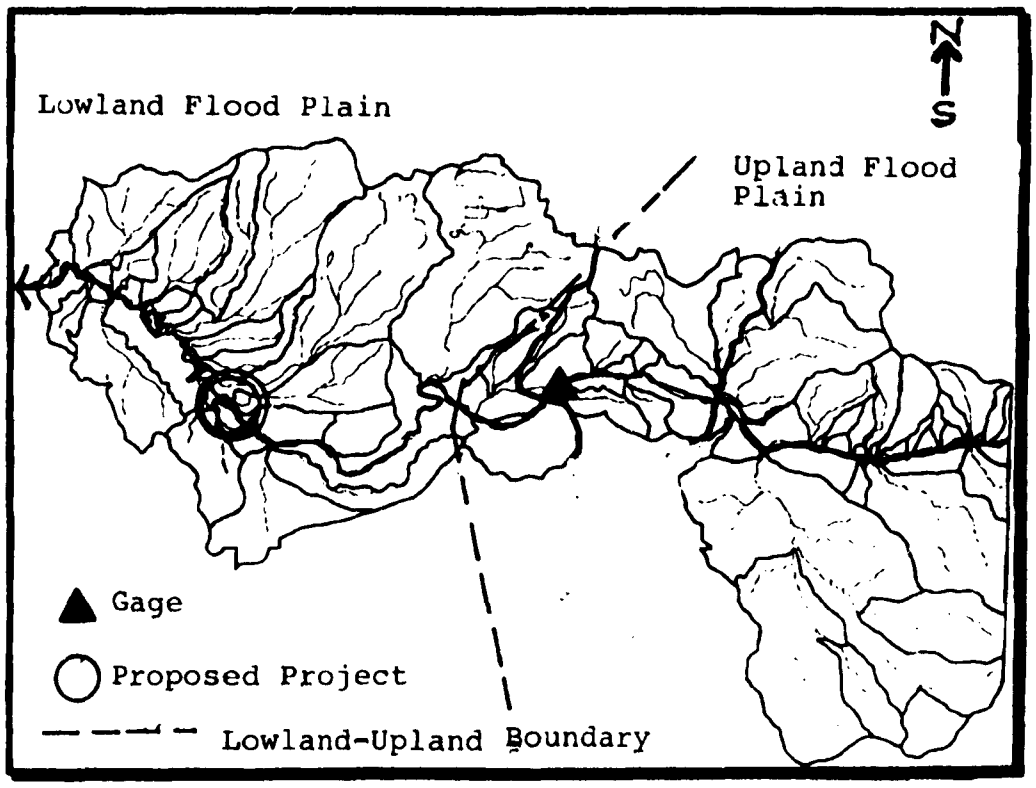


Figure 4. Comparison of Relative Flood Plain Widths
--Upland and Lowland Flood Plains, East Fork Lewis River



East Fork Lewis River Watershed

Point 2: The stream channel reaches starting at about 2.5 miles above the project area as well as below the proposed project area, are of a very active and unstable character. A stereoscopic analysis of a series of aerial photos starting in the 1930's show that the stream channel has meandered all over the floodplain valley and their were numerous active flood overflow channels across the valley. Studies by the University of Washington indicate substantial meandering and changing of the basic characteristics of the lowland stream channel between 1854 and 1990 (University of Washington, 1997.)

With the more recent deterioration of the channel stability condition and the increasing rate of runoff for a given climatic event, one can expect the rate of stream channel shifting and meander to accelerate.

The bankful width/depth (WD) is key to understanding the distribution of available energy within a channel, and the ability of various discharges occurring within the channel to move sediment. The W/D ratio is the most sensitive and positive indicator of trends in channel stability (Leopold, 1992, and Rosgen, 1996). As channel W/D ratios have been increasing in these lower reaches, it has essentially been raising the level of flood flow water surface occurring for a given flood event --see Figures 5. and 6.

The stream channels above the gage in the upland areas are of the B1 and B4 classification, and have width to depth (W/D) ratios between 8 and 14 which indicates high level of stability --see Figures 7. and 8. Their stream beds are predominantly bedrock and boulder.

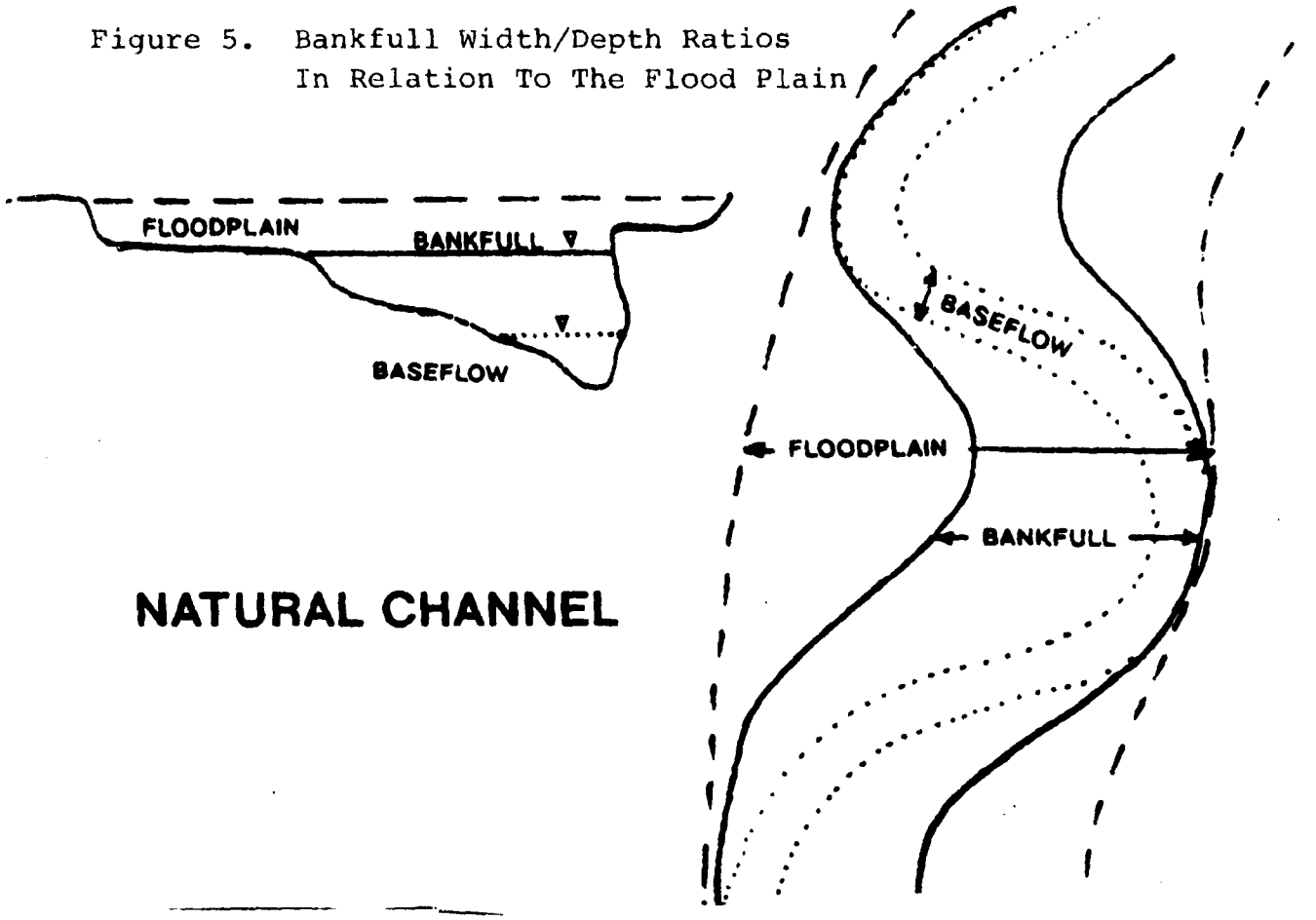
In contrast, the lowland floodplain channels are of the C3 and C4 classification, and have deteriorated to width/depth ratios that range from 37 to 48, which is quite high --see Figures9., 10.and 11. It indicates considerable instability at flood flow levels and a substantially reduced transport capability to handle suspended sediment and bed load. The channel stream bed and banks are predominately a mix of cobble, gravel, and sand alluvial materials. This initiates a high tendency for stream channel meandering (Rosgen-1996, Miller-1992).

Point 3: Flooding adjacent to and across the proposed project area has occurred several times in the past 70 years and can be expected to occur again and more frequently with the deteriorated condition of the lowland stream channel reaches and as urbanization increases.

"It is usual for the annual flood to equal or exceed baneful stream stage 2 years out of 3. (This is the meaning of a recurrence interval of 1.5 years.) In terms of number of cases per year in a natural basin influenced by humans, bank full would be equaled or exceeded somewhat more often than once a year, (recurrence interval of 0.9 year (Leopold, 1994)". **Since the fall of 1995, the lowland channel in the project area has exceeded bankful level at least 3 times or more.**

The proposed project area and the current sand and gravel washing area have been subject to flooding in the past and under the current conditions are at an increasing risk of flooding.

Figure 5. Bankfull Width/Depth Ratios In Relation To The Flood Plain



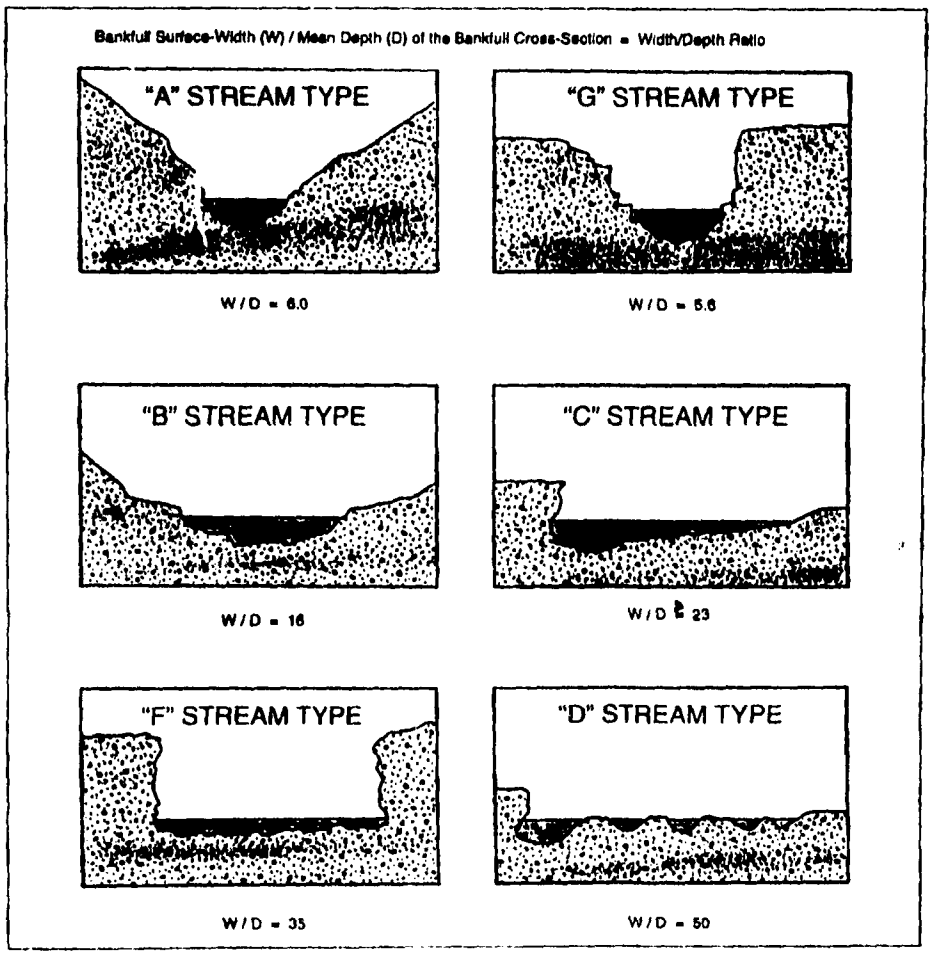
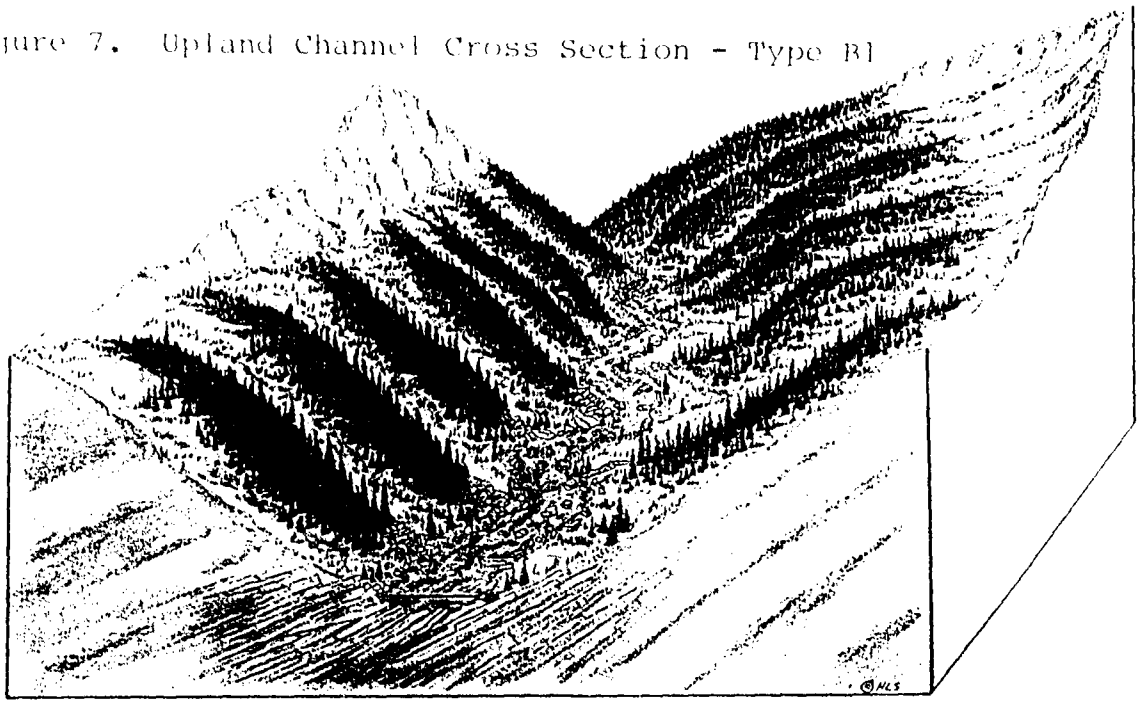


FIGURE 6. Examples of various Width/Depth Ratios for selected stream types.

Figure 7. Upland Channel Cross Section - Type B1



DELINEATIVE CRITERIA (B1)

Landform/soils: Structural controlled narrow valleys with moderate side slopes.

Channel materials: Bedrock bed with streambanks composed of boulders, cobble and gravel.

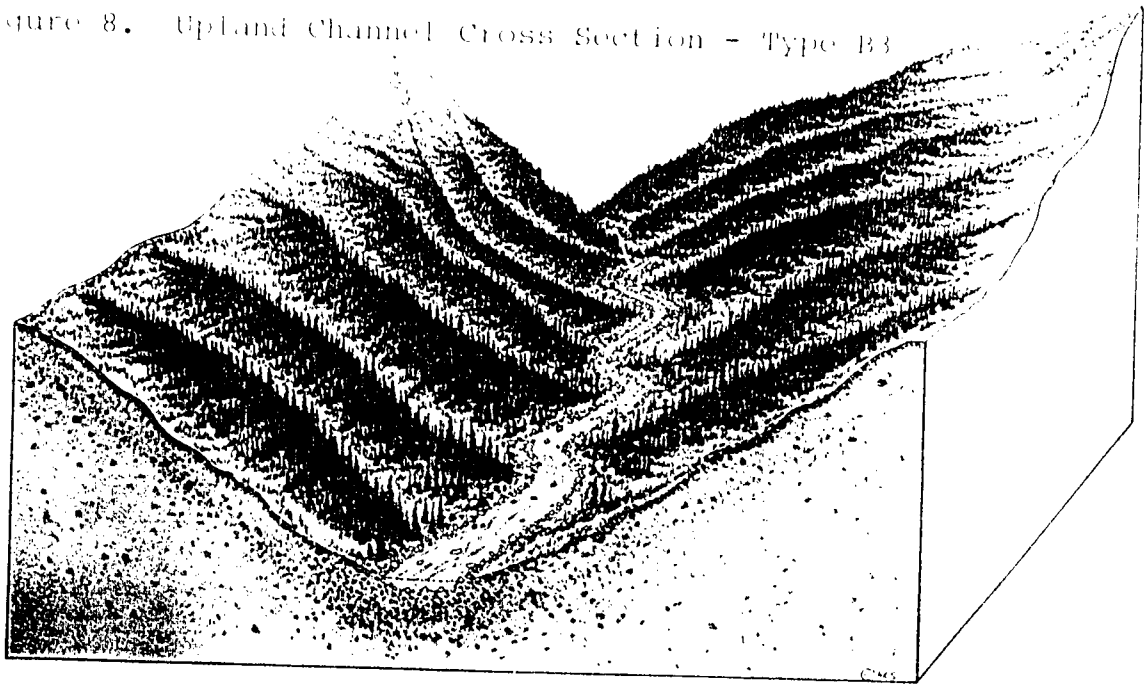
Slope Range: .02 .04 (B1c < .02)

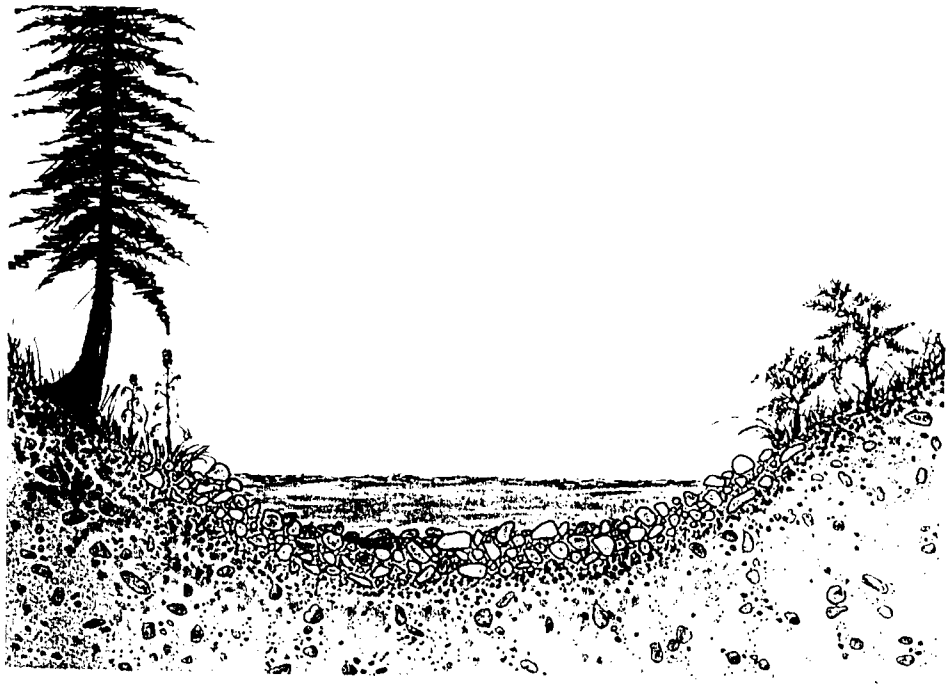
Entrenchment Ratio: 1.4 - 2.2

Width/depth Ratio: > 12

Sinuosity: > 1.2

Figure 8. Upland Channel Cross Section - Type B3





DELINEATIVE CRITERIA (B3)

Landform/soils: Narrow, moderately steep colluvial valleys with gentle side slopes. Soils are colluvium and/or alluvium. Often in fault line valleys or on well vegetated alluvial fans.

Channel materials: Predominantly cobble with lesser amounts of boulders, gravel and sand. Streambanks are stable due to coarse material.

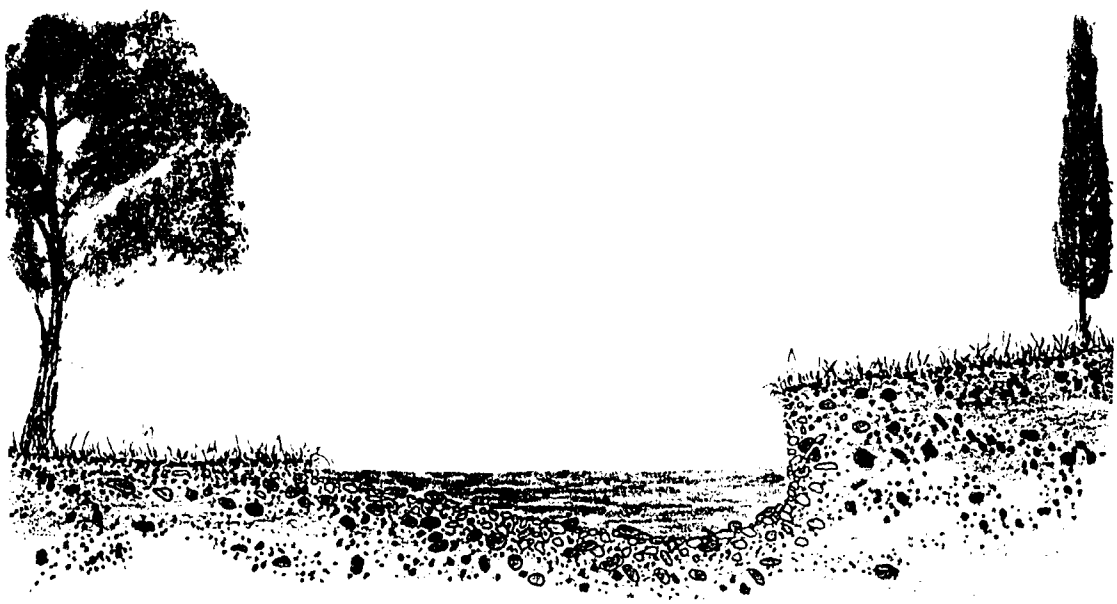
Slope Range: .02 .04 (B3c, < .02)

Entrenchment Ratio: 1.4 2.2

Width/depth Ratio: > 12

Sinuosity: > 1.2

Figure 9. Lowland Channel Cross Section - Type C3



DELINEATIVE CRITERIA (C3)

Landform/soils: Broad alluvial and glaciated valleys, holocene terraces generally present. Soils are glacial deposition and alluvium.

Channel materials: Predominantly cobble with lesser amounts of gravel and sand. Banks are finer in material size than channel bed.

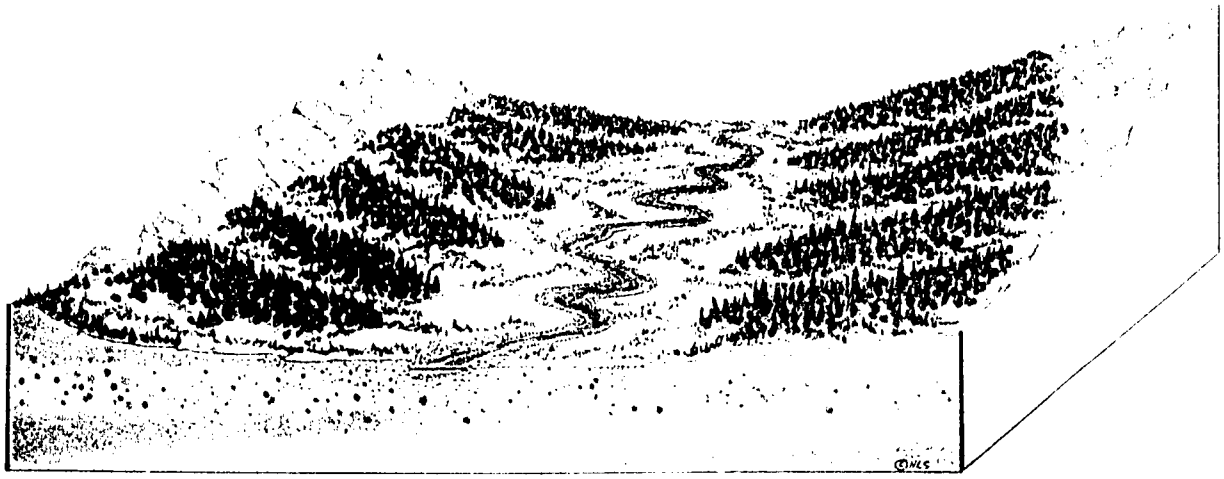
Slope Range: < .02 (C3c- .001)

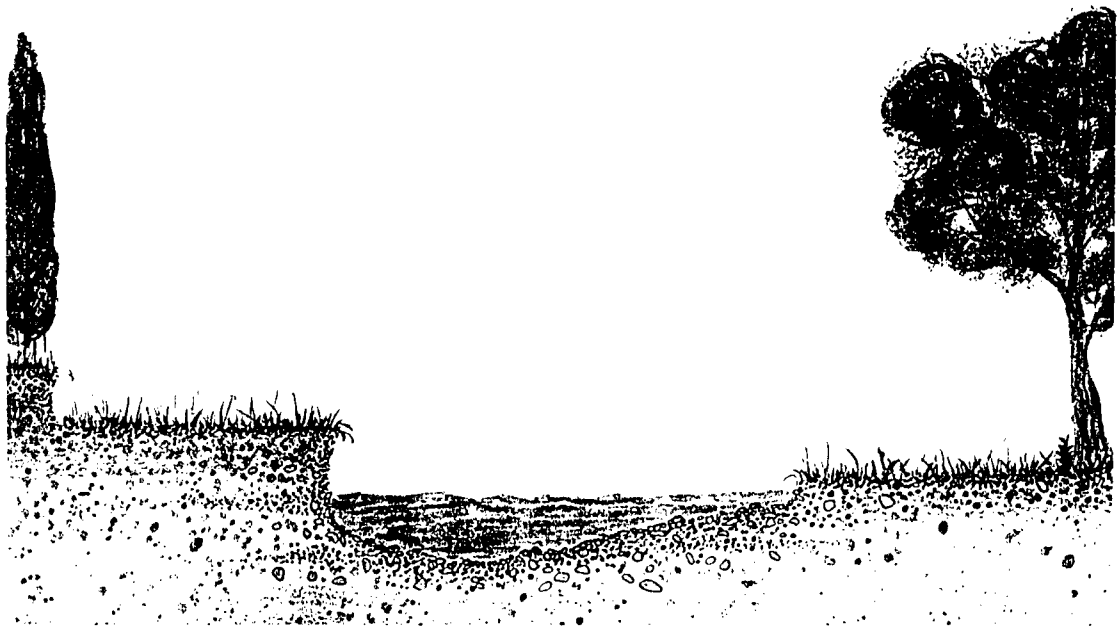
Entrenchment Ratio: > 2.2

Width/depth Ratio: >12

Sinuosity: >1.2

Figure 10. Lowland Channel Cross Section - Type C4





DELINEATIVE CRITERIA (C4)

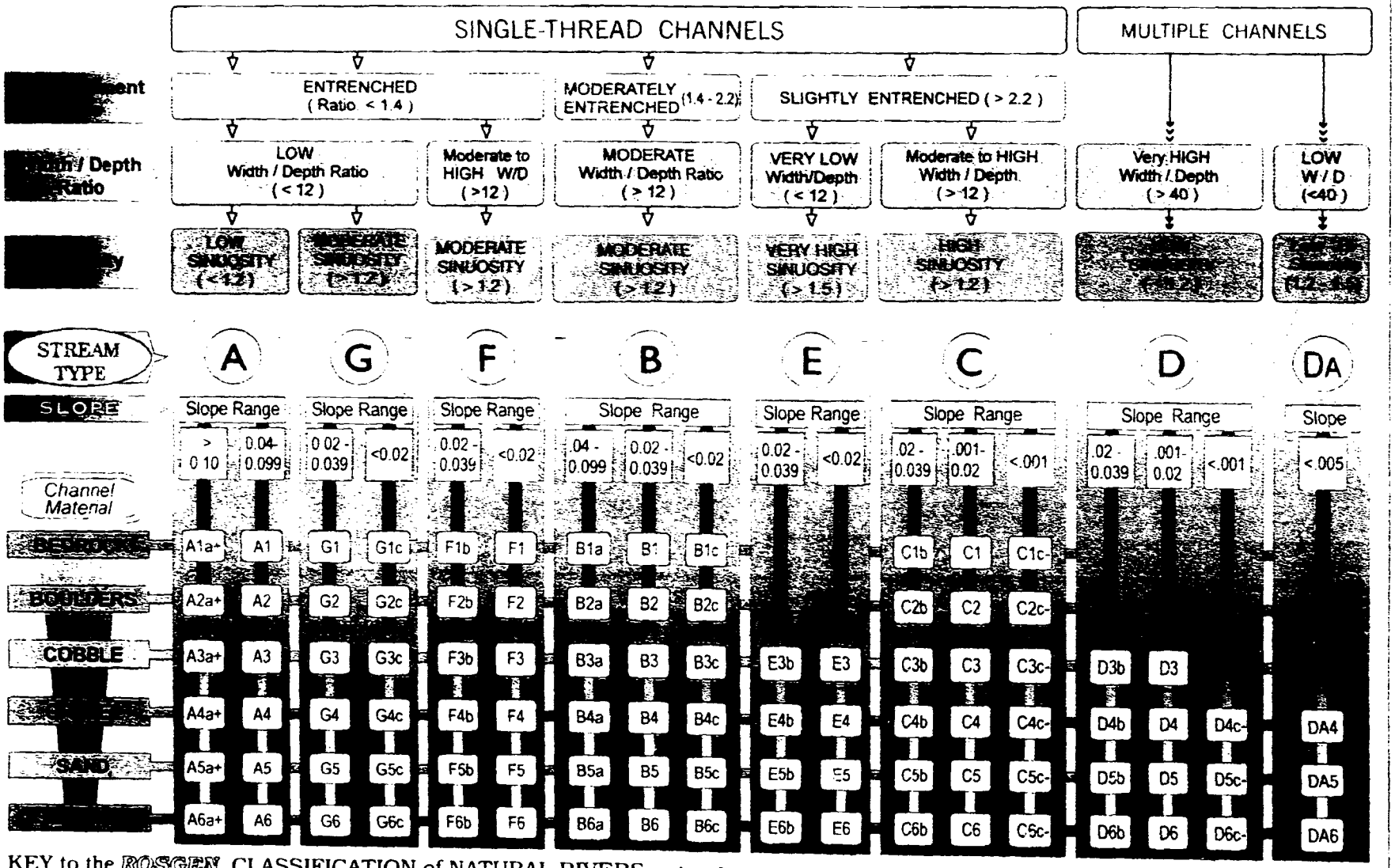
Landform/soils: Broad, gentle gradient alluvial valleys and river deltas. Soils are alluvium.

Channel materials: Predominantly gravel, with lesser amounts of cobble, sand and silt/clay.

Slope Range: < .02 (C4c- .001) **Entrenchment Ratio:** > 2.2

Width/depth Ratio: >12 **Sinuosity:** >1.4

Figure 11. Natural Channel Classification System - Leopold & Rosgen, 1996



KEY to the *ROSGEN* CLASSIFICATION of NATURAL RIVERS. As a function of the *"continuum of physical variables"* within stream reaches, values of ***Entrenchment*** and ***Sinuosity*** ratios can vary by +/- 0.2 units; while values for ***Width / Depth*** ratios can vary by +/- 2.0 units.

. Classification key for natural rivers

An analysis of the time series of aerial photos bears this out. The photos taken in 1939 prior to mining, show 2 active major flood overflow channels going through the middle of the proposed project area and westward back into the main channel further downstream. They also show the overflow channel adjacent to the current access road on the south side of the project area as well as the main channel in the current sand and gravel washing area. It also shows a large "oxbow" or old channel in the area that was mined in the recent past on the south side of the channel --see Figure 12.

The 1948 photo series show dramatic channel deterioration caused partly by mining operations that occurred about a mile and a half above the Daybreak Park bridge. Again the active flood overflow channels are present as well as the flow adjacent to the current access road on the south side of the proposed project area. The channel is also shifting northward in this area --see Figure 13. which is in two parts. The 1975 photo set shows some mining on both sides of the river, including the areas presently used for the gravel washing operation. This set, taken on December 4th 1975 is at flood stage (11,700 cfs peak flow) and shows a large flow in the flood overflow channel adjacent to the current access road on the south side of the proposed project area --see Figure 14.

A 1989 photo set shows that the one of the overflow channels across the west end of the proposed area had been mined for gravel and that the other overflow channel that crossed east to west through the middle of the project area, had been filled in and partly level and then used for agricultural crop production. The overflow channel along the access road on the south side of the project was still active.

During the flood of February 8th, 1986 the flood overflow activated the east-west flood overflow channel across NE 61st Ave.- J.A. Moore Rd. Again the overflow channel along the south side of the proposed project and adjacent to the access road was running well over its banks. Other flood flows in the past 3 years have also gone will over bankful along the south side of the project area --see Figure 15.

The occurrence of the "breach" by the main channel into the old mining pits on the south side of the river near the project area will have limited effect on the risk of flooding to the proposed project area. Much of the flood water overflow breakout occurs in reaches located above the area. And under the existing highly unstable channel conditions throughout, one could expect the channel to do the same as it did in the past, ---move across the valley flood plain, but at a faster rate.

The two recently abandoned sections of main channel have stream beds that are below the bankful level, they are subject to flooding annually and are part of the main system. This would bring flood flow directly against the current sand and gravel washing operation as it has done in the past.

Point 4: Although the stream gage data is important, it is also limited in its use for analysis of the channel dynamics in the lowlands below. More emphasis needs to be put on what has actually happened to the lowlands and the proposed project area as is shown through analysis of time series aerial photos, other special studies, and field measurements that describe the current hydraulic geometry of the existing channel reaches.

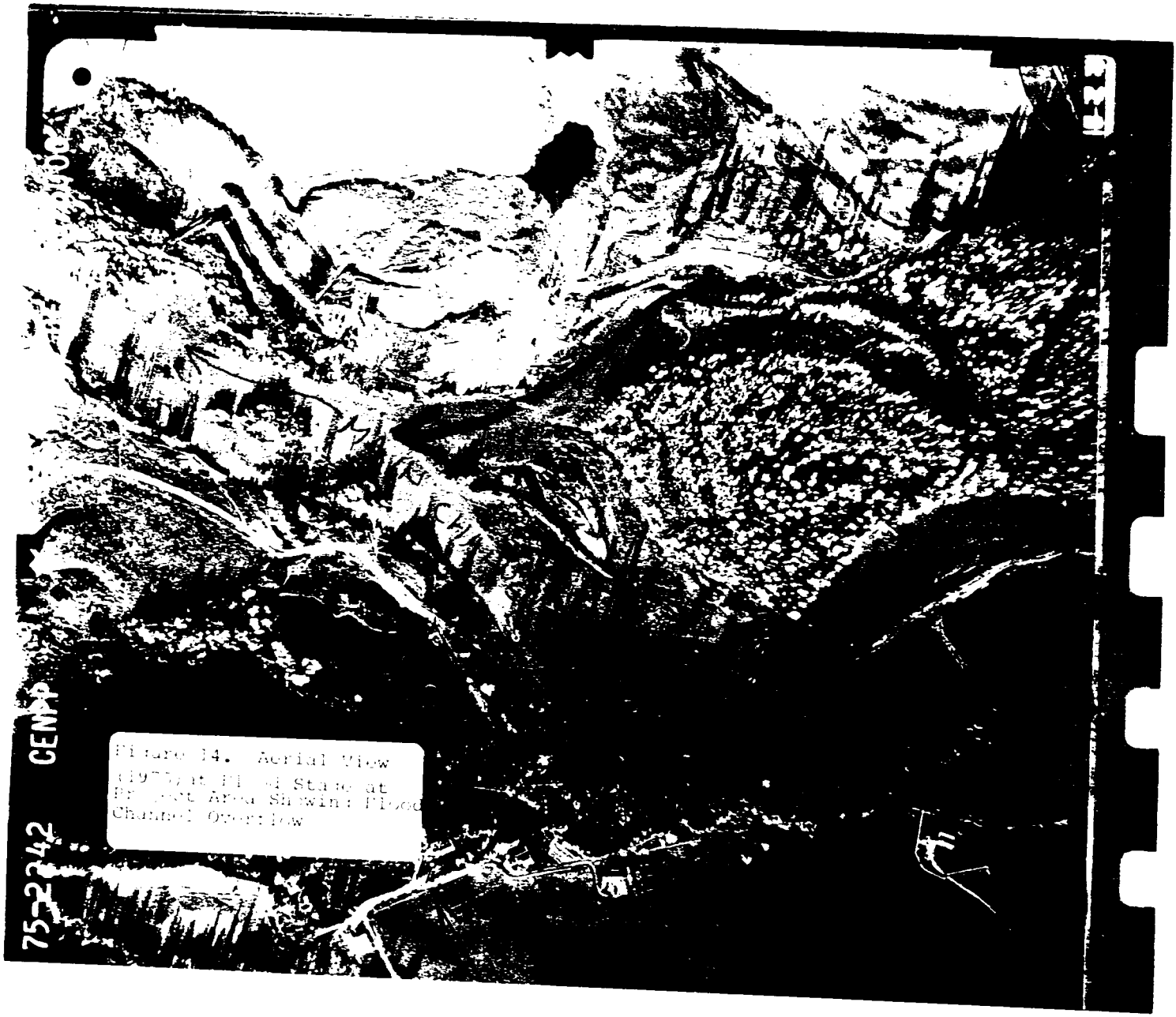


Figure 14. Aerial View (1975) at Flood Stage at Project Area Showing Flood Channel Overflow

Figure 12. Aerial View (1939) of Project Area Showing Overflow Channel

Figure 13. Aerial View (1948) of Project Area Showing Flood Overflow Channels – 2 PHOTOS

h1-d

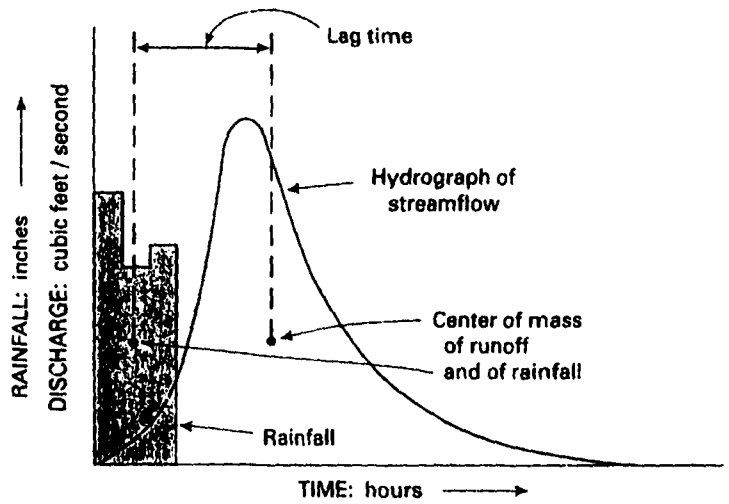
Figure 14. Aerial View (1975)at Flood Stage at Project Area Showing Flood Channel Overflow

Figure 15. Flood Overflow In Channel That Flows Along Edge of Proposed Project Area And Current Gravel Washing Operation

It is highly likely that we will see an increase in flood peaks due to increasing urbanization. This will raise the level of risk as well as the level of the flood plain for a given climatic event or flood frequency such as the 100-year event. (Leopold -1994) --see Figure 16.

Richard Dyrland
Hydrologist,
Friends of the East Fork

Figure 16. An Illustration of How "Urbanization and Vegetation Removal" Raise Flood Hydrograp Peaks



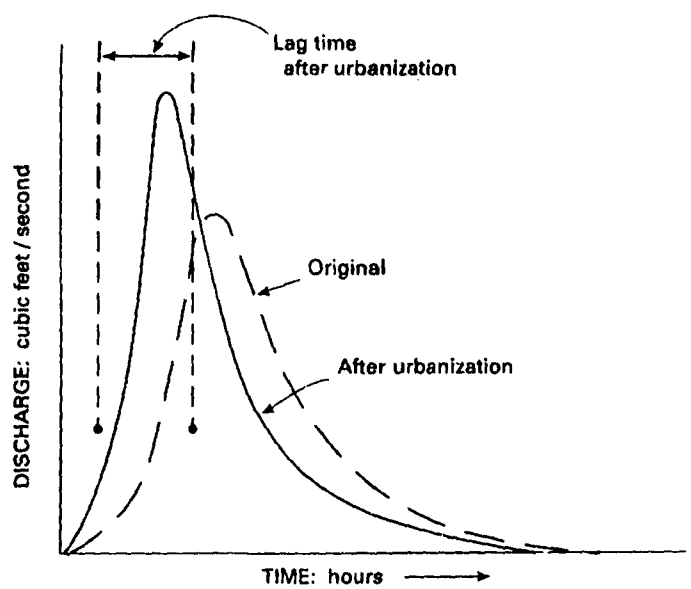


Figure 7.4 Hypothetical unit hydrographs relating runoff to rainfall, with definition of significant parameters, showing the effect of decreased lag time on flood peak.

A View of the River - L. Leopold, 1994

REFERENCES:

L. Leopold, PhD. "A View of the River", A Technical Book on River Hydrology, Morphology and Hyraulic Geometry Characterization of River Channels, Harvard University Press, 298 pp, 1994

J. Miller, L. Leopold and M. Wolman, PhD's. Fluvial Processes in Geomorphology, Initiation and Development of Meanders, Dover Publications, Inc., 1992.

D. Rosgen, A Classification of Natural Rivers, Catena, Vol. 22, Elsevier Science, B. V. Amsterdam, 1994.

University of Washington, Geology and Geomorphology of Stream Channels, Seattle WA, 1997.

US Geological Survey, 79-553, Magnitude and Frequency of Floods in Western Oregon, Four Flood Zones Including Parts of Washington, 1979.

May 19, 1997

Mr. Larry Epstein
Clark County Hearings Examiner
P.O Box 9810
Vancouver, Wa 98666-9810

Dear Mr. Epstein

RE: The need for a shoreline permit for the Daybreak Recreation Project, SPR96092 (API 97004)

Clark Counties own definition of a structure in Sec.18.104.715 states that a structure is " Any piece of work artificially built up or composed of parts joined together in some definite manner." The State of Washington's administrative code WAC 173-27-030(15) defines a structure as " any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water" Development is described in the Shoreline Management Act Chapter 90.58.030, as the " placing of obstructions" Clearly a conveyor is a structure and an obstruction.

The legislative findings of Chapter 90.58.020 details many important unresolved issues dealing with the use of this obstruction in the shoreline.

1. The obstructions impact to the [illegible] of the shoreline
2. How this structure will preserve the natural characteristics of the shoreline
3. This obstructions impact on vegetation and wildlife

Substantial development, as described by Chapter 90.58.030 shall mean " any development of which the total cost or fair market value exceeds two thousand five hundred dollars. The applicant submitted information to the planning staff which detailed the design specifications for Cedarapids stackable conveyors. I spoke to a sales representative by the name of Tom Cena. He revealed that a single 60 foot unit with a 36 inch belt costs approximately $18,000. A 30 inch belted unit would be a couple of thousand dollars less per unit. He also commented that these units are anchored to the ground. Anchored obstructions require a shoreline permit.

Thank you for considering my comment and please carefully review the Department of Ecology interpretations of this matter detailed in their April 18, 1997 letter to Michael Butts, Clark County Community Development

Sincerely,

Scott Rose
27313 NE Bennett RD
Battle Ground, Wa 98604

LANE & MARSHALL

ATTORNEYS AT LAW

514 West 9th Street, Vancouver, WA 98660 Telephone: (360) 696-0791 • Fax: (360) 696-0063

DENNIS W. LANE
PHILIP "CASEY" MARSHALL
• VICTORIA T. BLACKWELL
DEREK J. VANDERWOOD

• Also licensed in Oregon

RECEIVED

MAY 21 1997

Clark County
Community Dev/Records

EXHIBIT # 50

May 20, 1997

James I. Holland
Hall Holland & Dimitrov
1109 Broadway
Vancouver, Washington 98660

Re: *Response to Motion to Produce for Pacific Rock*
PREEG v. Storedahl, et al.

Dear Jim:

Enclosed please find the Response to your client's First Request for Production of Documents and an Objection filed with the Hearing Examiner.

The Objection only goes to matters relating to the dairy farm and to a potential sale of the property.

I have two boxes full of materials for your inspection. These are readily available at a mutually convenient time. The inspection will be held at my offices and any documentation that you want copied can be copied at my office at .20¢ per page.

Please call me upon receipt so we can set up an appropriate time.

In addition, the time you have requested for the deposition of Ray Woodside conflicts with a medical exam which has taken months to schedule. Ray's appointment is on June 5, 1997, at 11:00 a.m. If that leaves enough time for Ray, then this setting is fine. Otherwise, Ray is available on June 3 or 4, 1997.

Sincerely yours,

LANE & MARSHALL

PHILIP G. MARSHALL
PGM:kcs
cc: client

control of WOODSIDE as it relates to and concerns the mining activities of J. L. STOREDAHL & SONS and the predecessors.

5. REQUEST FOR PRODUCTION NO. 5: WOODSIDE will provide.

6. REQUEST FOR PRODUCTION NO. 6: WOODSIDE will produce any of such list of all such people included in such request as it relates to and concerns the mining activities of J. L. STOREDAHL & SONS and the predecessors. To Wit:

Vern Peterson & Associates
7714 Northeast Hazel Dell Avenue
Vancouver, Washington
574-0614

7. REQUEST FOR PRODUCTION NO. 7: This request is readily available to PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP as publicly available documents.

8. REQUEST FOR PRODUCTION NO. 8: None, except as to tax records already provided.

9. REQUEST FOR PRODUCTION NO. 9: This has already been supplied except for any and all documentation regarding a possible sale of the WOODSIDE property which is hereby objected to.

10. REQUEST FOR PRODUCTION NO. 10: WOODSIDE will provide.

11. REQUEST FOR PRODUCTION NO. 11: WOODSIDE will provide.

12. REQUEST FOR PRODUCTION NO. 12: WOODSIDE will provide.

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON

FOR THE COUNTY OF CLARK

PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP, a Washington non-profit corporation, Petitioner, v. LARRY EPSTEIN, Clark County Land Use Hearing Examiner, CLARK COUNTY, WASHINGTON, a municipal corporation; J.L. STOREDAHL & SONS, INC., a Washington corporation, RAY and MERRY WOODSIDE, husband and wife dba SAMMAMISH FARM, VIRGINIA I. WOODSIDE, SCOTT and CAROL ROSE, husband and wife, and FRIENDS OF THE EAST FORK, a Washington non-profit corporation, Respondents.	Cause No. 96 2 03238 1 RESPONSE OF WOODSIDE dba SAMMAMISH FARM TO PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS

TO: PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP and ATTORNEY JAMES I. HOLLAND, Hall Holland & Dimitrov, 1109 Broadway, Vancouver, Washington 98660

1. REQUEST FOR PRODUCTION NO. 1: WOODSIDE will permit inspection of personal and business tax returns that are in the possession or control of WOODSIDE as it relates to and concerns the mining activities of J. L. STOREDAHL & SONS and the predecessors.

2. REQUEST FOR PRODUCTION NO. 2: WOODSIDE will provide.

3. REQUEST FOR PRODUCTION NO. 3: WOODSIDE will provide.

4. REQUEST FOR PRODUCTION NO. 4: WOODSIDE will permit inspection of any government correspondence in the possession or

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

control of WOODSIDE as it relates to and concerns the mining activities of J. L. STOREDAHL & SONS and the predecessors.

5. REQUEST FOR PRODUCTION NO. 5: WOODSIDE will provide.

6. REQUEST FOR PRODUCTION NO. 6: WOODSIDE will produce any of such list of all such people included in such request as it relates to and concerns the mining activities of J. L. STOREDAHL & SONS and the predecessors. To Wit:

Vern Peterson & Associates
7714 Northeast Hazel Dell Avenue
Vancouver, Washington
574-0614

7. REQUEST FOR PRODUCTION NO. 7: This request is readily available to PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP as publicly available documents.

8. REQUEST FOR PRODUCTION NO. 8: None, except as to tax records already provided.

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11. REQUEST FOR PRODUCTION NO. 11: WOODSIDE will provide.

12. REQUEST FOR PRODUCTION NO. 12: WOODSIDE will provide.

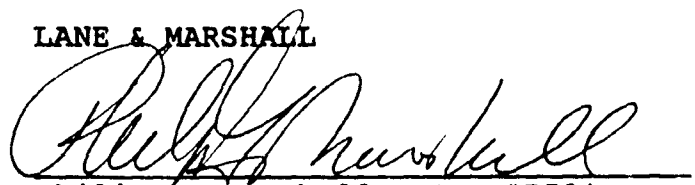
LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

The documentation and records that will be supplied will be available at the offices of LANE & MARSHALL for such review and copying, if needed, at .20¢ per page. The time and date will be set as mutually convenient between the parties.

DATED this 20th day of May, 1997.

Respectful y submitted,

LANE & MARSHALL



Philip G. Marshall, WSBA #5731
Attorney for Defendants Woodside

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON

FOR THE COUNTY OF CLARK

PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP, a Washington non-profit corporation, Petitioner, v. LARRY EPSTEIN, Clark County Land Use Hearing Examiner, CLARK COUNTY, WASHINGTON, a municipal corporation; J.L. STOREDAHL & SONS, INC., a Washington corporation, RAY and MERRY WOODSIDE, husband and wife dba SAMMAMISH FARM, VIRGINIA I. WOODSIDE, SCOTT and CAROL ROSE, husband and wife, and FRIENDS OF THE EAST FORK, a Washington non-profit corporation, Respondents.	Cause No. 96 2 03238 1 OBJECTIONS OF WOODSIDE dba SAMMAMISH FARM TO CERTAIN REQUESTS OF PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP

TO: PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP and ATTORNEY JAMES I. HOLLAND, Hall Holland & Dimitrov, 1109 Broadway, Vancouver, Washington 98660

On or about April 7, 1997, the law office of Lane & Marshall received on behalf of RAYMOND and MERRY WOODSIDE dba SAMMAMISH FARM a request for production of documents from PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP. The twelve requests for production include documentation and memorandum involving certain areas for which RAY and MERRY WOODSIDE dba SAMMAMISH FARM do object to as not being relevant nor would it lead to any relevant evidence. These areas include the following:

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

1. Any and all documentation relating to the dairy farm operation of SAMMAMISH FARM. This is separate and apart and is in no way related to the mining operation of J. L. STOREDAHL.

2. Any and all correspondence or documentation concerning any potential sale to J. L. STOREDAHL or any other party.

In the meantime the parties have provided and will make arrangements for the inspection and copying of any and all documentation as requested in PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP's First Request for Production of Documents.

This objection is made pursuant to the Hearing Examiner's Second Prehearing Order dated July 16, 1996.

Respectfully submitted,

LANE & MARSHALL

Philip G. Marshall, WSBA #5731
Attorney for Defendants Woodside

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON

FOR THE COUNTY OF CLARK

PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP, a Washington non-profit corporation, Petitioner, v. LARRY EPSTEIN, Clark County Land Use Hearing Examiner, CLARK COUNTY, WASHINGTON, a municipal corporation; J.L. STOREDAHL & SONS, INC., a Washington corporation, RAY and MERRY WOODSIDE, husband and wife dba SAMMAMISH FARM, VIRGINIA I. WOODSIDE, SCOTT and CAROL ROSE, husband and wife, and FRIENDS OF THE EAST FORK, a Washington non-profit corporation, Respondents.	Cause No. 96 2 03238 1 CERTIFICATE OF SERVICE

I hereby certify that, on this date, I served a copy of the attached RESPONSE OF WOODSIDE dba SAMMAMISH FARM TO PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS and OBJECTIONS OF WOODSIDE dba SAMAMMISH FARM TO CERTAIN REQUESTS OF PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP on the following parties by placing said copy in the U.S. Mail with postage prepaid:

Larry Epstein
Clark County Hearing Examiner
P. O. Box 9810
Vancouver, Washington 98666-9810

James I. Holland
Hall Holland & Dimitrov
1109 Broadway
Vancouver, Washington 98660-3292

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

DATED this 20th day of May, 1997.

Kristi Straight

Kristi Straight

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

May 29, 1997

EXHIBIT # 51

RECEIVED

JUN 0 2 1997

Clark County
Community Dev/Records

Mr. Larry Epstein
Clark County Planning Dept.
1408 Franklin
Vancouver, WA 98660

Re: East Fork of the Lewis River

Dear Mr. Epstein:

I'm writing in regard to the appeal in process for operation and expansion of mining at Woodsides farm on the East Fork of the Lewis River.

I would like to call your attention to an existing problem resulting from J.L. Storedahl and Sons gravel mine near Woodland between the East and North Forks of the Lewis River. During the past year and a half, muddy, silted water run-off from that operation has resulted in the filling and destruction of nearly all wildlife habitat at a pond below and off site of the mine.

I do not have any scientific data, but as a sportsman and observer, I have noted the complete abandonment of this area by waterfowl and any evidence of warm water fish has vanished. A casual drive-by of this pond on the east side of I-5 north between milepost 19 and 20 is all that is needed to witness the obvious damage in comparison to adjoining ponds and sloughs.

Having had a family member employed by J.L. Storedahl and Son, I know that they are capable of processing enormous quantities of their product in a short amount of time. They do this seemingly without the scrutiny and regulation afforded to other operators. This existing pit is in the Highland area, well away from water, yet still manages to pollute and destroy this wetland with it's waste.

The low level Daybreak area expansion proposal has the capability of destroying the East Fork of the Lewis River's status as one of the last unfettered and pristine rivers in our state.

If the past performance of Storedahl in the area of water quality has any bearing on your decision in this matter, I would strongly urge you to deny any future mining operations at the Woodside site.

Sincerely,

John P. Calnan

John P. Calnan
32501 N.W. Eagle Crest Dr.
Ridgefield, WA 98642
360 263-2651

EXHIBIT # 52

RECEIVED
JUN 0 3 1997
CLARK COUNTY
Plan & Dev. Review

David T. McDonald

Courtroom Lawyer

Admitted to Oregon and Washington State Bar

510 S.W. 3rd Ave., Suite 302 (503) 226-0188

Portland, OR 97204 Fax: (503) 226-1136

RECEIVED

JUN 0 3 1997

Clark County
Community Dev/Records

June 1, 1997

Mr. Michael Butts
Mr. Monty Anderson, Commercial/Industrial Team leader
Mr. Gary Fish
Department of Community Development for Clark County
1408 Franklin Street
PO Box 9810
Vancouver, Washington 98666-9810

RE: **Reconsideration of Determination allowing operations in the floodplain without a shoreline permit**

By Facsimile and by First Class Mail

Dear Gentlemen:

This letter is to specifically request that the County reevaluate its stop work order issued against JLS and clarified by letter from Monty Anderson to Charlie Roe dated August 15, 1995 (a copy of which is attached for your easy reference) and ban washing, screening, and stockpiling of aggregate and sand (i.e., stop all operations on the site until all issues are resolved) upon the grounds and for the reasons that:

1. JLS is alleged to have continued mining operations such as washing, stockpiling, and screening for almost two years now without complying with any environmental or surface mining laws;

2. JLS has now proposed an extensive *expansion* of mining operations not only within the 100 year floodplain but on the very banks of the East Fork of the Lewis River without any required permit or study; and

3. The County has now requested an EIS on SPR-96-092 which necessarily should include this property, and the mining operations which have been, and might continue to occur which highlights the environmental sensitivity of this parcel.

It has been almost two years since the county stopped all work except the screening, stockpiling and washing and the chances of environmental degradation continues to climb given the lack of oversight over the activities on the site. Moreover, it is quite clear that JLS is anticipating a huge expansion of operations on the site. Recently JLS has added a massive Sand Classifier to its operations (a picture of the structure is enclosed). The Classifier is clearly a structure and is affixed to a concrete foundation. Therefore, it appears that JLS has poured a concrete foundation in floodplain and within 200' feet of the shore and moved in a massive sand classifier, all without a permit or any environmental review. How can this be in compliance with state/county laws?

In addition, recent photos show that orange markings have been set out on the property which indicates *further* expansion (a picture of the structure is enclosed. The orange markers are to the right of the structure). Clearly such expansions of processing were not anticipated when Mr. Anderson wrote his letter of August 15, 1995, especially given the fact that at time, according to JLS, the total tonnage being sold from the site has been reduced from a high of 633,000 tons in 1991 to a mere 12,000 tons in 1995.

Therefore we request that you revisit this issue and ban *all* mining related operations on this extremely environmentally sensitive site until the preparation of the EIS or the applicant's obtaining a shoreline permit.

Sincerely,

David T. McDonald

Enclosures
cc: President, FOEF (w/ enclosures)
Board of County Commissioners (w/ enclosures)
Rich Lowry (w/ enclosures)
John L. Dentler (w/ enclosures)
Rex Happala (w/ enclosures)
Kim VanZwalenburg (w/ enclosures)

CLARK COUNTY
WASHINGTON

DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

August 15, 1995

Mr. Charles B. Roe, Jr.
Perkins Coie
1110 Capital Way South, Suite 405
Olympia, Washington 98501-2251

RE: Storedahl Mining Operations at Daybreak

Dear Mr. Roe:

Thank you for the opportunity to meet and discuss the referenced operations on the 1st and 7th of August, 1995. This is to memorialize the results of those discussions.

First, the Stop Work Order issued on August 3, 1995 pertains only to grading, excavating, mining and similar earth moving activities on the site. Although the screening, washing and stockpiling of imported aggregate occurring within the flood plain also requires a shoreline permit, we have determined to allow these uses to continue on an interim basis pending resolution of the overall issues involved with the operation.

Among those overall issues are the following concerns: (1) the current prohibition on surface mining within the 100-year flood plain, which may be addressed by the Growth Management Hearing Board; (2) the effect of rezoning much of the site by removing the Surface Mining Combining District to implement this GMA Plan policy; (3) the propriety of State recognition of the original 71-acre mining permit applying to the entire 349.94-acre site; (4) historic rights, if any, held by the owner or operator with regard to mining, crushing, zoning and the Shoreline Management Act; (5) the need to complete an environmental impact statement for continued processing of the shoreline permit pending since 1991; and (6) potential interim operating options and related permit requirements.

Regarding the first two items above, the current County Code allows mining to occur on only about 60 acres of the site; unless or until the County Plan is changed as a result of a GMA Board ruling, any further mining would be limited to areas outside the 100-year flood plain. As for Item #3, all evidence to date points to an approved reclamation plan for only 71 acres, none of which is currently zoned for mining. Your client indicated that a letter from the Attorney General supports the State Geologist's ruling that Permit #10139 applies to the entire 349.94 acres; we request a copy of this legal opinion. Regardless of that ruling, however, our current position is that mining can occur only under the appropriate zoning, which is limited to the 60 acres referenced above.

1408 FRANKLIN STREET • PO. BOX 9810 • VANCOUVER, WASHINGTON 98666-9810
(360) 699-2375 • FAX (360) 699-2011 • TDD (360) 737-6057

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The issue of grandfathered rights is perhaps the most perplexing. First, it is clear that there are no grandfathering rights under the Shoreline Management Act, so that any work within the flood plain requires a shoreline permit. It is our understanding that mining and crushing have not occurred on a regular basis on the site since 1992. The Clark County Zoning Code provides that a nonconforming use that ceases for a period of six months or more "shall be considered abandoned, and said premises shall thereafter be used only for uses permitted under the provisions in the district in which it is located" (CCC 18.412.030B).

It is our position that nonconforming rights for mining and crushing have not existed on this site for some time, and most certainly not since before new zoning took effect on January 1, 1995. As we discussed in the meetings, there is no meaningful case law in the State of Washington concerning the doctrine of diminishing resources, so that any reversal of our position on this issue would need to be based on hard, factual information (e.g., demonstration that all periods of discontinued mining and/or crushing have been less that six months in duration or were based on market conditions, such as no demand for materials).

Concerning Item #5 above, it is our understanding that your client has agreed to complete the EIS process so that a shoreline permit decision can be made. We also discussed the requirements for allowing an interim operation to occur within a properly zoned portion of the site outside the 100-year flood plain. These requirements would include the following: (a) approval of a conditional use permit through the public hearing process for rock crushing; (b) administrative site plan approval for mining, crushing, and other activities within the Surface Mining Combining District; and (c) a new SEPA review for these permit applications. A grading permit would be required only for earth moving activities undertaken prior to other permit approvals, as both the shoreline permit and site plan approval substitute for this permit requirement.

I hope this adequately summarizes our discussions, and thank you again for meeting with us. Please call me at (360) 699-2375, extension 4499, if there are any questions.

Sincerely,

Monty K. Anderson
Commercial/Industrial Team Leader

cc: Craig Greenleaf
Rich Lowry
Chris Horne
Rich Hines
Linda Maddy

MA/RH:roe.ltr

J. L. Storedahl & Sons, Inc.

2233 TALLEY WAY KELSO, WASHINGTON 98626

Jerry L. Storedahl, Owner

Phone: (206) 636-242

June 16, 1995

Clark County
Attention: Chris Horne

As per your request in our meeting of June 12, 1995, please find breakdown of quantity of materials sold from our Daybreak facility from 1991 through present:

1990		633,000 Tons
1991		560,000 Tons
1992	January - June	89,000 Tons
1992	July - December	45,000 Tons
1993	January - June	38,000 Tons
1993	July - December	42,000 Tons
1994	January - June	28,000 Tons
1994	July - December	30,000 Tons
1995	January - May	12,200 Tons

As stated in our meeting, we have been in continuous operation since the purchase of the Lease Agreement with the property owner, Ray Woodside.

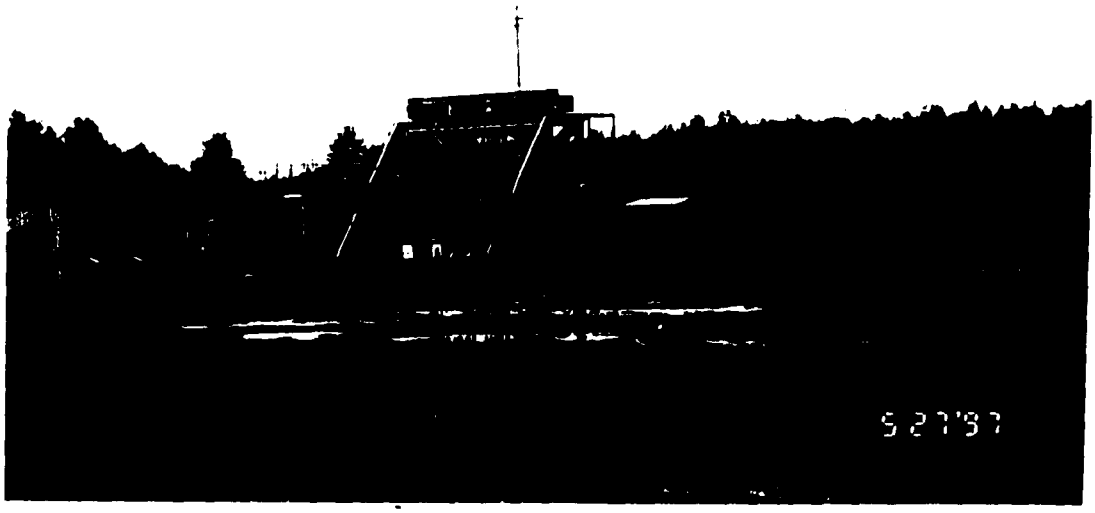
If you need additional information, please call me:
Mobile # 921-0114
Office # 687-5683

Thanks,

Virgle Barnett

VB;ch

EXHIBIT E PAGE 78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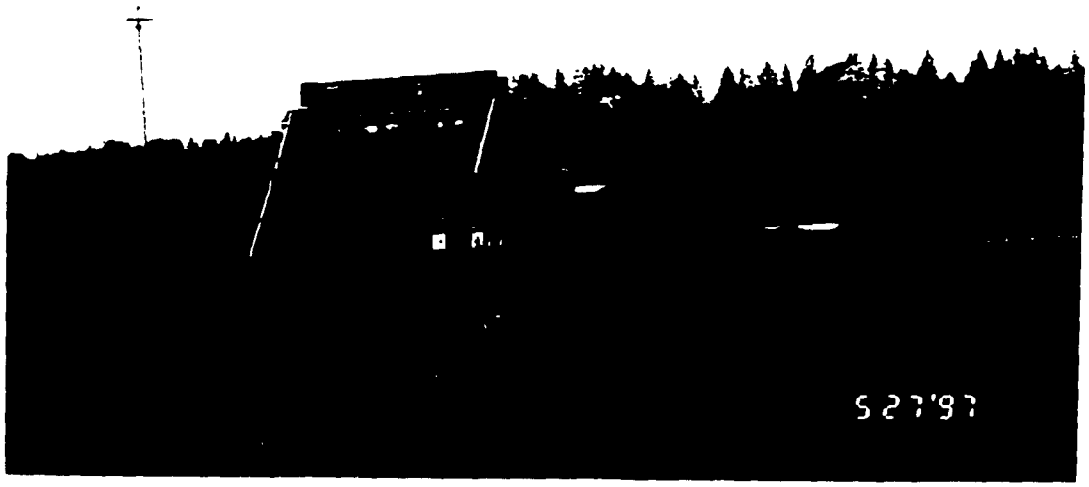
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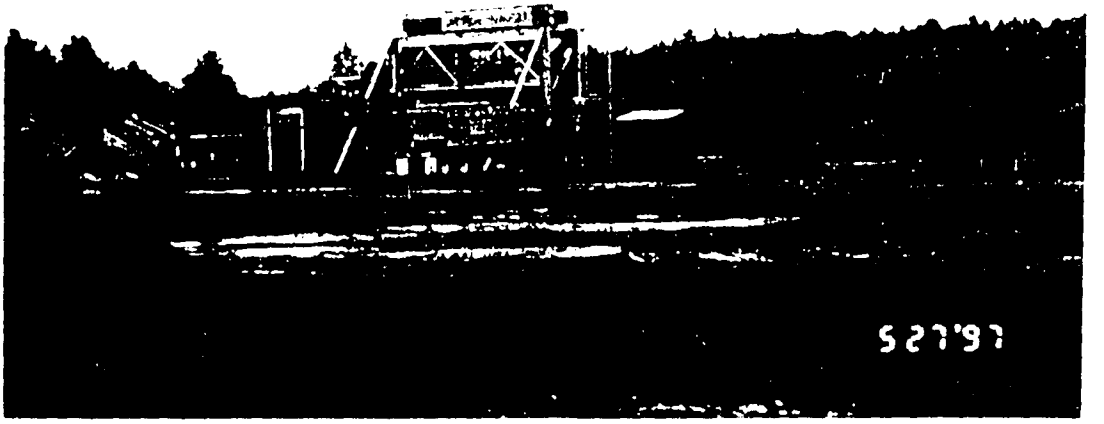
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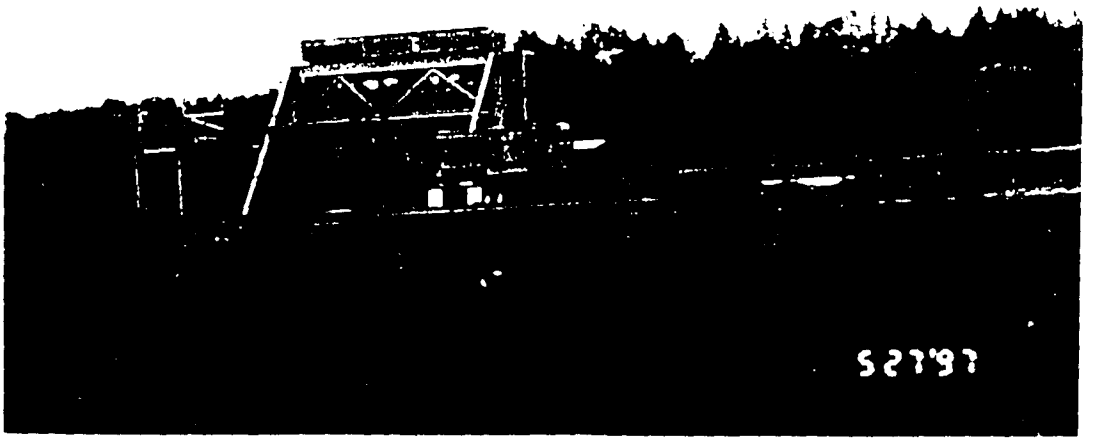
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EXHIBIT # 53

RECEIVED

JUN 03 1997

CLARK COUNTY
Plan & Dev. Review

June 2, 1997

Mr. Larry Epstein
Clark County Hearings Examiner
P.O.Box 9810
Vancouver, Wa 98666-9810

Dear Mr. Epstein

RE: The need for a shoreline permit for the Daybreak Resource Project, SPR96092 (APL 97004)

Included here, for the public record, is the letter I previously referred to dealing with the Department of Ecology interpretation as to whether a shoreline permit is needed for a conveyor in the 100 year regulatory flood plain.

In addition, I would like it to be known that the applicant has recently installed, in the flood plain, some kind of obstruction which appears to be related to the processing of rock products. If we are arguing the necessity of a shoreline permit for a conveyor, doesn't it seem logical that a permit would be required for a permanent, newly installed object such as the one recently installed? Was the installation of this obstruction in the floodplain approved by anyone or was this another attempt by the applicant to be somehow grandfathered from acquiring the needed permits established by law. I personally have observed numerous cement trucks entering the property prior to the placement of this obstruction. Could these trucks have been pouring some kind of foundation for the permanent placement of this obstruction? I believe so. This structure appears to be a substantial development with long term projected use. Has the county or the state authorized the placement of this obstruction? I am concerned that prior to the matter of the Notice in Order issues are resolved, the applicant will continue to build up a possibly illegal, permanent established area of operation. This seems to be an inappropriate land use while so may issues are pending before the courts and the appropriate legal jurisdictions.

Thank you for the opportunity to comment on this matter and please consider these issues when determining what permits are needed for this proposal.

Sincerely

Scott Rose
27313 NE Bennett RD.
Battle Ground, Wa 98604

WEST Consultants, Inc.

Water • Environmental • Sedimentation • Technology
12509 Bel-Red Road, Suite 100, Bellevue, WA 98005
(425) 646-8806 FAX 646-0570

EXHIBIT # 34

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CLARK COUNTY
Plan & Dev. Review

June 2, 1997

RECEIVED
JUN 03 1997
Clark County
Community Dev/Records

Larry Epstein
Land Use Hearing Examiner
c/o Michael V. Butts
Clark County Department of Community Development
1408 Franklin Street
Vancouver, WA 98666-9810

Dear Mr. Epstein:

Enclosed is a copy of my statement to be submitted for the record for the case of *Friends of the East Fork v. Clark County*, regarding the necessity of a shoreline permit (SPR-96-092). Please call me if you have any questions regarding this submittal.

Sincerely,

Thomas R. Grindeland

Thomas R. Grindeland, P.E

See exhibit 34

Enclosure

RECEIVED

JUN 03 1997

CLARK COUNTY
Plan & Dev Review

EXHIBIT # 55

Update: June 2, 1997

Monty Anderson, Director, Clark County Community Development, Planning Group
Larry Epstein, Appeals Hearing Examiner
Clark County, Vancouver, WA

Re: SPR #96-092 (Daybreak Resource Project/Storedahl Mining Operation on or near the East Fork of the Lewis River

Dear Mr. Anderson and Mr. Epstein:

My name is Richard Dyrland and I am a graduate hydrologist representing the Friends of the East Fork. My past 31 years of experience in hydrology and watershed management included duties as Regional Hydrologist for the Intermountain Region, Regional Hydrologist for the Pacific Southwest Region, and member of the National Watershed Management and Flood Rehabilitation Team, and review person for the watershed and hydrology components of all Forest Service Forest Plans in the Pacific Northwest Region. Recently I took early retirement to do consulting in watershed management and environmental analysis.

The items of interest that I will address are:

What are the functioning characteristics of the flood plain and channel reaches in the area of the proposed project, and the relationship to the East Fork of the Lewis River <u>NOW</u> ---including the 100-year 1% annual chance flood.

The various reaches of the stream channel below the area where the flood plane widens dramatically have gone through many changes in the last 60 years, some of this was due to natural causes and much to the increase in human related activities.

Allow me to clarify the hydrologic environment of the stream reaches in the proposed project area in relation to the stream gage at Heisson (USGS 14222500 - East Fork Lewis River) that has been used as a source of flood flow data.

The stream gage drains approximately 125 square miles of upland and mountainous area and is characterized by a relatively narrow flood plain and entrenched often bedrock channels --see Figure 1. The area below from the gage to the proposed project area, adds about 31 square miles, and is a mixture of foothills and valley lowlands. About 3.3 miles below the gage the shape of the floodplain changes into a broad meandering lowland floodplain with wider and less entrenched channels whose stream banks and bottoms are composed of cobble, gravel, and sand materials --see Figures 2. and 3.

Point 1. The proposed project area is about 10.5 miles below the gage and about 7 miles below the point where the lowland floodplain begins --see Figure 4. **It is essential that the gage data although useful, <u>should be applied and interpreted with caution</u> as the stream flow data at the gage represents conditions and events happening in the watershed area above the gage. Its application to the area below is limited.**

In addition, an increasing rate of vegetation modification, roading, mining, and urbanization have changed the hydrologic condition of the watershed and affected the stream flow runoff relationships in the last 40 years (Leopold - 1994, USGS - 1979)

Point 2. The color aerial photo taken February 10, 1996 which has been used numerous times in discussions regarding the level of a "100-year" flood plain, does not represent the peak of flooding or the flood peak. The peak occurred on February 8th, two days earlier. For example the February 10th photo does not show the extent and level of flooding across NE 61st Ave. and onto the proposed project area, nor does it show how the house on the north corner of NE 61st Ave. and 259th St. was completely surrounded by flood flow. Refer to "Point 4:" for a related discussion.

Point 3. The stream channel reaches starting at about 2.5 miles above the project area as well as below the proposed project area, are of a very active and unstable character. A stereoscopic analysis of a series of aerial photos starting in the 1930's show that the stream channel has meandered all over the floodplain valley and their were numerous active flood overflow channels across the valley. Studies by the University of Washington indicate substantial meandering and changing of the basic characteristics of the lowland stream channel between 1854 and 1990 (University of Washington, 1997).

The bankful width/depth (WD) is key to understanding the distribution of available energy within a channel, and the ability of various discharges occurring within the channel to move sediment. The W/D ratio is the most sensitive and positive indicator of trends in channel stability (Leopold, 1992, and Rosgen, 1996). As channel W/D ratios have been increasing in these lower reaches, it has essentially been raising the level of flood flow water surface occurring for a given flood event --see Figures 5. and 6.

The stream channels above the gage in the upland areas are of the B1 and B4 classification, and have width to depth (W/D) ratios between 8 and 14 which indicates high level of stability --see Figures 7. and 8. Their stream beds are predominantly bedrock and boulder.

In contrast, the lowland floodplain channels are mostly of the C3 and C4 classification, and have deteriorated to width/depth ratios that range from 37 to 48, which is quite high --see Figures 9., 10. and 11. It indicates considerable instability at flood flow levels and a substantially reduced transport capability to handle suspended sediment and bed load. The channel stream bed and banks are predominately a mix of cobble, gravel, and sand alluvial materials. This initiates a high tendency for stream channel meandering (Rosgen-1996, Miiler-1992). In addition, a few short reaches of the channel and some longer reaches below the proposed project area have transitioned into the D4 stream type. The W/D ratios are over 40, which is very unstable and the reach will degenerate into a shallow braided channel.

A May 31, 1997 follow up field inspection of the various stream reaches above and below the proposed project area was done to update that done in early May of 1997. It was observed that the channels had formed several new point bars, increased their sinuosity within channel, eroded more stream bank, and lengthened the rapids/delta section into the old ponds below the breach. **The channel reaches are very active**

With the more recent deterioration of the channel stability condition and the increasing rate of runoff for a given climatic event, one can expect the rate of stream channel shifting and meander to accelerate.

Point 4. Flooding adjacent to and across the proposed project area has occurred several times in the past 70 years and can be expected to occur again and more frequently with the deteriorated condition of the lowland stream channel reaches and as urbanization increases.

"It is usual for the annual flood to equal or exceed bankful stream stage 2 years out of 3. (This is the meaning of a recurrence interval of 1.5 years.) In terms of number of cases per year in a natural basin influenced by humans, bank full would be equaled or exceeded somewhat more often than once a year, (recurrence interval of 0.9 year (Leopold, 1994)". **Since the fall of 1995, the lowland channel in the project area has exceeded bankful level at least 3 times or more.**

The proposed project area and the current sand and gravel washing area have been subject to flooding in the past and under the current conditions are at an increasing risk of flooding.

An analysis of the time series of aerial photos bears this out. The photos taken in 1939 prior to mining, show two active major flood overflow channels going through the middle of the proposed project area and westward back into the main channel further downstream. They also show the overflow channel adjacent to the current access road on the south side of the project area as well as the main channel in the current sand and gravel washing area. It also shows a large "oxbow" or old channel in the area that was mined in the recent past on the south side of the channel --see Figure 12.

The 1948 photo series show dramatic channel deterioration caused partly by mining operations that occurred in the river channel and about a mile and a half above the Daybreak Park bridge. Again the active flood overflow channels are present as well as the flow adjacent to the current access road on the south side of the proposed project area. The channel is also shifting northward in this area --see Figure 13. which is in two parts. The 1975 photo set shows some mining on both sides of the river, including the areas presently used for the gravel washing operation. This set, taken on December 4th 1975 is at flood stage (11,700 cfs peak flow-USGS 1997) and shows a large flow in the flood overflow channel adjacent to the current Storedahl access road on the south side of the proposed project area --see Figure 14.

A 1989 photo set shows that the one of the overflow channels across the west end of the proposed area had been mined for gravel and that the other overflow channel that crossed east to west through the middle of the project area, had been filled in, partly leveled and then used for agricultural crop production **(Note that the flood overflow from the February 8th, 1996 flood again used this route)**. In addition, the overflow channel along the access road on the south side of the project was active.

During the flood of February 8th, 1986 the flood overflow activated the east-west flood overflow channel across NE 61st Ave.- J.A. Moore Rd, and 259th St. Again the overflow channel along the south side of the proposed project and adjacent to the access road was running well over its banks. Other flood flows in the past 3 years have also gone well over bankful along the south side of the project area --see Figure 15.

The occurrence of the "breach" by the main channel into the old mining pits on the south side of the river near the project area will have limited effect on the risk of flooding to the proposed project area. Much of the flood water overflow breakout occurs in reaches located above the area. Under the existing highly unstable channel conditions throughout, one could expect the channel to again do the same as it did in the past, ---move across the valley flood plain, <u>but at a faster rate.</u>

The two recently abandoned sections of main channel have stream beds that are below the bankful level, they are subject to flooding annually and are part of the main system. This would bring flood flow directly against the current sand and gravel washing operation, as it has done in the past. Also as of May 31, 1997 with moderate level stream flow, the height of flow needed to activate the upper old main channel was about 1.3 ft. and the lower old main channel that flows directly at the current gravel washing site, would need to increase a height of 2.7 ft. to activate. These are relatively low flows and the bankful heights of the old channels at these points are about 5.1 ft. and 4.6 ft. respectively, which is well above the 1.3 ft and 2.7 ft. current activation height.

Stated another way, a main channel flow height increase of about 50% or less of "bankful level" would activate the two old main channels near the project area. With the recurrence interval range of 0.9 years to 1.5 years for bankful stage, this relationship indicates that the probability for a relatively frequent activation of the two old channels and their attendant cumulative effects and connected actions, ---is quite high.

Point 5. The level of the February 8, 1996 flood plain level needs to be put into perspective with one of the main factors that affected it. When the flood flow broke through the old dike located on the south side of what is the old upper main channel, the water flowed into two ponds (not the old Storedahl south side ponds further downstream) that are remnants from an earlier period of gravel mining. The breakthrough into the ponds took some of the flood pressure off the upper reaches of the channel. The original old channel had a high flow resistance on its north bank due to the numerous tree length logs and debris that had built up as it curved around to the southwest. Related to this was a loss of transport capability and buildup of bed load material that raised the level of the channel bed.

When the dike broke and the flow split into two channels, the 15 feet deep or greater ponds behind the dike began to catch part of the bed load and suspended sediment from upstream. The immediate effect on stream flow was to began lowering the height of the flood plain overflow. And, if the flood peak in the reach at the project area was of a 200-year or 300-year event or more, the dike failure would have reduced the level of that particular flood peak and related flooding

This is quite similar to what the Army Corp. of Engineers did when they blew up a main dike on the Mississippi River to reduce flood flow pressure and levels on farmland and communities further downstream during the last major flood..

Currently, in the project area in East Fork Lewis River, the new upper main channel has already filled in the old ponds near the dike and channel characteristics are returning to a state similar to before. They are primarily the unstable "C4" and "D4" channel types with large width/depth ratios.

It is quite likely that the related effect on the East Fork was to lower the actual flood height peak and amount of flooding during the day when flows from the February 8, 1996 flood were the highest. This essentially indicates that the flood levels observed were actually lower than what they normally would have been. This would cause an underestimate of the 100-year flood plain level when used as a basis for an update of the 100-year flood plain.

Stage discharge relationships are also an important factor (Linsley, Kohler, and Paulhus, 1982). The actual stage discharge curve for the flood peaks at the Heisson gage rises relatively steep and then begins to flatten out at a moderate rate at the higher flows due to the deep "U" shape of the bedrock channel and the relatively steep stream bank and side slopes. The hydraulic geometry of channels of the lowland valley in the proposed project area have an entirely different hydraulic geometry and relationship for a stage discharge curve. It rises at a less steep rate, and begins to flatten sooner then the one for the Heisson gage located 10.5 miles above ---**see discussion in Point 6. for more details**. Compared to a stage discharge curve for the channel conditions at the project area, the increments of stage height increase at high flows are greater at the Heisson gage.

Point 6. Although the stream gage data is important, it is also limited in its use for analysis of the channel dynamics in the lowlands below. More emphasis needs to be put on what has actually happened to the lowlands and the proposed project area as is shown through analysis of time series aerial photos, special studies, and analysis and evaluation of field measurements that describe the current hydraulic geometry of the existing channel reaches.

As was discussed in Point 5, the stage discharge curve for the stream reaches above and below the proposed project area in the broad lower valley would exhibit a relatively less steep initial curve and would began to flatten out or lose slope angle faster than the one for the gage upstream at Heisson ---see figure 16. Basically, this is because of the wide shallow channels, relatively low bankful flow height, and the wide relatively flat valley floor. **The flatter stage discharge angle at higher flows also means that the difference between the height of flood flow decreases faster at the higher, 50-yr, 100-yr, 200-yr, etc., return periods** (Beer-1991). In addition, bankful levels in themselves mean that in 2 out of 3 years a certain area of land outside the main channel will be under water.

Another way to state this relationship is to say that the incremental difference between the height of flow for each successively higher flood event is much smaller. It would continue to decrease until a flood occurs someday that is big enough to reach both the north and south side of the valley where the flood plain would change from a relatively flat valley floor to steep valley side slopes.

To summarize, there now is an entirely new situation, the ponds below the dike break have essentially filled in and built up point bars. The "new channel" through the old Storedahl south side ponds below the lower channel breach is no longer just a simple delta, but has filled in and extended over 150 feet in the last month, and new C4 and D4 channel types have formed. The "pressure release" conditions created earlier have all but disappeared.

As a net effect, one can expect future flood events for the same return period to shift to higher peaks and the actual area flooded would increase.

It is also highly likely that we will see higher flood peaks and more flooding due to increasing urbanization. This will add to the level of risk as well as the level of the flood plain for a given climatic event or flood frequency such as the 100-year event. (Leopold -1994, Pacific NW Research Station and Oregon State University-1996) --see Figure 17.

Richard Dyrland

Richard Dyrland
Hydrologist,
Friends of the East Fork

Attachments:

Figures 1-17

REFERENCES:

T.Beer, Applied Environmetrics and Hydrologic Tables, *Extreme Value Statistics*, CSIRO Research Unit, Mordialloc, Austraila, 62 pp, 1991

L. Leopold, PhD. "A View of the River", A Technical Book on River Hydrology, Morphology and Hydraulic Geometry Characterization of River Channels, Harvard University Press, 298 pp, 1994

R. Lindsley, M. Kohler, and J. Paulhus, "Hyrology for Engineers", 3rd Edition, McGraaw-Hill, Inc. 508 pp, 1982.

J. Miller, L. Leopold and M. Wolman, PhD's. Fluvial Processes in Geomorphology, *Initiation and Development of Meanders*, Dover Publications, Inc., 1992.

Pacific NW Research Station and Oregon State University, Report on Flood Peak Changes from Roads and Vegetation Modification in the Saint Andrews Experimental Watershed, 1996.

D. Rosgen, A Classification of Natural Rivers, Catena, Vol. 22, Elsevier Science, B. V. Amsterdam, 1994.

University of Washington, Geology and Geomorphology of Stream Channels, Seattle WA, 1997.

US Geological Survey, 79-553, Magnitude and Frequency of Floods in Western Oregon by Four Flood Zones Including Parts of Washington, 1979.

US Geological Survey, Listing of Peak Flood Flows and Other Flow Data, East Fork of the Lewis River at Heisson, Stream Gage 14222500, May 1997.

Figure 1. Upland Channel Cross Section

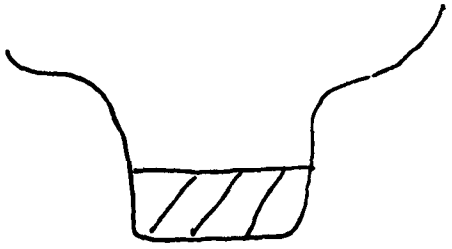


Figure 2. Lowland-Valley, Channel Cross Section

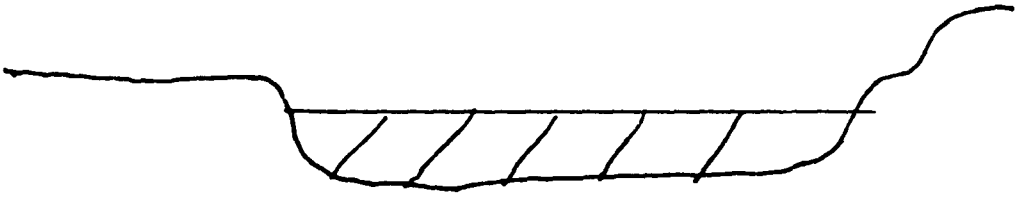


Figure 3. Comparison Of Valley Lowland Flood Plain Width To Upland Flood Plain Width -East Fork Lewis River Watershed

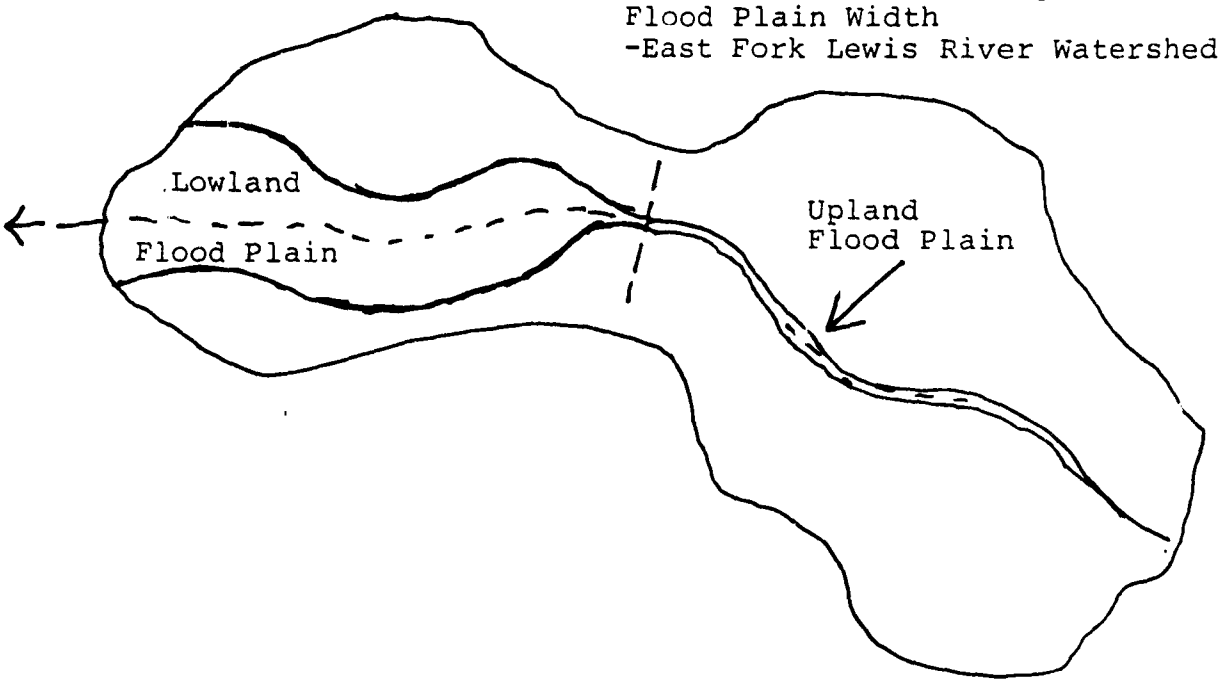


Figure 4. Comparison of Relative Flood Plain Widths
--Upland and Lowland Flood Plains, East Fork Lewis River

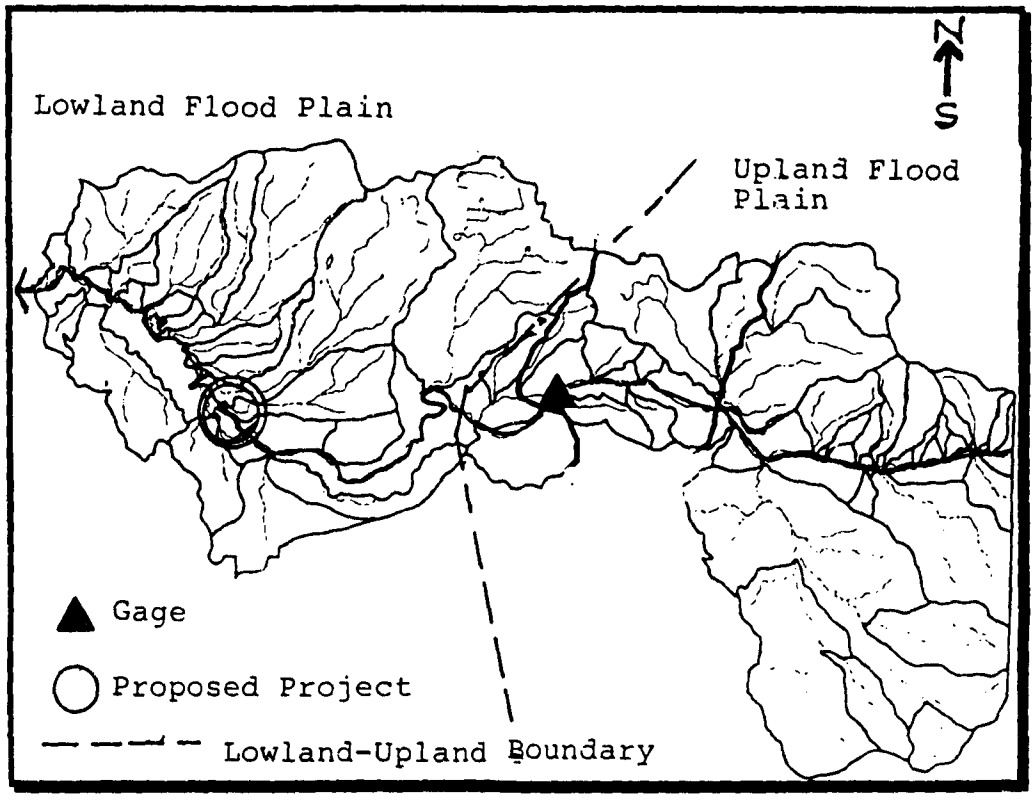
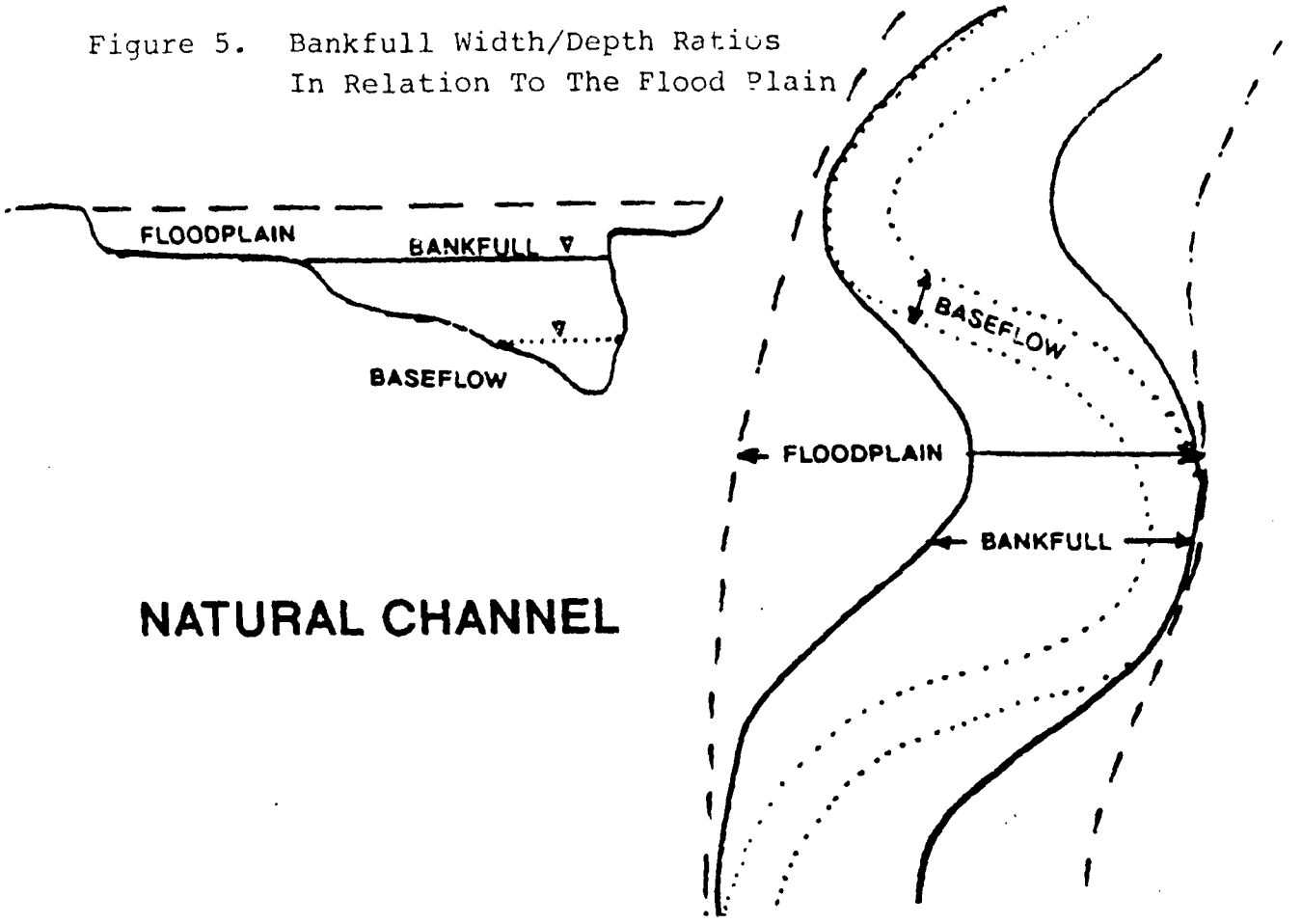


Figure 5. Bankfull Width/Depth Ratios
In Relation To The Flood Plain



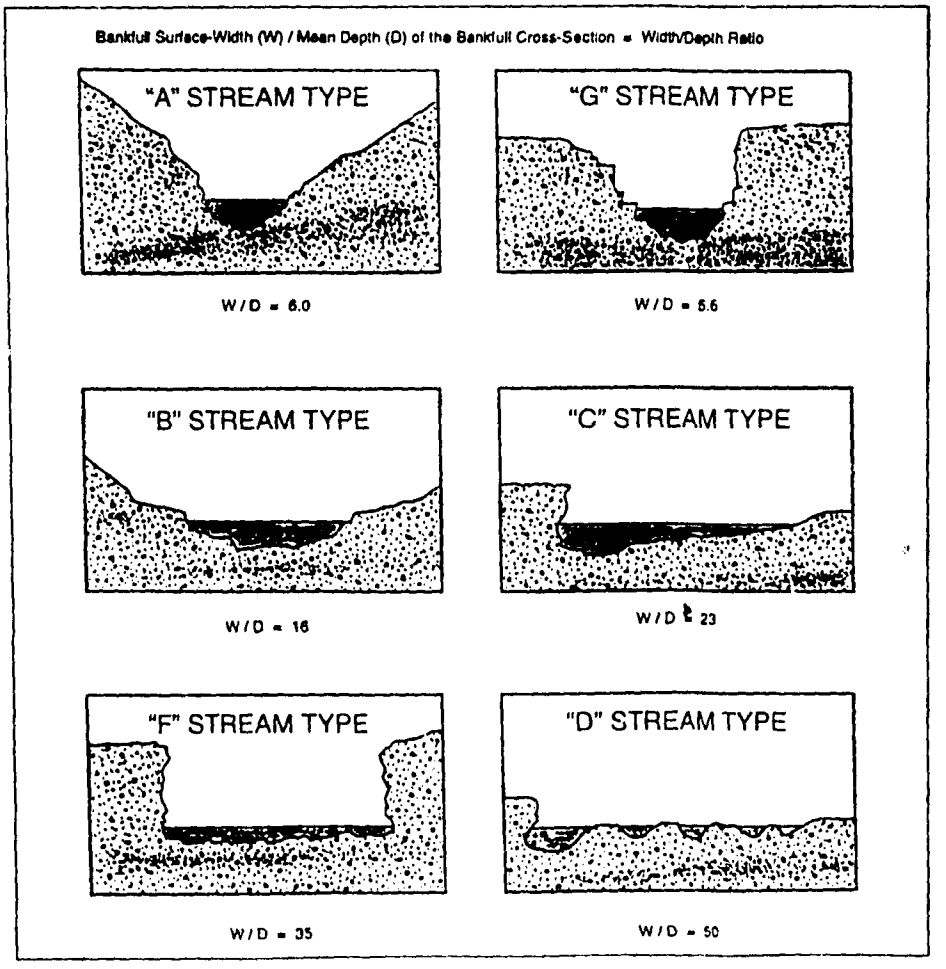
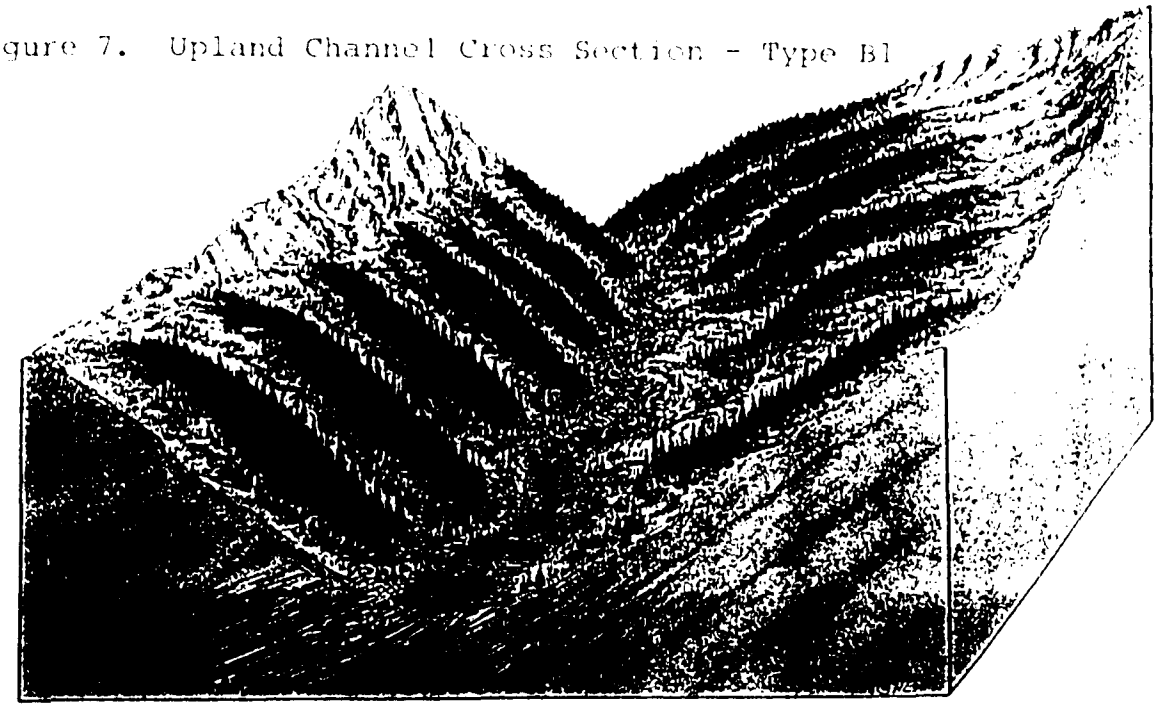


FIGURE 6. Examples of various Width/Depth Ratios for selected stream types.

Figure 7. Upland Channel Cross Section - Type B1



DELINEATIVE CRITERIA (B1)

Landform/soils: Structural controlled narrow valleys with moderate side slopes.

Channel materials: Bedrock bed with streambanks composed of boulders, cobble and gravel.

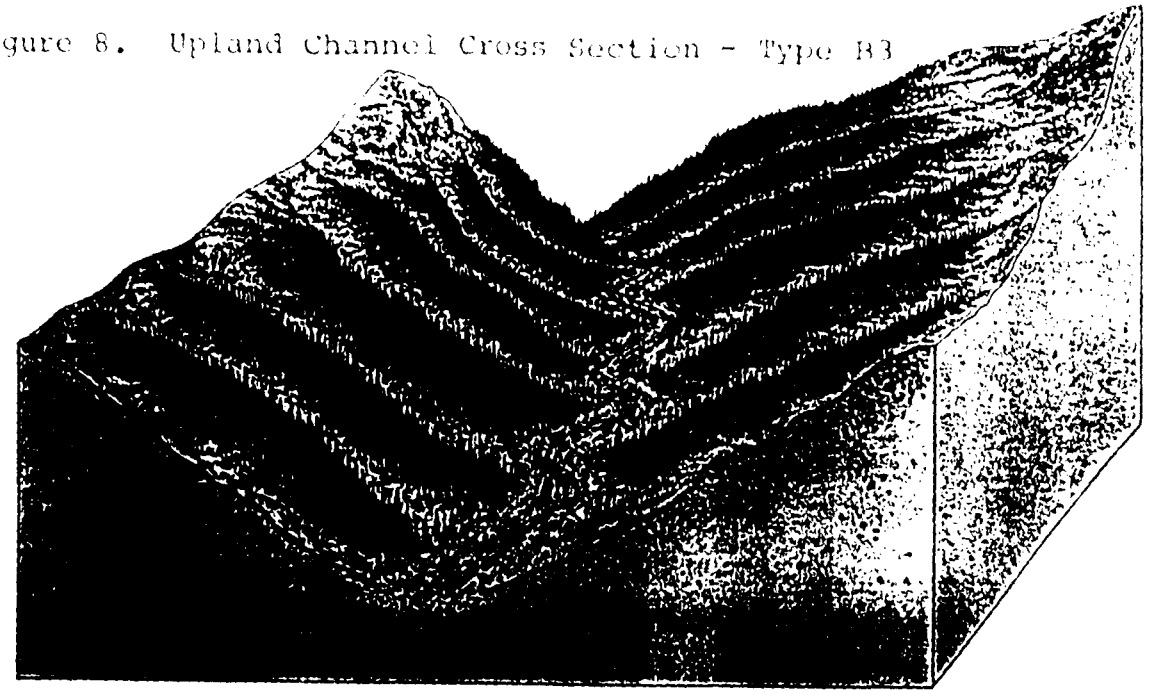
Slope Range: .02 - .04 (B1c < .02)

Entrenchment Ratio: 1.4 - 2.2

Width/depth Ratio: > 12

Sinuosity: > 1.2

Figure 8. Upland Channel Cross Section - Type B3



DELINEATIVE CRITERIA (B3)

Landform/soils: Narrow, moderately steep colluvial valleys with gentle side slopes. Soils are colluvium and/or alluvium. Often in fault line valleys or on well vegetated alluvial fans.

Channel materials: Predominantly cobble with lesser amounts of boulders, gravel and sand. Streambanks are stable due to coarse material.

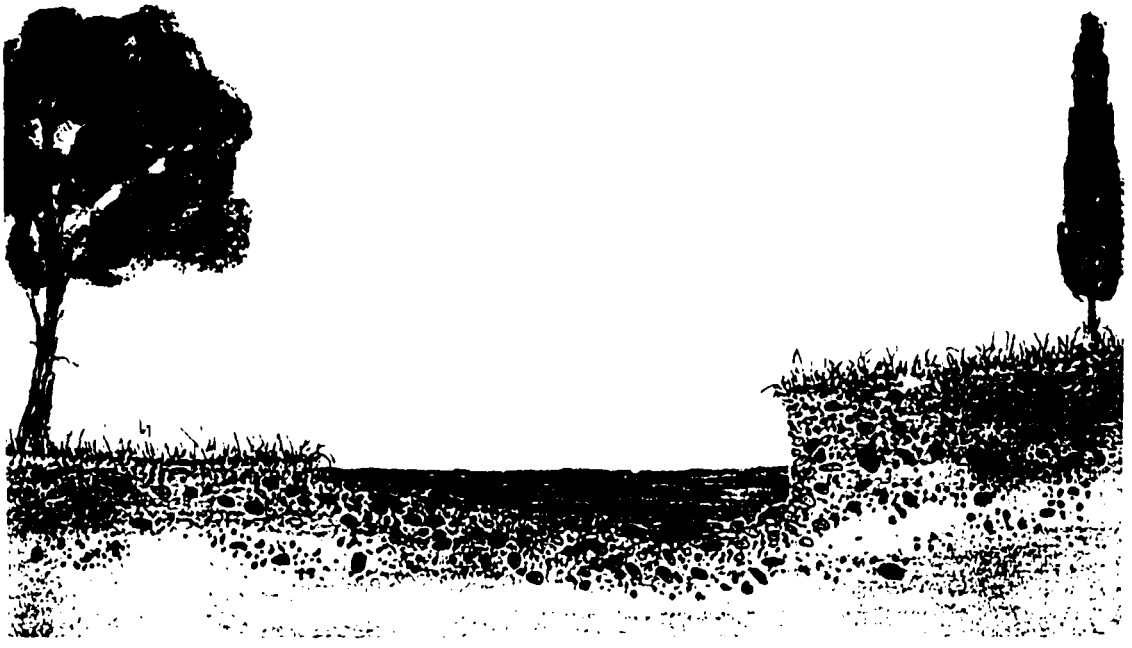
Slope Range: .02 - .04 (B3c, < .02)

Entrenchment Ratio: 1.4 - 2.2

Width/depth Ratio: > 12

Sinuosity: > 1.2

Figure 9. Lowland Channel Cross Section - Type C3



DELINEATIVE CRITERIA (C3)

Landform/soils: Broad alluvial and glaciated valleys, holocene terraces generally present. Soils are glacial deposition and alluvium.

Channel materials: Predominantly cobble with lesser amounts of gravel and sand. Banks are finer in material size than channel bed.

Slope Range: < .02 (C3c- .001)

Entrenchment Ratio: > 2.2

Width/depth Ratio: >12

Sinuosity: >1.2

Figure 10. Lowland Channel Cross Section - Type C4

DELINEATIVE CRITERIA (C4)

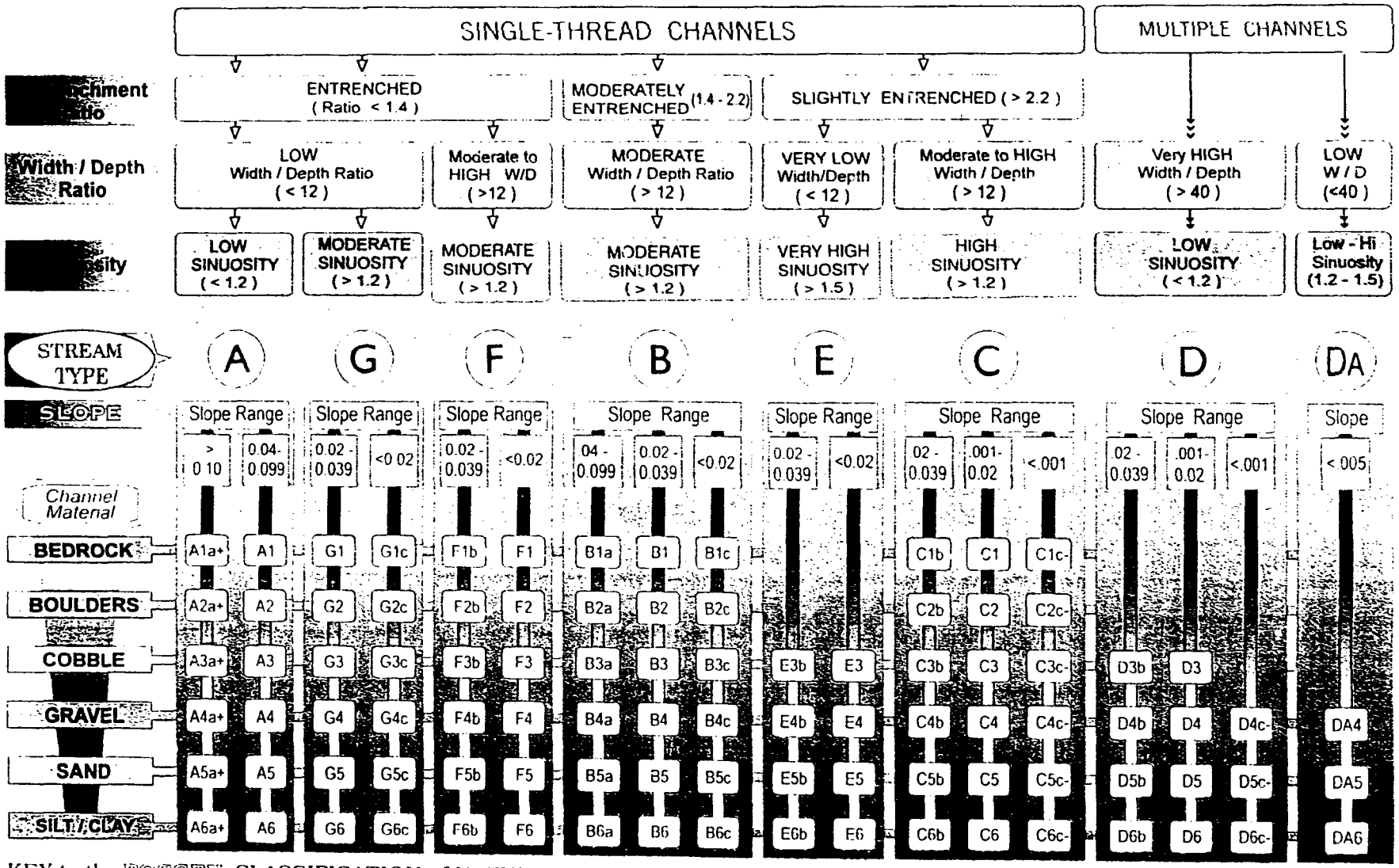
Landform/soils: Broad, gentle gradient alluvial valleys and river deltas. Soils are alluvium.

Channel materials: Predominantly gravel, with lesser amounts of cobble, sand and silt/clay.

Slope Range: < .02 (C4c- .001) **Entrenchment Ratio:** > 2.2

Width/depth Ratio: >12 **Sinuosity:** >1.4

Figure 11. Natural Channel Classification System - Leopold & Rosgen, 1996



KEY to the ROSGEN CLASSIFICATION of NATURAL RIVERS. As a function of the *"continuum of physical variables"* within stream

VERY POOR COPY WILL NOT
DUPLICATE.

1.638

VERY POOR COPY WILL NOT
DUPLICATE.
Hill Sharp

Aerial View (1948) of
Project Area & Flood
Overflow Channels

VERY POOR COPY WILL NOT
DUPLICATE

Figure 14. Aerial View (1975) at Flood Stage at Project Area Showing Flood Channel Overflow

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ICATE.

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DUPLICATE

Figure 15. Flood Overflow In Channel That Flows Along Edge Of Proposed Project Area And Current Gravel Washing Operation

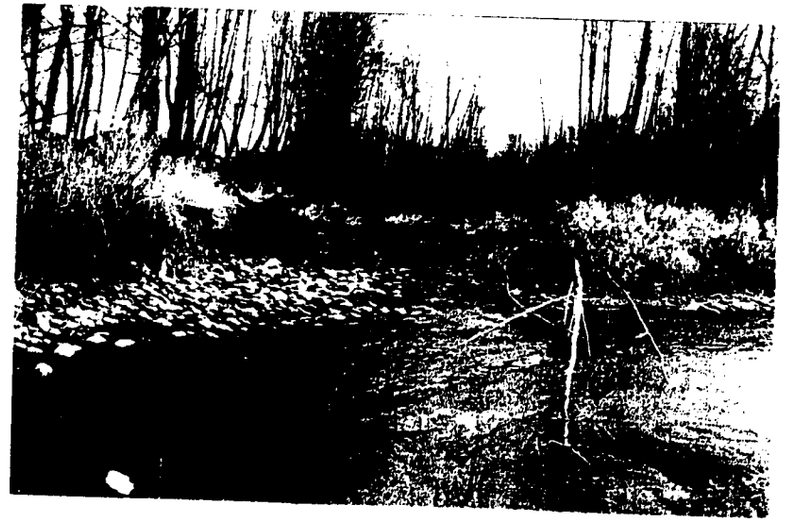
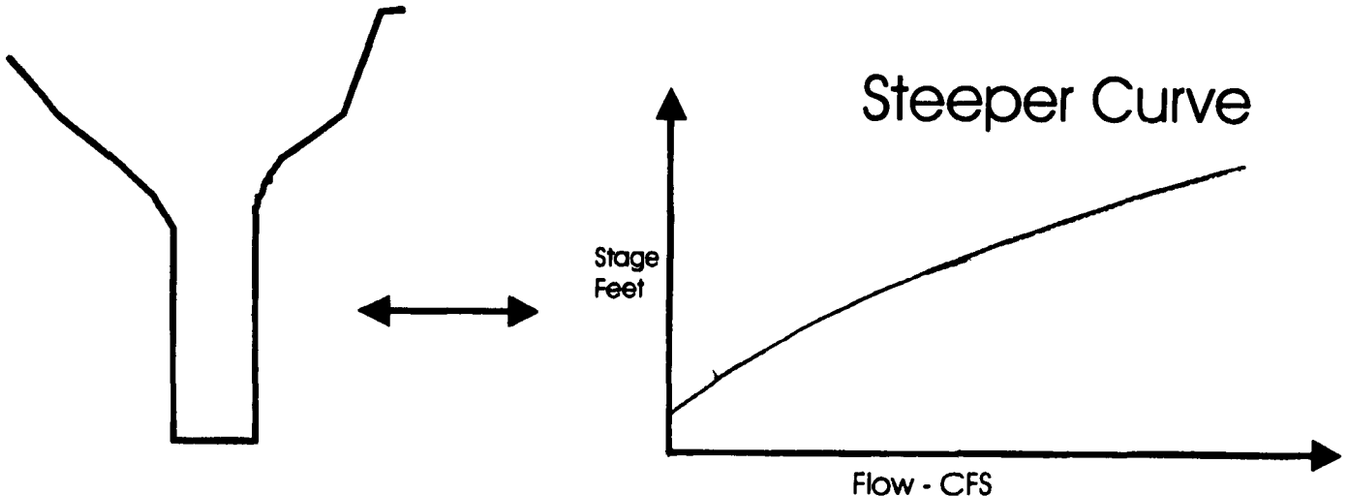


Figure 16. Comparison of Basic Stage Discharge Relationships - Heisson Gage to Channels Reaches Near Project Area

Stage Discharge at Heisson Gage

Channel Shape
--Narrow & Deep



Diagramatic Approximation of Relationship to Stage Discharge at Project Area

Channel Shape
--Wide & Shallow

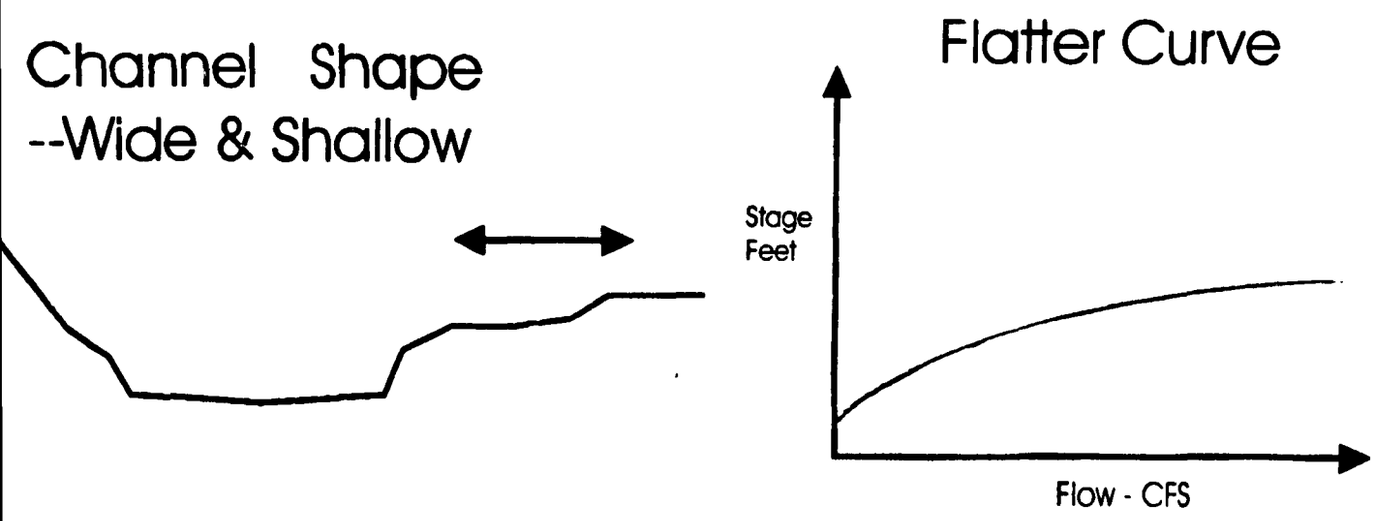
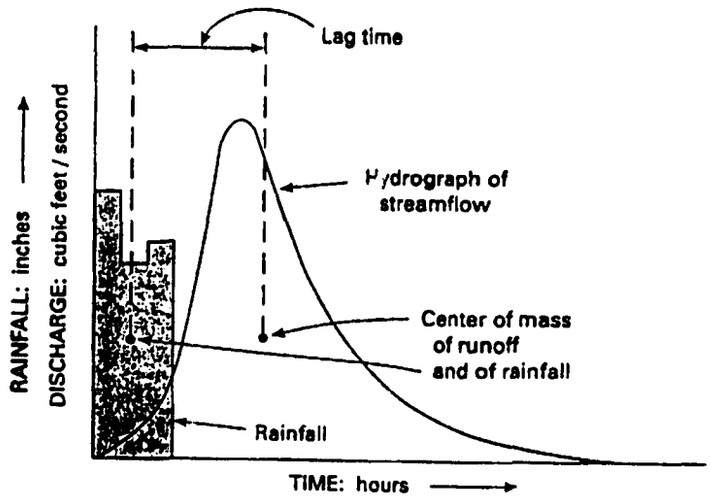


Figure 17. An Illustration of How "Urbanization and Vegetation Removal" Raise Flood Hydrograp Peaks



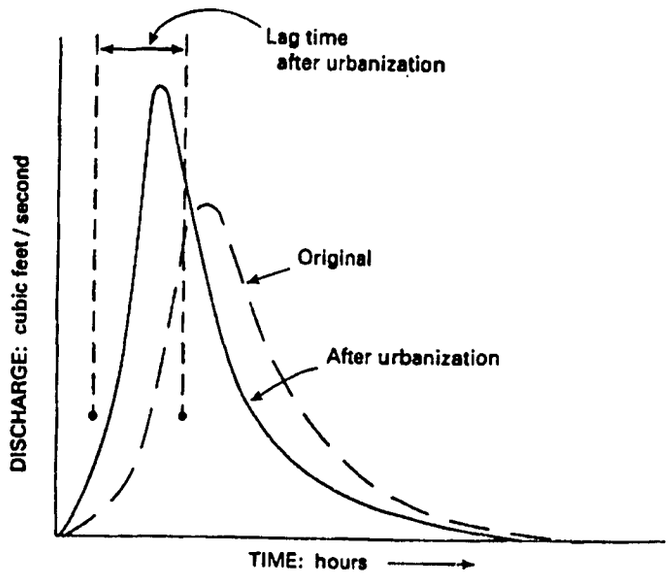


Figure 7.4 Hypothetical unit hydrographs relating runoff to rainfall, with definition of significant parameters, showing the effect of decreased lag time on flood peak.

A View of the River - L. Leopold, 1994

David T. McDonald
Courtroom Lawyer
Admitted to Oregon and Washington State Bar
510 S.W. 3rd Ave., Suite 302 (503) 226-0188
Portland, OR 97204 Fax: (503) 226-1136

EXHIBIT 52

June 3, 1997

Mr. Michael Butts
Mr. Monty Anderson, Commercial/Industrial Team leader
Mr. Gary Fish
Department of Community Development for Clark County
1408 Franklin Street
PO Box 9810
Vancouver, Washington 98666-9810

RE: **Appeal No. 97-004 / Supplemental Brief**

By Messenger

Dear Gentlemen:

I am enclosing the original Supplemental Brief of Appellant in Support of Reversal of the County's Determination with attached Exhibits.

Sincerely,

Connie Halperin

Connie Halperin

Enclosure
cc: Larry L. Epstein (with enclosure)
President, FOEF (with enclosure)
Richard S. Lowry (with enclosure)
John L. Dentler (with enclosure)
Jeff Wriston (with enclosure)

BEFORE THE LAND USE HEARINGS EXAMINE OF CLARK COUNTY

FRIENDS OF THE EAST FORK, Appellant, v. CLARK COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT, STATE OF WASHINGTON, Respondent.	APPEAL NO. 97-004 SUPPLEMENTAL BRIEF OF APPELLANT IN SUPPORT OF REVERSAL OF THE COUNTY'S DETERMINATION

BACKGROUND

This matter originally came before the Hearings Examiner on May 20, 1997. At that time, the Hearings Examiner took testimony and received evidence from the Appellant, Friends of the East Fork (FOEF), the applicant, J.L. Storedahl & Sons, Inc. (Storedahl) and the County by and through the county planning staff, Gary Fish and Monty Anderson and the County's civil prosecuting attorney, Richard S. Lowry. After the hearing, the Hearings Examiner left the record open for a period of four weeks. The first two weeks were to give all sides the opportunity to provide additional information to the Hearings Examiner and the latter two weeks were to provide all parties rebuttal. This memorandum, and the exhibits attached to it, continues to support FOEF's position that the County Planning Director's determination that a shoreline permit was not required for this project is erroneous and should be reversed.

/ / / / /

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This memorandum will focus on three areas: 1) Storedahl's intention to conduct mining operations on the entire 349 acre parcel and the inextricable relationship between mining on those acres, mining operations on the current 71 acre parcel and mining operations on the proposed 19 acre parcel; 2) FEMA has declared through a scientific hydraulic analysis the appropriate delineation of the 100 year floodplain within the reach of the East Fork of the Lewis River which is at issue in this case; and 3) the conveyor system is both within the floodplain and constitutes a structure.

In support of this memorandum the following exhibits are attached and are requested to be made part of the record by this reference:

1. The June 1977 Hydraulic Analysis of the East Fork of the Lewis River initiated by FEMA for the purposes of delineating the 100 year floodplain through this particular reach of the East Fork of the Lewis River;

2. Letter dated October 2, 1996 from Michael K. Buckley, P.E., Chief Hazard Identification Branch, Mitigation Director at Federal Emergency Management Agency, Washington D.C. to Dave Sturdezant (sic) *rejecting* the request by Mr. Jeff B. Bradley of WEST Consultants to revise the delineation of the 100 year floodplain along this stretch of the East Fork of the Lewis River;

3. Affidavit of Virgle Barnett prepared by Perkins Coie, signed and notarized on January 26, 1995 (the date is erroneous, it was a 1996 affidavit and was submitted as part of the information for the

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Notice and Order proceeding which resulted in the Notice and Order being issued on February 27, 1996);

4. Letter from the Pacific Rock Environmental Enhancement Group to Mike Hirsch, dated May 13, 1997; and

5. Newspaper article from the Columbian dated February 12, 1996 discussing the impact of dams and the manipulation of the flow of water over dams to flooding in the region.

DISCUSSION

A. The Facts Support Do Not Support Storedahl's Claim That They Do Not Intend To Mine The Entire 349 Acre Parcel And, Therefore, Extracting The 19 Acre Parcel Is An Unlawful Segmentation Under The Shoreline Management Act.

At the hearing on May 20, 1997, Storedahl put forward testimony that they did not intend to pursue mining on any other sections of the 349 acre parcel. Storedahl's assertion is not supported by their actions. Specifically, Storedahl's actions reveal their determination to mine this 19 acre parcel is only a piecemeal representation of their true intentions at this point in time.[1] The following actions by Storedahl illustrate this point:

1. Storedahl refuses to abandon the breadth and scope of the operating permit which they allege was expanded to the entire 349 acres in 1990;

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[1] FOEF asserts this intention was abandoned in the early 1990s but belatedly revived after the County adopted its ban on mining within the 100 year floodplain as part of its GMA mandated Comprehensive Plan. As evidence of that assertion, FOEF points out that Storedahl was not even a party to the original appeal of the County's plan before the Western Washington Growth Management Hearings Board in the spring of 1995.

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2. Storedahl maintains an application on file with Clark County for a Shoreline Permit to mine the entire 349 acre site; and

3. Storedahl maintains a contractual agreement with Ray and Merry Woodside dba Sammamish Farms to either lease and/or purchase the entire 349 acre site for the purposes of mining the entire site.

Storedahl cannot state they do not "intend to mine the entire 349 acre parcel" without some firm action which substantiates the claim. Many a parent has said to a child, "your actions speak louder than words" and, in this case, Storedahl's actions are screaming at a volume which drowns out the timid testimony given at the hearing.

Storedahl's first action is to refuse to let go of the breadth of the operating permit they claim covers the entire 349 acre parcel. Recently, during discussions with the Department of Natural Resources for reclamation permits, the Department offered Storedahl a chance to mine the 60 acres which allegedly are considered to be outside the 100 year floodplain on the condition that any claim to the viability of the operating permit for the remaining parcel be abandoned. Storedahl rejected this opportunity to show they had no intention to mine the remaining areas of the 349 acre parcel. If, as they claim, they have no intention of mining the remaining portion of the 349 acre parcel then there is no prejudice to them by eliminating the remainder from the permit. However, they refuse to relinquish.

Second, in 1991 Storedahl filed a shoreline permit application for the *entire* 349 acre parcel which triggered the requirement of an environmental impact statement. The application

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stayed dormant between 1992 and 1995. In 1995 it was temporarily revived after the County passed its new mineral policy banning mining in the 100 year floodplain. As recently as July of 1996, Storedahl submitted a draft environmental impact statement to the County. Now Storedahl has asserted in a number of venues that they have never abandoned that application and the filing of the application "vests" their rights and thus avoids the ban on mining in the 100 year floodplain adopted by the County in 1995.

It is important to note that the County does not have a procedure for setting a termination point on the viability of a shoreline permit application. Unlike a building permit application, which expires in a particular period of time, the shoreline permit application can apparently sit dormant and thus vest the applicant to the laws that were applicable at the time that the application was filed (see Notice and Order dated February 26, 1997 by Craig Greenley, Clark County Planning Director).

Therefore, Storedahl continues to claim that the ban on mining in the 100 year floodplain initiated by the County as part of its growth management comprehensive plan does not apply to them because it was not in existence at the time they filed their 1991 shoreline permit.

Ironically, Storedahl now claims that they have let that permit application go dormant. In addition, they have verbally stated that at this time they have no intention of reviving it. Again, Storedahl refuses to abandon the permit application. The rational is simple:

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Storedahl refuses to actively support their statements in this proceeding. Their actions speak louder than their words.

Third, as part of the Notice and Order proceeding, and prior to the issuance of the Notice and Order, Virgle Barnett on behalf of Storedahl & Sons submitted an affidavit to Clark County which states, at number 9:

> In summary, Storedahl has continued historic mining and processing activity at the Woodside property through 1994 and **fully intended to continue mining on the Woodside property**. Storedahl submitted the requisite permit applications to continue such mining as is reflected in the submission of a shoreline permit application to Clark County, and an updated reclamation permit application submitted to the DNR. In addition, Storedahl was negotiating a contract to purchase the entirety of the Woodside property at the time of ban (sic) went into effect." (Emphasis added.)

Storedahl seems to change their position with the wind. When it suits their purpose to show an intention to mine, they present testimony under penalty of perjury which says they do intend to mine. When they need testimony which says they do not intend to mine, they send in testimony under penalty of perjury by the same person that says they do not intend to mine.

The inconsistent determinations by Storedahl and the manipulations of the system should not be allowed. At this point, Storedahl should state unequivocally whether or not they intend to mine the remainder of the site and support that statement by actions which would abandon their toe-hold in continuing to keep their option

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open of mining that entire site or admit to this Hearings Examiner that they do intend to mine the area and this 19 acre proposal is a piecemeal of the overall plan.

Fourth, over the past almost two years, there has been a continuation of a claim by Storedahl that they are in an extended lease/option to purchase agreement with Ray Woodside for the entire 349 parcel and, therefore, it shows their intention to have a presence on the entire parcel and mine it. This alleged lease/option to buy/contract with the holder of the operating permit shows that Storedahl's statements regarding their intent not to mine the property are simply hollow and without support.

Finally, this project simply cannot stand on its own and is inextricably connected to the remaining parcels as exemplified by the County's most recent issuance of a Determination of Significance on SPR-092. Initially, the County had made a preliminary Determination of Significance, but issued an MDNS after some discussions with Storedahl. However, given recent comment by FOEF members, the DNR and the DOE, the County has withdrawn the MDNS determination and issued a solid Determination of Significance, thus requiring an environmental impact statement.

As part of the environmental impact statement study, "all potential mining" in related areas must be studied, which includes the entire 349 acre parcel (see attached Determination of Significance).

Storedahl's claim that this is just one piece which can be extricated from any other on the 349 acre parcel could not be done without the jaws of life given Storedahl's actions. The 19 acre parcel is

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part and parcel of their intent to take as much rock out of the 349 acre parcel as possible. It is a piecemeal approach that is barred by the SMA without a full analysis of the entire area.

B. The FEMA Determination And Delineation Of The 100 Year Floodplain Is The Correct Floodplain Delineation And Controls This Litigation.

During the hearing, Storedahl claimed that there was "no legal or factual basis" to support the floodplain delineation of the East Fork of the Lewis River set forth on the FEMA maps. FEMA has undergone extensive analysis of the area using "engineering judgment" and previously rejected a Storedahl request for a revision of the floodplain delineation.

Storedahl claims that their studies show that the FEMA delineation is fatally flawed and should not be used to control the litigation in this process. However, FEMA has established through expert work and hydraulic study where the 100 year floodplain should be delineated in this reach. In July 1996, Storedahl requested that FEMA revise that delineation based up materials submitted to FEMA by WEST Consultants, the experts in this adjudication. FEMA specifically rejected WEST Consultants' request to revise the floodplain delineation in this reach of the East Fork of the Lewis River because it found that WEST Consultants' study was fatally flawed. Specifically, FEMA found

> The floodplain boundary delineations shown on the maps submitted by WEST Consultants differ substantially from the floodplain boundary delineations shown on the effective FIRM. **We believe those differences show how difficult it is to precisely determine the**

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> **flow paths and floodplain boundaries in areas where portions of the floodflow break away from and then re-enter the main flow path, as is the nature of the flow during the base flood event along this reach of the East Fork of the Lewis River.** See letter dated October 2, 1996 from FEMA to Clark County Board of Commissioners, Chairman Dave Sturdezant (emphasis supplied).

FEMA's rejection of WEST Consultants goes on to state that although floodplain mapping is usually accomplished in one step, it cannot be so in this particular reach because

> [I]n areas where the computed or (interpolated) water-surface elevation is higher than the ground elevations adjacent to the channel, floodwater may break out from the main channel. The floodwater will continue to break out from the main channel and enter the overbank areas until the floodwater either re-enters the main channel at some point downstream or encounters ground at an elevation at least as high as the water-surface elevation at the breakout point. In such situations, it is unlikely that the main and the breakout flows would result in the same elevation at a given cross section. **Therefore, plotting the floodplain boundaries in the main channel and overbank areas based on the computed water-surface elevations is only the first step in mapping the floodplain boundaries.** Id. (Emphasis added.)

Finally, FEMA recognized that:

> The SFHA shown on the effective FIRM was developed by studying the local topography to determine the flooding situation in each breakout area. This information was augmented

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> by local knowledge of historic flood events. The proposed floodplain boundaries along the main flow path and breakout flows were mapped using the water surface elevations calculated from the HEC-2 model. Thus, the analysis submitted by WEST did not proceed past the initial step of mapping the floodplain boundaries based upon the computed water surface elevations.
>
> The submitted mapping indicates several overflows do not re-enter the main floodplain; instead, these overflows create ponded areas adjacent to the main floodplain. The elevations used to map those ponded areas decrease within the area delineated, indicating that floodwater would be flowing rather than ponded. Because both situations cannot be true, we cannot revise the FIRM as requested. Id.

This letter by FEMA supports the hydraulic analysis completed in June 1977 which states that

> As part of the original analysis, the Corps noted several complications in determining the floodplain in this reach. The first problem was storage, due to the relatively broad flood plain. A second variable was the amount of influence the Lewis and Columbia Rivers would have along with tidal fluctuations on the East Fork of the Lewis River and, finally, the third variable involved the timing of peak stages for all three rivers and their tributaries relative to discharge at the mouth of the East Fork.

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The original study stated that "Because of complications described previously (i.e., the three main variables), flows for known floods were based on high water makes, field observations, gage readings at Heisson, and **engineering judgment.** (Emphasis supplied.)

Storedahl now wishes the Hearings Examiner to replace the engineering judgment exercised by the creators of the original Hydraulic Analysis with the engineering judgment of a non-biased consultant with the analysis paid completely by J.L. Storedahl and Sons, Inc. Miraculously Storedahl's highly paid consultant, who admittedly did not reference the FEMA analysis, comes up with a delineation which shows the parcel intended to be mined outside of the 100 year floodplain.

The Hearings Examiner should not reject the FEMA analysis and replace it with the determination by a paid consultant, especially in light of the fact that FEMA had previously reviewed the consultant's information and found its study flawed. FEMA is the designated body who delineates the floodplains. There is no reason shown by Storedahl that FEMA is incorrect in its analysis.

Moreover, Storedahl's study specifically does not calculate in the main variables included by the Corps analysis. First, in comparing the calculations of the 100 year floodplain performed by the Army Corps of Engineers in 1977 with the Storedahl study, it is amazing that the Storedahl study can restrict the floodplain to such a small area. First, the United States Army Corps of Engineers 1977 analysis was based upon 1972 flood data which put the peak flow at 19,200 cubic feet per second (CFS).

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Based upon that model and the maximum flow, FEMA made the current 100 year floodplain delineation. In contrast, Storedahl's study by WEST Consultants used the 1996 flow of 28,600 cubic feet per second (over 7,000 CFS more than the 1972 flood data), yet their delineation of the 100 year floodplain is extremely smaller than that delineated by the Corps based upon a lower maximum flow. Common sense tells us that a larger flow should have shown a larger floodplain delineation, but WEST Consultants showed a smaller floodplain with a larger flow.

In addition, FEMA's hydraulic analysis shows that flood characteristics of this section of the river are substantially impacted by factors other than the flow of water at the Heisson gauge. The three complications, or variables, mentioned in the study are totally absent from any analysis completed by Storedahl's consultants.[2]

One of the most interesting absences from the WEST Consultants study completed by Grindeland involves how the Lewis River and the Columbia River impact the elevation of the East Fork of the Lewis River. Specifically, the elevation of the Columbia River can act as a dam to the flow of the East Fork. If the level of the Columbia increases, then all rivers in the system will experience a profound impact.

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[2] It is interesting to note that Professor Peter C. Klingeman in his comments to the Hearings Examiner stated that he agreed completely with the June 1996 report completed by WEST Consultants. That is the same report that was rejected by FEMA due to the fact that it was a completely flawed analysis and failed to continue past the initial step of the floodplain delineation determination. Therefore, Professor Klingeman, like WEST Consultants, is willing to take shortcuts in analyzing the floodplain delineation or is not the expert as touted in his testimony.

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During the most severe flooding of February 1996, the Corps of Engineers reduced the flow of the Columbia River to minimize the flood damage to the areas below the Bonneville Dam. As shown in the newspaper articles from February 1996, an unusual combination of events set the stage. The Corps had been able to create storage behind their dams for the additional waters which they could use to reduce the flow down the Columbia, thus allowing the tributary rivers to flush out without experiencing the backflow which would have increased the floodplain inundation.

WEST Consultants' study of the floodplain is reminiscent of the old fairly tale 'The Emperor's New Clothes". Storedahl wishes for everyone to believe that the new analysis is perfect, but the truth is that it is hollow and incomplete. The Hearings Examiner should not be placed in a position of becoming a river morphologist, especially based upon incomplete data that has previously been rejected by the Federal Emergency Management Agency.

One of the other factors that was not considered by the Storedahl study is that the natural river channel has temporarily been abandoned due to a breach in a berm going into a pit previously excavated by Storedahl but never reclaimed. As part of the re-establishment of the old Storedahl/Ridgefield pit which was mined out by Storedahl, but never reclaimed, on the south side of this breach of the East Fork of the Lewis River, the Pacific Rock Environmental Enhancement Group (EEG), a non-profit organization, has taken action.

As part of its plan to reestablish the natural flow of the river, EEG is attempting to reestablish the natural channel. Re-

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establishment of the natural channel, as testified to by Dan Miller, will change the calculations utilized by West Consultants.

In addition, Richard Dyrland, an experienced hydrologist and former review hydrologist for the watershed and hydrology components of all Forest Service Forest Plans in the Pacific Northwest Region, reviewed the area and undertook a study of the subject area. His findings are attached and incorporated by this reference. Mr. Dyrland recognizes six specific points which show the flaws in the study conducted by West Consultants including the erroneous use of the Heisson gage figures, the use of the aerial photographs on the 10th of February 1996, since the peak flow occurred on February 8, 1996, a full two days earlier, the historical reaches of the river in this reach, the fact that the proposed project area and the current sand and gravel operations have been subject to flooding, and the breach of the various berms and dikes in the area.

He emphasizes that due to the conditions one "can expect that future flood events for the same return period to shift to higher peaks and the actual flooded area would increase".

Therefore, based upon all of the information that is before the Hearings Examiner, there is nothing to indicate a strong reason to ignore the current FEMA 100 year floodplain delineation and it should be applied in this case.

C. Conveyor Is A Structure.

Two issues evolved in determining whether or not the conveyor belt system which Storedahl intends to utilize for the movement of hundreds and thousands of tons of rock across the 100

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year floodplain to an area within the shoreline for stockpiling, washing, screening and crushing is a structure and thus requires a shoreline permit. As pointed out at the hearing, these stackable conveyors are huge and inextricably related to both the current Storedahl operations on the 71 acre site which continue without an EIS or Shoreline Permit.

Attached is an declaration which illuminates that these conveyors fit the definition of "structure" under the state and county definitions. These units, not unlike a mobile home, are over two tons and required to be anchored to the ground. Further, as set forth by Scott Rose, each piece of the conveyor cannot operate unless it is connected to another conveyor piece. If there was no connection, then the rock which is being conveyed would simply not make it to its destination.

CONCLUSION

This 19 acre proposal is a segmentation of the larger parcel in violation of the SMA. Storedahl's current words are overborne by their actions which show they intend to conduct mining operations on the entire 349 acre parcel and there exists an inextricable relationship between mining on those acres, mining operations on the current 71 acre parcel and mining operations on the proposed 19 acre parcel.

FEMA has declared through a scientific hydraulic analysis the appropriate delineation of the 100 year floodplain within the reach of the East Fork of the Lewis River which is at issue in this case. Storedahl's analysis cannot compete with reality or science. The conveyor system is both within the floodplain and constitutes a structure.

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For all of the above reasons, along with those previously asserted, FOEF requests the Hearings Examiner to reverse the County Planning Director's determination that a Shoreline Permit is not required.

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EAST FORK LEWIS RIVER, WASHINGTON
Hydraulic Analysis

The hydraulic analysis of the East Fork Lewis River was made utilizing the Corps of Engineers HEC-2 step-backwater computer program to determine water surface profiles for selected flows.

Cross-sections used in the computations were those supplied by the Portland District office of the Corps of Engineers. Channel cross-sections were surveyed during May 1973 except for cross-sections numbered 36 through 43, which were estimated on the basis of upstream and downstream cross-sections.

Several high water profiles were available for model calibration. High water marks for the 9 November 1968, 3 December 1968, and 5 January 1969 flows were from USGS crest gages located along the stream (these gages were removed by the USGS on 27 August 1969). Profile data for the 20 January 1972 flood was collected by the Clark County Department of Public Works and forwarded to the USGS office in Tacoma.

Because of lack of data concerning storage, downstream river stages, and timing of various peak inflows, it was not possible to duplicate observed high water profiles in the lower reach utilizing the flows provided by Portland District and USGS. The first problem, storage, is due to the relatively broad flood plain found through most of the reach. Between

River Mile 2.3 ± and 5.2 ±, in particular, low banks allow the flood plain to be easily inundated. When the river overtops the bank, some floodwater goes into overbank storage, and this appears to effectively reduce the peak flow. Another variable is the amount of influence that the Lewis River and Columbia River stages, including tidal fluctuations, have on the lower East Fork Lewis River water surface profiles. A third complication is the timing of peak stages for the three rivers and tributaries entering the lower portion of East Fork relative to the peak discharge at the mouth of East Fork. Without the necessary data regarding above variables, accurate backwater computations for the lower East Fork cannot be readily made.

Because of complications described previously, flows for known floods were based on high water marks, field observations, gage readings at Heisson, and engineering judgment. The 1972 flood was used to calibrate the backwater model because it was the most recent and largest flood for which high water marks were available. The procedure used in the reach downstream of River Mile 5.2 ± was to hold n-values, which were based on field observations, constant and then alter the flow in a manner that duplicated recorded high water marks. In order to determine what flow was required, backwater runs were made for a range of flows. The flow that most nearly reproduced the 1972 high water profile was then selected. The 1968 and 1969 floods with flows great enough to cause overbank flooding

were then run using flows that were prorated in the same manner used to calibrate the model. The computed profiles were then used as a check on the model. The same procedure was then applied to the hypothetical 10, 50, 100, and 500-year flows. Starting elevations for this last series of flows were provided by Portland District.

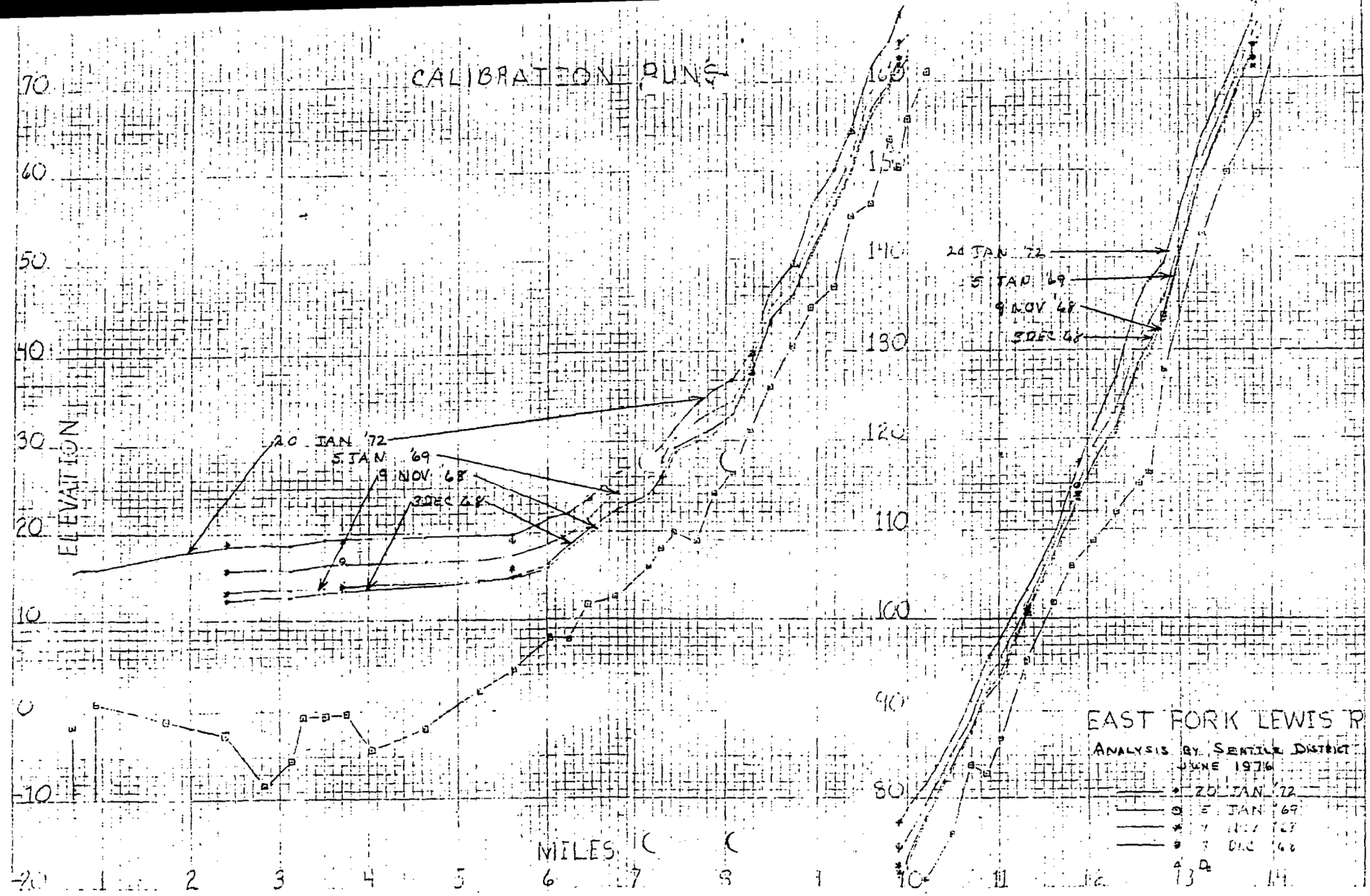
Final floodway limits were arrived at after a series of trial runs representing various floodway limit schemes based on engineering judgment. An arbitrary incremental rise of 0.9 feet above the natural 100-year flood profile was used to determine initial limits of the floodway. After plotting these floodway limits on the topographic maps, a smooth line was drawn connecting as many of the points as possible but in such a manner as to maintain a 1-foot or less rise in the water surface profile when compared to the natural 100-year profile.

The topographic maps indicate that the stream is in a state of slow, but constant, migration. As the channel migrates, there will be a local change in the water surface elevation. The stream may also migrate outside of the designated floodway; therefore, the floodway was enlarged to include some reaches where the stream is braided or has several side channels.

If the floodway fringe is developed and/or filled, the resulting loss of storage will increase flood flows and cause water surface profiles to be higher than presently anticipated.

Because of uncertainty associated with the flows for various floods, the reliability of the results of this study are estimated to be ± 2 feet.

NOTE: There are occasionally some discrepancies between the plotted cross-sections and the topographic maps. This was most apparent when plotting the floodway on the topographic maps.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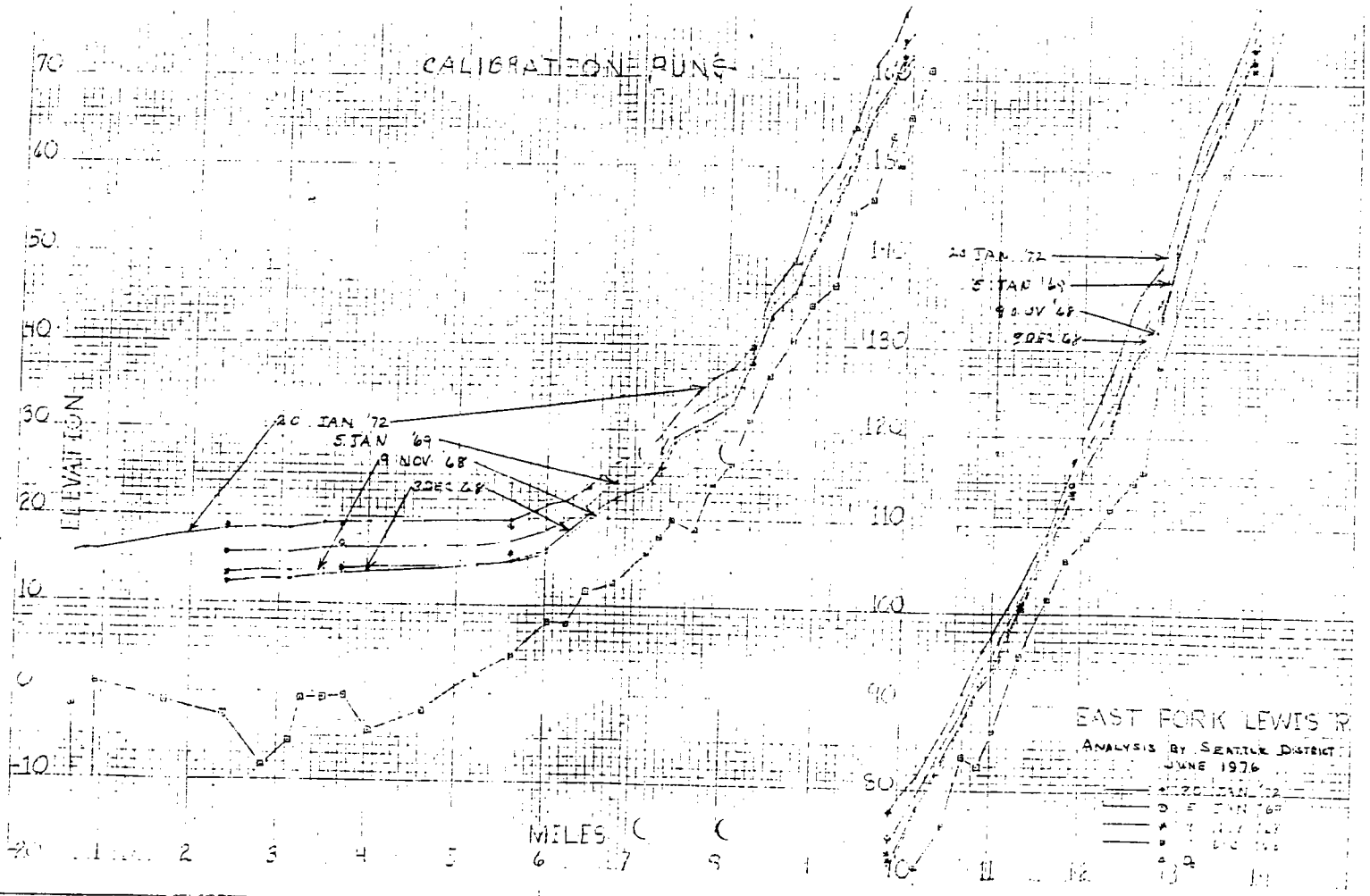

STATE OF WASHINGTON,
COUNTY OF CLARK:
:IN RE TO THE MATTER OF J.L.
STOREDAHL & SONS, INC.

AFFIDAVIT OF VIRGLE BARNETT

Virgle Barnett, a citizen of the United States and of the State of Washington, over the age of twenty-one (21) years, and competent to testify herein, being first duly sworn, deposes and says:

1. My name is Virgle Barnett, and I reside at 12316 N.E. 13th Ave. Vancouver, Washington 98685.

2. This affidavit is prepared in conjunction with deliberations by the Clark County Planning Department and Clark County Prosecutor's Office regarding the operations of J.L. Storedahl & Sons, Inc. [hereinafter "Storedahl"] sand and gravel mining operations located on real property owned by Ray and Merry Woodside located in Clark County.

3. Storedahl has been in the sand and gravel mining business for some 20 years and operates in Northwest Oregon and Southwest Washington. I have worked in and the sand and gravel and construction business for approximately 33 years and I currently hold the position of Clark County Representative with Storedahl where I have worked in that capacity since 1988. I have worked for Storedahl for nearly 8 years and have worked at the Woodside property site since 1988.

4. Since I began working for Storedahl and at the Woodside property, the site has remained operational with the exception of a period of time during which local supply and demand required that Storedahl focus operations on the nearby Ridgefield sand and gravel site. Other than this period of time, the Woodside site's gates have remained open and

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Storedahl employees worked on the site nearly every day each year, excepting weekends and holidays. The only other times that the site has not operated has been due to intermittent lack of demand for product, machine breakdowns, inclement weather and the like.

5. Storedahl operates at the Woodside property by removing overburden, excavating and removing raw product, crushing, sorting, screening, washing, and stockpiling various sizes, grades and quality of aggregate material. When an order for the sale of materials is completed, Storedahl utilizes these stockpiles, in addition to utilizing materials that are available by mining directly from the site and incorporating imported aggregate from other sources.

6. Generally, only material with a consistently high demand is stockpiled. Aggregate of specific sizes and shape for which demand is not heavy is generally mined only when an order for such material is received. In 1994 through the early part of 1995, approximately 5-6 material types were stockpiled for future crushing and processing as this material is not in high demand in its natural state. On the other hand, over a dozen other product types, differentiated by size and shape, were generally mined and processed at such time as orders for that material were received. A recent report issued by Mike Plymale, CPA attempted to determine, based on potential stockpile capacity and Storedahl sales records, whether mining must have been "continuous." Mr. Plymale could not make such an affirmative conclusion except for the last two quarters of 1990 and 1991. However, the premise for Mr. Plymale's conclusions did not take into account sales of materials that occurred in 1992, 1993 and 1994 for specialty products which are not stockpiled and typically mined when an order for such material is received.

7. Mining has occurred under Storedahl's direction at the Woodside site beginning in 1987 and relatively intensive mining occurred beginning in 1990. In around,

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[illegible]

1993 mining decreased relative to earlier levels and, for a number of reasons, has remained so. Nonetheless, Storedahl continued to take raw material from the Woodside property in each year, including 1994. This material was processed on site or sold as raw pit-run material and sold from the Woodside property. Such sales are reflected in the regular business records of Storedahl. In addition, although some of the site has already been mined, this did not prevent Storedahl from mining deeper because Storedahl purchased and brought to the site a Komatsu 650 excavator which allowed continued excavation in areas previously mined. Moreover, Storedahl intended to continue mining at this site and, but for the issuance of a stop work order issued by Clark County, would have continued such mining in 1995.

8. The reason for the decline in mining activity at the Woodside site are many but primarily were caused by disputes with the Washington Department of Natural Resources and Clark County which hampered Storedahl's ability to carry out mining.

9. In summary, Storedahl has continued historic mining and processing activity at the Woodside property through 1994 and fully intended to continue mining on the Woodside property. Storedahl submitted the requisite permit applications to continue such mining as is reflected in the submission of a shoreline permit application to Clark County, and an updated reclamation permit application submitted to the DNR. In addition, Storedahl was negotiating a contract to purchase the entirety of the Woodside property at the time of ban went into effect.

Virgle Barnett

Subscribed and sworn to before me this 26th day of January, 1995.

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Olympia, Washington 98501
(206) 956-3501

Patty L. Erbes

Patty L. Erbes

Notary Public in and for the State of Washington,
residing at Longview.
My commission expires: 12-30-99.

PERKINS COIE
1110 Capitol Way South, Suite 305
Olympia, Washington 98501
(206) 956-3300

PACIFIC ROCK
ENVIRONMENTAL ENHANCEMENT GROUP
A Non-Profit Organization

May 13, 1997 VIA FACSIMILE

Mr. Mike Hirsh
FEMA
Federal Center Plaza
500 "C" St., S.W.
Washington, D.C. 20472

RE: Case No. 96-10-218P
Jeffrey Bradley, WEST Consultants, Inc.;
J. L. Storedahl & Sons, Inc.

Dear Mr. Hirsh:

If you recall, on October 2, 1996, FEMA issued a determination letter denying a request to revise the Flood Insurance Rate Map (FIRM) in the above-referenced case number (see copy attached). It has come to our attention that the applicant is, either under the same case number or another separate application, continuing to attempt to revise the FIRM in some manner.

It is our understanding that the request is based on new survey information conducted by the above-referenced applicant. You should know that any changes in elevation have been caused by a catastrophic breach of the river into a former mining site which was mined by J. L. Storedahl & Sons. The river breached an area that had been over-mined and was subsequently eroding over the past years. Thus, any alleged changes in elevations were caused by a man-made alteration of the topography. This man-made situation was caused by the applicant and now occurs on our property. This property is contiguous to the 300+ acre mine that J. L. Storedahl would now like to mine.

The property where this breach occurred is now owned by the Environmental Enhancement Group. We are in the process of rehabilitating the property into a natural preserve.

Please be advised that the Environmental Enhancement Group is considering reestablishing the river into its former channel (a channel which existed up until December 1996). Because of the breach of the river, the Environmental Enhancement Group's property has been severely damaged, including loss of our access to the property and the frustration of our plans. This is a serious problem and we will likely reestablish the area of the breach to mitigate the damage to our property. Consequently, it is more than likely the river will be reestablished to its former elevations in the near future. We are clearly within our rights as property owners to return the river to its former channel to mitigate the damage to our property.

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Obviously, the Environmental Enhancement Group, as well as numerous citizens, still strongly object to and will oppose any revisions to the flood plain in this area. This is a continuing attempt to circumvent the jurisdiction of government agencies and thwart continuing impending legal and administrative proceedings.

I think it is also important for you to understand that there is clear evidence that the elevations are changing on a daily basis. Various agencies who have investigated the breach can attest to this fact. What used to be 15-foot mining silt ponds have now filled up with gravel in less than a year's time. Therefore, even if we are not successful in revetting the breach, the elevations are in a state of constant flux. Your letter dated October 2, 1996, clearly recognizes this fact. The river in this reach has been documented historically to be in a dynamic state of constant flux reaching from one side of the valley to the other. Any change in the mapping would be inappropriate, premature and unsubstantiated.

Please also consider this letter a formal request, once again, under FOIA and/or a data request that any and all information received with respect to this matter be forwarded to our office. Please contact me at the above-referenced number and address with any and all information you have regarding this request, as well as a written indication of its status.

Your attention to this matter is greatly appreciated.

Sincerely,

Jeffrey P. Wriston
General Counsel

c: Mr. Michael Buckley
Mr. John Magnatti
Mr. James Lee Witt
Mr. David DeCourcy
Mr. Charles Steele

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Federal Emergency Management Agency

Washington, D.C. 20472

OCT 02 1996

The Honorable Dave Sturdezant
Chairman, Clark County
Board of Commissioners
P.O. Box 5000
Vancouver, Washington 98666-5000

IN REPLY REFER TO:
Case No.: 96-10-218P
Community: Clark County, Washington
Community No.: 530024

Dear Mr. Sturdezant:

This responds to a request for a revision to the effective Flood Insurance Study (FIS) and National Flood Insurance Program map for your community. Specifically, this responds to a letter dated July 3, 1996, from Mr. Jeffrey B. Bradley, Ph.D., P.E., Chief Executive Officer, WEST Consultants, Inc., regarding the effective Flood Insurance Rate Map (FIRM) for the unincorporated areas of Clark County, Washington, dated May 2, 1991. Mr. Bradley requested that we revise the FIRM to modify the Special Flood Hazard Area (SFHA) along the East Fork Lewis River from approximately 7.15 miles upstream to approximately 9.79 miles upstream of its confluence with the Lewis River. The SFHA is the area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood).

With his letter, Mr. Bradley submitted printouts of the input and output files of the effective HEC-2 hydraulic computer model; cross section plots; and copies of Flood Profile Panels 29P, 30P, and 31P and the Floodway Data Table for the East Fork Lewis River from the effective FIS report dated May 2, 1991. He also submitted the following: Sheets 3 and 4 of 5 of the topographic maps, entitled "East Fork Lewis River State S.F.H.I. Report," prepared by the U.S. Army Corps of Engineers, Portland District, and dated February 1975; and Sheets 3 and 4 of 5 of the plan profile sheets, entitled "Flood Plain Information, East Fork Lewis River, Wash., Flooded Areas and Water Surface Profiles," prepared by Jordan/Avent & Associates and dated December 1977, revised February 1980.

We reviewed the submitted information and the flood data used to prepare the effective FIRM, and we have determined that we cannot revise the FIRM as requested at this time. The submitted computer model and topographic maps were used in conjunction with historic flooding information to develop the flood hazard information shown on the effective FIRM. The floodplain boundary delineations shown on the maps submitted by WEST Consultants differ substantially from the floodplain boundary delineations shown on the effective FIRM. We believe those differences show how difficult it is to precisely determine the flow paths and floodplain boundaries in areas where portions of the floodflow break away from and then re-enter the main flow path, as is the nature of the flow during the base flood event along this reach of the East Fork Lewis River.

Once the water-surface elevations are computed, the floodplain mapping is usually accomplished in one step. The floodplain boundaries are delineated using the water-surface elevations determined at cross sections aligned perpendicular to the direction of flow; between cross sections, the floodplain boundaries are interpolated using topographic maps.

However, for situations in which floodwater is not contained within a floodplain adjacent to the channel, additional steps are necessary to determine the floodplain boundaries. In areas where the computed (or interpolated) water-surface elevation is higher than the ground elevations adjacent to the channel, floodwater may break out from the main channel. The floodwater will continue to break out from the main channel and enter the overbank areas until the floodwater either re-enters the main channel at some point downstream or encounters ground at an elevation at least as high as the water-surface elevation at the breakout point. In such situations, it is unlikely that the main and the breakout flows would result in the same elevation at a

given cross section. Therefore, plotting the floodplain boundaries in the main channel and overbank areas based on the computed water-surface elevations is only the first step in mapping the floodplain boundaries.

The SFHA shown on the effective FIRM was developed by studying the local topography to determine the flooding situation in each breakout area. This information was augmented by local knowledge of historic flooding events. The proposed floodplain boundaries along the main flow path and breakout flows were mapped using the water-surface elevations calculated from the HEC-2 model. Thus, the analysis submitted by WEST did not proceed past the initial step of mapping the floodplain boundaries based on the computed water-surface elevations.

The submitted mapping indicates several overflows do not re-enter the main floodplain; instead, these overflows create ponded areas adjacent to the main floodplain. The elevations used to map those ponded areas decrease within the area delineated, indicating that floodwater would be flowing rather than ponded. Because both situations cannot be true, we cannot revise the FIRM as requested.

If you have any questions regarding this matter, please contact Mr. Karl Mohr of my staff in Washington, DC, either by telephone at (202) 646-2770 or by facsimile at (202) 646-4596.

Sincerely,

Michael K. Buckley, P.E., Chief
Hazard Identification Branch
Mitigation Directorate

cc: Mr. John Milne
Clark County Planning Department

Mr. Lawrence Basich, P.E.
Federal Emergency Management Agency, Region X

Mr. Jeffrey B. Bradley, Ph.D., P.E.
Chief Executive Officer
WEST Consultants, Inc.

Mr. Jeffrey P. Wriston
General Counsel
Pacific Rock Environmental Enhancement Group

Mr. David T. McDonald, P.C.
Courtroom Lawyer

DUPLICATE

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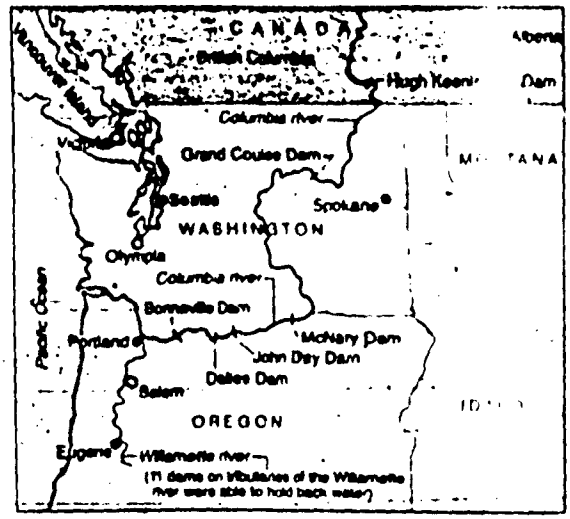
The Associated Press

Volunteers, from left, Jeff Dotter, Mark Lewis and Steve Johnson load relief supplies in Beaverton, Ore., Sunday for the flood-isolated city of Vernonia in northwestern Oregon.

Dams play crucial role in fight

- Officials say Army Corp of Engineers saved region from worse flooding by manipulating flow of water over dams



PORTLAND (AP) — In windowless offices eight blocks from the Willamette River seawall, a few men and women saved downtown Portland from flooding.

It was a delicate balancing act that included careful calculations and international negotiations.

A timely end to the rain didn't hurt, either. But state emergency officials say that without the work of the Army Corps of Engineers, Northwest flooding would have been much, much worse.

"We're glad they're there," said Tom Worden, spokesman for Oregon's emergency management office. "It could have been a terrible nightmare for Portland if those dams weren't there."

The corps has concluded that without its manipulation of the more than 60 dams in the Willamette and Columbia river systems, dozens of downtown Portland blocks would have been flooded.

The changing Willamette would have rolled 8 to 8 feet over the seawall, the agency said. In Eugene, the river would have crested 9 feet higher than it did. In Salem, 7 feet.

Jeff Hanson, chief of the reservoir regulation unit for the corps' North Pacific Division, never saw the result of his work first-hand.

"It's a funny thing," he said. "I come to work in the dark. I go home in the dark. I'm sitting here all day tossing numbers and making decisions. I'm looking at control points. The closest I've come to seeing the seawall is the picture I've got on the wall of the 1964 flood."

The corps usually wins no popularity contests, especially among environmentalists who resent the dams' impact on fish runs. Last week, it was the target of unfounded rumors it was releasing water from its dams, worsening the flooding.

Today, plenty of Northwesterners are dam lovers.

When the week began, the corps had already begun releasing water from its Columbia system to make room for spring runoff. Then came the forecasts for rain.

Heavy rain.

To deal with the incoming water, the corps asked BC Hydro in British Columbia to cut back its own seasonal release from Hugh Keenleyside Dam in Canada, so the reservoir behind Grand Coulee Dam 180 miles downriver could be lowered.

The water rushing through Grand Coulee, operated by the U.S. Bureau of Reclamation, was cut back from 160,000 cubic feet per second to 50,000.

This caused a problem for the Bonneville Power Administration, said Cindy Henriksen, chief of the corps' reservoir control center. With some arm twisting, the BPA agreed to be enough power elsewhere to make up for the loss at Grand Coulee, she said.

Then attention turned to the public utilities that operate the dams on the mid Columbia in central Washington. They, too, were persuaded to cut back their flow, even though it cost them money.

Portland, Salem conserve water

PORTLAND (AP) — Portland and Salem residents cut back on water consumption over the weekend, heading off problems created by cloudiness in water from the cities' main sources.

Water use typically increases on Mondays and officials in both cities were urging residents to continue conserving water.

In Portland, officials said the city's main source of water from Bull Run reservoirs was beginning to clear and could be used by later today or Tuesday. A ban remains on outdoor use of water.

Those driven from ... tuned to Portland ... and heard the stories ... Portland's downtown ... and affluent flooded ... miles to the southeast.

Their own misery ... lived.

"We listened to the r... pickup and nobody ... said Tami Bellingham ... from Birkenfeld.

"We felt lost."

The rivers and stre... the Northwest contin... slow retreat today, leav... a dispiriting trail ... destruction. The death... the floods and mudslid... gon, Washington, Idaho ... tana stood at seven.

As they waited for ... remember them, residen... ran out of food, lau... patience.

On Sunday, they were ... up, helping their neig... welcoming the Nation... and other relief wor... they finally came.

The day was brilliant ... felt like spring. The bri... shimmered, the mud ... ding and clothing was ... on lawns to dry.

John Fitch, who found ... Mist Stop in Septemb... told people in town that ... happen.

And, he said, the ... believe him.

"There've been peopl... lived here all their lives ... think it was coming," sa... who stood around smoke... group of townspeople.

Jeff and Tami Belling... beyond tears.

The couple had mov... their children into a 12 ... trailer on high ground. ... rescued neighbors in a ... and helped clear a highw... they watched as thei... turned to the ground.

Up to 200 homes al... Nehalem River, which r... Birkenfeld and Mist ... destroyed or badly damag... flood, one official estimate...

A few homes still wer... Sunday, but most were dr...

"The water went do... somebody pulled the plu... Bob Buechol, who liv... miles South of Mist.

"Luckily, we're just st... the ocean rather than g... the Willamette or Columbi... said. "It went out as fast as ... in."

Locals who'd lived h... decades scoffed when wa... the flood had come. Now m... lost the things most dear t... including photos, clothi... china.

"It's just devastating, es... the old people out he... said. "It's all they got."

Just down the road in Ve... the call went out for supplie... ing from baby food to und...

A 17-head ...

Sunday's winning lottery numbers:

Washington Daily Game 1-9-1
Keno 2-8-12-13-18-19-20-25-27-28-32-43-48-52-60-62-63-67-79-80

TV highlight:

Three-part miniseries, "Last of the Czars," looks at the

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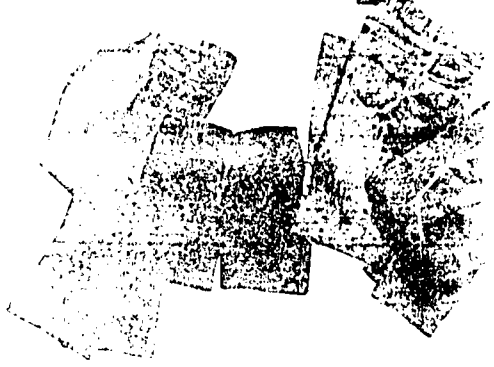
Family D



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DETERMINATION OF SIGNIFICANCE AND REQUEST FOR PUBLIC COMMENT ON SCOPE OF ENVIRONMENTAL IMPACT STATEMENT

Description of Proposal: Site Plan Review #96-092 (Daybreak Resource Project): The proposal requests approvals for the operation of a surface mine to extract sand and gravel on approximately 20 acres in the AG-20-S (Agriculture with Surface Mining Combining District). The proposed project would occur in 3 to 6 acres phases over a period of 3 to 6 years. The project also includes the placement of a conveyor system to transfer mined material from the mining site to an existing rock crushing and processing operation adjacent to the subject site.

Proponent: J.L. Storedahl and Sons, Inc., 2233 Talley Way, Kelso, WA 98626

Location of Proposal: South of NE J.A. Moore Road and West of NE 61st Avenue, at approximately the 28000 block of NE 61st Avenue. Tax lot 107 (225047), located in the southwest quarter of Section 18, Township 4 North, Range 2 East, of the Willamette Meridian.

Lead Agency: Clark County Department of Community Development

EIS Required. The lead agency initially determined that this proposal, as mitigated, was unlikely to have significant adverse impacts on the environment. In light of comments received on the initial threshold Mitigated Determination of Nonsignificance (MDNS) and after a thorough review of the proposal, the lead agency has now determined that this proposal is likely to have a significant adverse impact on the environment. The initial threshold Mitigated Determination of Nonsignificance dated April 4, 1997, is hereby withdrawn. An environmental impact statement (EIS) is required under RCW 43.21C.030(2)(c) and will be prepared. Materials indicating likely environmental impacts may be reviewed at our offices.

The lead agency has identified the following areas for discussion in the EIS: groundwater impacts, surface water and floodplain impacts, fish and wildlife impacts; to include an evaluation of the cumulative impacts of past mining activity, the current proposal, and other potential mining activity on the subject reach of the East Fork of the Lewis River.

Scoping. Agencies, affected tribes, and members of the public are invited to comment on the scope of the EIS. You may comment on alternative sites, mitigation measures, methodology, and potentially significant adverse impacts. The method and deadline for giving us your comments is:

Written and oral comments will be accepted on the scope of the Environmental Impact Statement. The deadline for receiving comments on the scope of the EIS is **Monday, June 23, 1997**.

Responsible Official: Michael V. Butts
Position/Title: Current Planning Manager
Address: 1408 Franklin Street, P.O. Box 9810, Vancouver, WA 98666-9810
Phone: (360) 699-2375, ext. 4112

Staff Contact: Gary T. Fish, Planner II
Phone: (360) 699-2375, ext. 4968
Date of Publication: June 2, 1997

Signature: Michael V. Butts

Appeals: An appeal may only be made by the proposal applicant or sponsor, and shall be filed within fourteen (14) calendar days of the issuance of the EIS/scoping notice. The appeal shall be heard and decided by a hearing examiner appointed pursuant to Chapter 2.51 of the Clark County Code, whose decision shall be final and not subject to further administrative appeal.

ADDENDUM TO ENVIRONMENTAL CHECKLIST REVIEW AND WITHDRAWAL OF MITIGATED DETERMINATION OF NONSIGNIFICANCE

Description of Proposal: Site Plan Review #96-092 (Daybreak Resource Project): The proposal requests approvals for the operation of a surface mine to extract sand and gravel on approximately 20 acres in the AG-20-S (Agriculture with Surface Mining Combining District). The proposed project would occur in phases of 3 to 6 acres over a period of 3 to 6 years. The project also includes the placement of a conveyor system to transfer mined material from the mining site to an existing rock crushing and processing operation adjacent to the subject site.

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Lead Agency: Clark County Department of Community Development

Environmental Elements & Comment Review

Comments on the Mitigated Determination of Nonsignificance (MDNS) issued April 4, 1997, were received from the Southwest Washington Health District, Washington State Department of Natural Resources (DNR), Washington State Department of Ecology (DOE), John Dentler of Perkins Coie (representing J.L. Storedahl and Sons, Inc.), and David McDonald (representing Friends of the East Fork), in addition to written and verbal comments from several concerned members of the public and neighbors.

Comments received from DOE asked that the County withdraw the MDNS for this 20-acre proposal and include this proposal as part of the larger surface mining proposal that has been applied for with the County and for which an EIS is under preparation {Reference attachment #1 - DOE comment letter from Kim Van Zwalenburg, dated April 18, 1997.}

The Department of Natural Resources comment letter asked that the current proposal be evaluated in terms of the larger 349-acre permit area, which DNR has interpreted to be the existing permitted surface mining area for the Woodside property. DNR's comment letter states that "all of the projects related to mining on the entire 349-acre permitted area are physically and functionally linked, and the environmental effects of all these activities should be assessed in one project document." The comment letter goes on to request that "a thorough Hydrogeologic Report should be prepared. The report should assess all effects and potential effects of mining activities occurring on this site (349 acres)." {Reference attachment #2 - DNR comment letter from Rex Hapala, dated April 18, 1997.}

Additional clarification and technical information from the Department of Natural Resources was requested by the County and was received on May 15, 1997. The comment letter

addressed four potentially significant adverse impacts as perceived by DNR: avulsion, subaqueous habitat modification, property loss, and the cumulative impacts of multiple excavations along the subject reach of the East Fork of the Lewis River. {Reference attachment #3 - DNR comment and clarification letter from Bill Lingley, dated May 15, 1997.}

Comments received from the Southwest Washington Health District addressed potential ground water impacts and dewatering impacts to wells producing from the shallow gravel aquifer, and flooding impacts resulting from breaching into mining pits and increased volatility in urban watersheds, river meander. The letter requested a multi-agency review of the proposal by experienced surface mining professionals. {Reference attachment #4 - SWHD comment letter from Reuel F. Emery, dated May 6, 1997.}

Comments received from David McDonald and Kevin Coulton, hydrology consultant (Philip Williams & Associates, Ltd., Troutdale, OR), on behalf of Friends of the East Fork, addressed multiple concerns with the SEPA review and threshold MDNS. McDonald's letter called for additional review and mitigation regarding noise, dust control, petroleum spills, bonding of reclamation, and compatibility of the proposal with wildlife enhancement projects. It also addressed wetland and surface water impacts, and cumulative impacts of past mining activity, the current proposal, and other potential mining activity in the subject reach of the East Fork. Coulton's letter addressed floodplain and river hydraulic connections, flood water and groundwater storage, river meander, floodplain protection and mining buffers, pit reclamation, the need for a comprehensive aggregate resources management plan, groundwater monitoring and analyses, seasonal water table indication, and recent floodplain observations of inundated areas (including the subject area). {Reference attachment #5 - comment letter(s) from David McDonald & Kevin Coulton, dated May 6, 1997.}

Comments were received on nearly all elements of the County's MDNS review and the threshold determination. The environmental elements of the checklist review in which most of the potentially significant adverse impacts were addressed in comments received were earth, water, animals, and land and shoreline use. Among the probable significant adverse impacts discussed were river meander and the potential for avulsion or river capture, including potential property losses; channel diversion and impacts to aquatic and riparian habitat from breaching of mining pits by flood waters or the river channel; impacts to the integrity of the floodplain from adjacent steep mining pit slopes and narrow mining buffers, including the stability of pit slopes; potential dewatering of nearby shallow drinking water wells; and impacts to groundwater quality and storage capability from the mining operation, including the hydraulic connection of local groundwater to the East Fork of the Lewis River.

Many of these impacts were discussed in the original checklist review, but it was concluded that they could be adequately mitigated or were unlikely to occur. The applicant has supplied

floodplain and hydrologic studies, and other modifications to the proposal and information regarding potential mitigation, that indicate that any potentially significant adverse impacts either do not exist or can be mitigated.

Comments received on the MDNS have introduced new information and questioned the validity and scope of many of the studies submitted by the applicant studies. The comments also questioned the probable successful implementation and extent of required and suggested mitigation measures, and pointed out the need for an evaluation of the cumulative impacts of past, present, and potential mining activity on this reach of the East Fork. The County has conducted a thorough evaluation of the applicant's studies and submittals in light of comments received, a review of impacts and information addressed in the SEPA comments, and the best available information on probable significant adverse impacts. Agency and public comments have raised many questions concerning the County's review and information submitted by the applicant.

Based on the evaluation of comments, questions, and information received in response to the MDNS, Clark County has determined that sufficient information exists to support the identification of significant adverse impacts by the project in the earth, water, animals, and land and shoreline use elements of the checklist review. Many questions were raised in the environmental review and commenting process, and the need for additional study has been thoroughly discussed. County staff has concluded that there is a need for additional evaluation and study in the following areas: groundwater impacts, surface water and floodplain impacts, fish and wildlife impacts; to include an evaluation of the cumulative impacts of past mining activity, the current proposal, and other potential mining activity on the subject reach of the East Fork of the Lewis River.

Therefore, Clark County, as lead SEPA agency, has reached a decision to withdraw the Mitigated Determination of Nonsignificance issued on April 4, 1997, to issue a Determination of Significance for the project, and to require the preparation of an environmental impact statement.

Attachments:

1- DOE comment letter from Kim Van Zwalenburg, dated April 18, 1997
2- DNR comment letter from Rex Hapala, dated April 18, 1997
3- DNR comment and clarification letter from Bill Lingley, dated May 15, 1997
4- SWHD comment letter from Reuel F. Emery, dated May 6, 1997
5- Comment letter(s) from David McDonald & Kevin Coulton for Friends of the East Fork, dated May 6, 1997

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FAX NUMBER (360) 699-2011

FAX COVER SHEET

DATE: 4/18/97	TIME:	# OF PAGES 3
TO: Michael Butts	Gary Fish	
FROM: Kim Van Zwalenburg		
REMARKS: Daybreak Resource Sepa Comments		

Washington Department Of Ecology
Southwest Regional Office
300 Desmond Drive SE
P.O. Box 47775
Olympia, WA 98504-7775
Phone: (360) 407-6300
FAX: (360) 407-6305

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CLARK COUNTY
Plan & Dev. Review

Gary - Michelle

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CLARK COUNTY
Plan. & Dev. Review

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6700

April 18, 1997

Mr. Michael V. Butts
Clark County Community
Development Department
P.O. Box 9810
Vancouver, WA 98666-9810

Dear Mr. Butts:

RE: SPR #96-092/MDNS for Daybreak Resource Project

Thank you for the opportunity to comment on the MDNS issued for the Storedahl and Sons Daybreak Resource Project on the East Fork of the Lewis River. I have the following comments and concerns.

1. The Sepa checklist was incomplete and inadequate. The only attached site plan was titled "Structures/Operational Plan" Fig. 4. A vicinity map is lacking, as is any information on where the 100 year floodplain is located, the location of the proposed conveyor system, the location of the "offsite" processing plant, and information about where material mined from this proposed site will be stockpiled.

2. It is clear that this site was once, and perhaps still is, part of a larger proposal to mine over 300 acres, much of which is contained within the 100 year floodplain of the Lewis River. Given the fact that there is apparently a draft EIS in process, it is not clear what the basis is for segregating this portion of the proposal out and considering it as a separate proposal. This appears to be a piecemeal approach to allow surface mining to occur within proximity to the East Fork of the Lewis River without the appropriate environmental analysis of the overall impacts to the river system. It also conveniently appears to remove the requirement for a shoreline permit.

3. The Department of Ecology disagrees with the County's determination that a shoreline permit will not be required for this proposal. Mining in Rural shoreline environments requires a Shoreline Conditional Use Permit. There are no exemptions in the implementing regulations for activities which require a Conditional Use Permit. WAC 173-27-040 (formerly WAC 173-14-040) sets forth the criteria for those specific developments which may be granted exemption from the substantial development permit process. Exemptions are to be construed narrowly.

WAC 173-27-040(b) states in part that a "development or use that is listed as a conditional use pursuant to the local master program or is an unlisted use, must obtain a conditional use permit even though the development or use does not require a substantial development permit." (Emphasis added)

The proposal to place a conveyor system into the one hundred year floodplain of the Lewis River requires a Shoreline Conditional Use Permit.

4. The Department disagrees with the County's determination that the conveyor belt is considered equipment and not a structure. "Structure" is defined in WAC 173-27-030(15) as follows:

> "Structure" means a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels;

"Development" is defined, in part, in WAC 173-27-030(6) and RCW 90.58.030(3)(d) as "a use consisting of the construction or exterior alteration of structures" (emphasis added). The conveyor belt is clearly a "piece of work artificially built or composed of parts joined together in some definite manner".

The proposal to place a conveyor system into the one hundred year floodplain of the Lewis River requires a Shoreline Substantial Development Permit.

5. The Sepa checklist neglects to point out that processing of the material mined from this site will occur within the 100 year floodplain of the Lewis River. Active, unpermitted stockpiles are within approximately 100 feet of the Ordinary High Water Mark. In the absence of any information to the contrary, the Department assumes material from this proposal will be stockpiled within the 100 year floodplain of the Lewis River. A shoreline substantial development permit and shoreline conditional use permit are required for this activity.

6. In the absence of information, the Department is skeptical that mining can occur on this site that stays wholly outside the 100 year floodplain. A 20 foot buffer is minimal, and there is no information provided to show that it will adequately protect the 100 year floodplain and the Lewis River system from impacts associated with this proposal.

7. The Department strongly urges the County to withdraw the Mitigated Determination of Nonsignificance for this proposal and include this proposal as part of the larger proposed surface mine operation which is going through the EIS process.

8. The Lewis River is identified as a Shoreline of Statewide Significance under the Shoreline Management Act. As such, the Legislature has set forth use preferences in RCW 90.58 (which states in part) that recognize and protect the state-wide interest over local interest; preserves the natural character of the shoreline; results in long term over short term benefit; and protects the resources and ecology of the shoreline. The Sepa checklist lacks any discussion of how this proposal meets these goals.

9. The effort to piecemeal this project is inconsistent with the policies and regulations of the Shoreline Management Act and the Clark County Shoreline Master Program.

10. Any wells proposed to be abandoned must meet the minimum standards set forth in WAC 173-160 and must be done by a licensed well driller. The wells must be sealed below final grade due to the potential for contamination of the aquifer if the wells are deeper than the depth of the proposed mining operation.

If you have any questions regarding comments 1-9, please contact me at (360) 407-6520. If you have any questions regarding comment 10, please contact Chris Anderson at (360) 407-0272.

Sincerely,

Kim Van Zwalenburg

Kim Van Zwalenburg
Shoreline Specialist
Shorelands and Water
Resources Program

KVZ:cl

cc: Abbe White, Ecology
Scott Morrison, Ecology
Rex Hapala, Department of Natural Resources

Mary - Michelle
Brian

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

April 18, 1997

RECEIVED

APR 21 1997

Clark County
Community Dev/Records

Clark County Planning
Attn: SEPA Coordinator
PO Box 9810
Vancouver, WA 98666-9810

SEPA No. 011696

Dear Mr. Butts:

Thank you for the opportunity to comment on the J.L. Storedahl & Sons "Site plan review and approval to operate a surface mine for the purpose of extracting sand and gravel on approximately 20 acres (SPR #96-092/Daybreak Resource Project). The proposal also includes the placement of an electrically operated conveyor from the mining site to an existing rock crusher on an adjacent site." This site is known to the Department more commonly as the "Daybreak Pit" (#70-010139) with Ray & Merry Woodside dba Sammamish Farms, the permit holder and J.L. Storedahl & Sons, the operator.

I have been asked to submit these comments on behalf of both DNR's Southwest Region and the Geology and Earth Resources Division. Due to time constraints, we have only touched a few of the many issues we believe need to be evaluated in a more detailed manner.

The first and most obvious comment that we have is that a Reclamation Plan will need to be submitted to the Department for review. The revised/modified Reclamation Plan must meet the requirements and standards set forth in RCW 78.44 and WAC 332-18. The Reclamation Plan needs to include all the areas that **have been mined** and that are **to be mined**. The SEPA Checklist indicates that "An application for a Surface Mining Reclamation Permit (Form SM-2) has been submitted to the Department of Natural Resources for this parcel." An application was submitted by the applicant but returned for its incompleteness on November 18, 1996 (See Attached Letter). In addition, on January 23, 1997, the Department reaffirmed that any reclamation plan submitted must be for the entire permit area and not portions of it (See Attached Letter). Since this issue is not addressed in documentation supporting the MDNS, we believe it should be treated as new information.

The second obvious issue concerns the interrelationship of the 20 acre parcel at issue, and the remaining adjoining acreage at the mine site. The Department has interpreted the Woodside's existing surface mining permitted area to be the full 349 acres, part of which is the proposed 2 acre parcel. As noted, in the Background section of the Draft Site Plan Review, Storedahl and the Woodsides have been in the process of developing their full plans for the 349 acre permitted area since 1991.

The pending proposal to mine 20 acres is clearly linked with other mining and mine-related activities on the adjoining 329 acres that have occurred in the past, will occur under this proposal, and are planned in terms of future proposals. First, this proposal clearly involves the movement and processing of tons of material through and on the floodplain, to the existing crusher, scale house, and stockpile area used for the prior mining activities. The impacts of these and other parts of the facility are not being considered. Mining is an all inclusive issue and by leaving that part of the project out, it would appear that some extremely important environmental issues are being ignored (noise, dust, surface and ground water, transportation, etc.). Shouldn't the effects of the reclamation and post-mining condition of these adjoining areas be considered in the context of the pending proposal to mine 20 more acres at the site? It would appear that the scope of the project should be all the areas where mining and mining related activities have occurred and will occur.

Second, more mining of the adjoining areas is clearly contemplated by the applicants. In the SEPA checklist, page two, question #7 (addressing plans for future additions, expansion, or further activity "connected" with this proposal), the applicant has affirmatively indicated that they plan to mine an additional adjacent 40 acre parcel. Is there any reason why the environmental review of these two linked proposals should be considered in this piecemeal fashion? The Department believes that <u>all</u> of the projects related to mining on the <u>entire</u> 349 acre permitted area are physically and functionally linked, and the environmental effects of all these activities should be assessed in one project document.

We have included three key definitions from the Washington Surface Mining Act, Chapter 78.44 RCW that may be of use when trying to better understand how the Department interprets mining operations.

> RCW 78.44.031(5) "Disturbed area" means any place where activities clearly in preparation for, or during, surface mining have physically disrupted, covered, compacted, moved, or otherwise altered the characteristics of soil, bedrock, vegetation, or topography that existed prior to such activity. Disturbed areas may include but are not limited to: Working faces, water bodies created by mine-related excavation, pit floors, the land beneath processing plant and stock pile sites, spoil pile sites, and equipment staging areas.
>
> RCW 78.44.031(8) "Operations" means all mine-related activities, exclusive of reclamation, that include, but are not limited to activities that affect noise generation, air quality, surface and ground water quality, quantity, and flow, glare, pollution, traffic safety, ground vibrations, and/or significant or substantial impacts commonly regulated under provisions of land use or other permits of local government and local ordinances, or other state laws.
>
> Operations specifically include:
>
> (a) The mining or extraction of rock, stone, gravel, sand, earth, and other minerals;
>
> (b) Blasting, equipment maintenance, sorting, crushing, and loading;
>
> (c) On-site mineral processing including asphalt or concrete batching, concrete recycling, and other aggregate recycling;
>
> (d) Transporting minerals to and from the mine, on site road maintenance, road maintenance for roads used extensively for surface mining activities, traffic safety, and traffic control.
>
> RCW 78.44.031(11) "Reclamation" means rehabilitation for the appropriate future use of disturbed areas resulting from surface mining including areas under associated mineral processing equipment and areas under stockpiled materials.

Clark County has indicated that the existing processing plant and stockpile area is pre-existing or "grandfathered" and thus does not need a Shorelines Permit. The issue of "grandfathering" of the existing processing area is questionable. On April 15, 1991, the DNR sent a letter to the Department of Ecology about this issue (See Attached Letter). The response from the Department of Ecology stated that *"There should be no grandfathering of the older mines, despite the fact that they may have pre-existed the Shoreline Management Act..."* (See Attached Letter). In addition, the determination not to require a Shorelines Permit for the conveyor is also questionable.

A major question that is not addressed and should be considered is that the excavation of this site (20 acres and 45 feet deep) directly adjacent to the floodplain may have the physical and legal effect of changing the location of the floodplain line. We believe that these issues need to be explored in the environmental review of this project.

One of the concerns that the Department has had for numerous years has been the issue of river avulsion. Section 3 of the Draft Site Plan Review Staff Report and Determination has some conflicting information about the potential for the river to invade the site. According to Dr. Bradley *"avulsion of the main channel of the East Fork of the Lewis River into the subject mining area is highly improbable."* Continued on the next page, G. Mathias Kondolf, Ph.D., indicates that *"the river does have the potential and will most likely flow into the proposed or the existing adjacent mining pits in the future (Kondolf, pp.5)."* We were unable to locate Dr. Bradley's January 9, 1997 letter/report in Response to County Concerns Regarding Effects on Floodplain and Avulsion or Dr. Kondolf's April 11, 1996 report on Effects of Aggregate Mining on River Floodplains. It is interesting to note that Dr. Bradley indicates that since 1935 the river has never approached within 1,300 feet of the site and has consistently moved to the south, away from the project site. It should be pointed out that from circa 1854 to circa 1937 the river showed classic features of a braided stream/channel. By 1937 or so, the braided stream/channel is replaced with a single channel that is probably unstable during major floods. This issue is by far the largest concern but little data or conclusions are provided to support the MDNS. The only mitigation measures identified are to move the conveyor if flooding threatens and seasonal drainage through the berm.

Some of the SEPA Mitigation measures identified are not clear:

-Number 1 of the SEPA Mitigation says no mining will occur as indicated on the site plan. No site plan was attached. What is meant when the word *"threatened"* is used? Who will make that determination? Does this mean the floodplain no longer functions as a floodplain? Avulsion is imminent or likely? This is vague. Is there a study that discusses this issue and defines thresholds?

-Number 4 of the SEPA Mitigation says that *"The conveyor shall be removed if flooding threatens to enter the location of the conveyor."* How and who will make the determination to move the conveyor?

-Number 5 of the SEPA Mitigation talks about expected flows into the mining site. What size of an event will it be looking at? How will these effect the channel morphology? Will avulsion result? Is new diking required?

-Number 6 of the SEPA Mitigation says mining shall not occur into the Troutdale Formation. Have test holes been drilled on the site to locate this formation and determine its exact location and depth throughout the site?

-Number 8 of the SEPA Mitigation shows that a 10 foot high berm will be built for noise. What specifications is it going to be constructed too? How long will this and other berms be in place? The material stored in berms plays a key role in reclamation, so this is of interest to the Department.

It is our opinion that a thorough Hydrogeologic Report should be required. That report should assess all effects and potential effects of mining activities occurring on this site (349 acres). Additionally, the Department's position is that a reclamation plan must be submitted for the areas where mining and mining related activities have occurred and will occur.

Once again, thank you for allowing us the opportunity to comment on this proposal. If you have any questions please feel free to call or write me at our Southwest Region office (360)577-2025.

Sincerely,

Rex J. Hapala
Geologist

Enclosures

c: SEPA Center
SW SEPA File
Jan Gano, SW Region Manager
Neil Smith, SW Assistant Region Manager
Lloyd Handlos, District Manager
Phil Ferester, Assistant Attorney General
Kim Van Zwalenburg, Department of Ecology
Scott Morrison, Department of Ecology
Brian Cowan, Department of Fish and Wildlife
Geology & Earth Resources Division
File #10139
r f.

WASHINGTON STATE DEPARTMENT OF
Natural Resources

BRIAN BOYLE
Commissioner of Public Lands

Division of Geology & Earth Resources
Rowesix Bldg. 1, MS.PY-12
4224 6th Ave. SE
Lacey, WA 98503
(206) 459-6372

April 15, 1991

Tom Mark
Department of Ecology
Shorelands Management Section
Mailstop PV-11
Lacey, WA 98504

Subject: Grand fathering of the Shorelines Management Act

Dear Mr. Mark:

I have a question regarding the "grandfathering" of surface mines along shorelines. As an example, the East Fork of the Lewis River in Clark County has several sand and gravel mines located on the 100 year flood plain and also within 200 feet of the river. The active surface mine permits are:

SM Permit	Name	Location	Issued	Acres
11236	J.L Storedahl	Sec.13,24 T4N R1E	1974	70
10139	Ray Woodside	Sec.13,19,18,24 T4N R1,2E	1971	300+
10389	Clark County	Sec.19 T4N R2E	1972	100

There are currently two new proposed surface mines adjacent to the above surface mine permits which will require shoreline permits according to Clark County. However, none of the older surface mine permits are required to have shoreline permits because Clark County has determined that the mines are "grandfathered".

The question is, don't all of the older surface mines need a shoreline permit as well as the newer ones? If all of the above mines need a shoreline permit it would be appropriate to inform Clark County as they seem confused about their jurisdiction.

As we understand it the Shoreline Management Act can provide the best master plan for the river, further development, and the past and future mining.

Thank you for your assistance and please do not hesitate to call if you have any questions regarding surface mines on the floodplain of the East Fork of the Lewis River.

Sincerely,

David K. Norman
Geologist

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WASHINGTON CENTENNIAL

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

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April 26, 1991

Mr. David Norman
Department of Natural Resources
Division of Geology and Earth Resources
Mailstop PY-12
Olympia, WA 98504

Dear Mr. Norman:

You are correct in assuming that both old and new surface mines require shoreline permits. There should be no grandfathering of the older mines, despite the fact that they may have pre-existed the Shoreline Management Act, because any mining activities which may have been legal at the effective date of the Shoreline Management Act on June 1, 1971, were required to be permitted not later than June 1, 1973. The requirement to obtain permits for pre-existing developments is set out specifically by 90.58.140(10) RCW, which states:

> A permit shall not be required for any development on shorelines of the state included within a preliminary or final plat approved by the applicable state agency or local government before April 1, 1971, if: . . .
>
> (b) The development is completed within two years after June 1, 11. (Emphasis added.)

This requirement is reiterated by Ecology's implementing regulations at WAC 173-14-050, which exempt from permitting those substantial developments undertaken on the shorelines of the state prior to the effective date of the act "except . . . [w]here the development is not completed within two years after the effective date of the act." (Emphasis added.)

The surface mining is clearly an ongoing project, and as such requires a valid shoreline permit in order to continue operations lawfully. That mining operations constitute "development" under the Act is unquestioned, because the definition of development includes "dredging; drilling; dumping; filling; removal of any sand, gravel or minerals . . . ." 90.58.030(3)(d).

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

November 18, 1996

Virgil Barnett
J.L. Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

RE: Comments on September 26, 1996 Segment 2 & 3 Reclamation Plan for the Daybreak Mine (#70-010139)

Dear Mr. Barnett:

We have reviewed your most recent reclamation plan for the Daybreak Mine. It is extremely difficult to make a detailed list of the items that your reclamation plan is presently missing. I have tried to give a general list of the most obvious items below:

- A single/complete Application for Surface Mining Reclamation Permit (Form SM-2)
- A single/complete County or Municipality Approval for Surface Mining (Form SM-6)
- A single/complete Standard Reclamation Plan (Form SM-8A)
- A written narrative describing the proposed mining and reclamation scheme (RCW 78.44.091(1))
- River avulsion/flood plain issues not addressed (RCW 78.44.091(1)(i)(j))
- Topsoil/overburden management plans (RCW 78.44.091(1)(k))
- Cross-section maps (RCW 78.44.091(3))
- Maps that depict the entire permit boundary
- Maps as they relate to the flood plain (RCW 78.44.091(2)(a))
- Setbacks (RCW 78.44.121)
- The ponds presently do not show irregular shoreline configurations, sinuous bathymetry and shorelines, peninsulas, islands, etc. (RCW 78.44.141(4)(c)(iv))

It does not appear appropriate to split the proposal into different permits. As it stands, any reclamation plan submitted to the Department needs to be a single comprehensive plan for the whole permit area. Please note that due to the above needs the SEPA documents were not reviewed.

The Department can not approve the plan as it is presently submitted. I am returning the documents that you submitted.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

RECEIVED

April 26, 1991

Mr. David Norman
Department of Natural Resources
Division of Geology and Earth Resources
Mailstop PY-12
Olympia, WA 98504

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>
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The surface mining is clearly an ongoing project, and as such requires a valid shoreline permit in order to continue operations lawfully. That mining operations constitute "development" under the Act is unquestioned, because the definition of development includes "dredging; drilling; dumping; filling; removal of any sand, gravel or minerals . . . ." 90.58.030(3)(d).

Finally, Clark County's own Shoreline Master Program spells out that in areas that have shoreline environment designations of Urban, Rural, and Conservancy, mining is a Conditional Use, and thus requires a Conditional Use Permit to be a lawful activity. These three designations are the predominant environment designations on the East Fork of the Lewis River. In those areas with an environment designation of Natural, mining is prohibited completely.

If you should have additional concerns regarding this matter, please feel free to contact me at 438-7468.

Sincerely,

Bonnie S. Shorin
Legal Liaison
Shorelands and Coastal Zone
Management Program

BSS:del

cc: Rich Hines

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

November 18, 1996

Virgil Barnett
J.L. Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

RE: Comments on September 26, 1996 Segment 2 & 3 Reclamation Plan for the Daybreak Mine (#70-010139)

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- Cross-section maps (RCW 78.44.091(3))
- Maps that depict the entire permit boundary
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It does not appear appropriate to split the proposal into different permits. As it stands, any reclamation plan submitted to the Department needs to be a single comprehensive plan for the whole permit area. Please note that due to the above needs the SEPA documents were not reviewed.

The Department can not approve the plan as it is presently submitted. I am returning the documents that you submitted.

It would appear that it may be necessary to sit down and review your plan and the issues that were not addressed. With the holiday season close at hand and various other scheduling conflicts, please keep in mind that meetings may not be easily scheduled with short notice. If you wish to go in this direction please contact me at our Southwest Region office so that we may make the necessary arrangements.

Sincerely,

Rex J. Hapala
Geologist

c: Ray & Merry Woodside
Monty Anderson, Clark County
Rich Hines, Clark County
Phil Ferester, AAG
Neil Smith, RP&S Assistant Manager
Lloyd Handlos, District Manager
Dave Norman, Geology Division
File #10139
r.f.

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

January 23, 1997

Virgil Barnett
J.L. Storedahl and Sons, Inc.
2233 Talley Way
Kelso, WA 98626

Dear Mr. Barnett:

This is a follow up to my November 18, 1996 letter and additional conversations dealing with the Daybreak Pit on the East Fork of the Lewis River.

The Department has reviewed and considered your proposal(s) to mine both the 20 and 60 acre parcels that are within the existing 349 acre permit area (#70-010139). We have decided not to accept those applications. Our position is that we will not split the permit area. This is based on the agreement with the permit holder in 1990 that the reclamation plan that would be submitted would cover the entire permit area.

Sincerely,

Rex J. Hapala
Geologist

c: Ray & Merry Woodside, Permit Holder
John Dentler, J.L. Storedahl & Sons Legal Counsel
Monty Anderson, Clark County
Rich Hines, Clark County
Melissa Remick, Clark County
Brian Carrico, Clark County
Phil Ferester, Assistant Attorney General
Bill Lingley, Geology Division
Dave Norman, Geology Division
Jan Gano, SW Region Manager
Neil Smith, SW Assistant Region Manager
Lloyd Handlos, District Manager
File #10139
r.f.

WASHINGTON STATE DEPARTMENT OF
Natural Resources

F A C S I M I L E C O V E R L E T T E R

To:	Michael Betts	
	Telephone:	**FAX:** 360 699-2011
From:	**GEOLOGY** 1111 WASHINGTON ST SE PO BOX 47007 OLYMPIA WA 98504-7007	**Sender's Name:** Bill Lingley
	Telephone: (360) 902-1450	**FAX:** (360) 902-1785
Date: 5/19/97		**Time:** 11:00 am
Total number of pages (including cover sheet):		
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CLARK COUNTY
Plan & Dev. Review

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

May 15, 1997

Mr. Michael V. Butts
Clark County
Dept. of Community Development
1408 Franklin Street
P.O. Box 9810
Vancouver, WA 98666-9810

Fax: 360-699-2011

Re: Potential impacts of Storedahl & Sons expansion of the Woodside gravel mining operation at the Daybreak site, East Fork Lewis River, Permit No. 10139

Dear Mr. Butts:

I have been asked by our Southwest Regional office to provide additional technical information regarding the referenced proposal. This letter touches on potentials for adverse effects arising from avulsion, subaqueous habitat modification, property loss, and/or cumulative impacts of multiple excavations along this reach. The Department of Natural Resources believes that each of these four issues must be addressed in a thorough and credible manner prior to permitting additional excavation along this reach.

The proponent intends to continue mineral processing and other operations within the floodplain that may lead to adverse environmental impacts. We believe these impacts should be addressed through the Shorelines process. Additionally, these operations are not addressed in the existing reclamation plan. Consequently, the Department cannot allow continued mining in Permit 10139 without a revised reclamation plan for the entire site.

The proposed excavation will result in a deep lake separated from the 100-year floodplain by a weak gravel dike. Although the proponent contends that the river will not impinge on this deep lake in the foreseeable future, we disagree.

The present channel through the adjacent reach is unstable for three reasons:

- (1) Gravel and cobbles are deposited in this area because the channel gradient decreases from about 30-feet-per-mile to about 15-feet-per-mile, causing a reduction in river velocity and concomitant reduction in the ability of the river to move its coarse bedload. Deposition of these gravels and cobbles chokes the channel, thereby producing rapid channel shifts. In fact, some parts of this reach have moved laterally more than 600 feet since 1937.

- (2) Examination of the attached maps of the historical river channel (Collins, 1997; used with permission) reveals that, prior to 1937 (when the river was channelized), the East Fork consisted of multiple braided channels in the vicinity of the proposal. Similar braiding is the expected channel-pattern for this reach because: (a) its banks are made of gravel, (b) the overall gradient is moderately high, and (c) sediment transport rates appear to be high. A component of channel instability results from the East Fork's attempt to re-establish this braided morphology.

- (3) The river is currently pinned between moderately-deep mined excavations north and south of this reach.

Because the river has scrolled rapidly across its floodplain and because the floodplain has been, and is being, widened by localized erosion along it margins, it is unreasonable to assume that it would not enter the proposed at deep lake some time in the future. If the river enters the lake, avulsion may occur. The event might be similar to the avulsion that occurred in 1971 when the Yakima River entered a gravel pit located in a similar fluvial environment. In one night, the Yakima moved 1,960 feet laterally (Dunne and Leopold, 1978) and damaged a freeway right-of-way.

Armoring the margins of the floodplain adjacent to the mine could arrest northward migration of the river. However, such revetments tend to increase the energy of the river. Furthermore, when current is focused on these dikes during floods, it is "reflected" across the channel and causes increased erosion downstream.

If the river does enter the lake, the channel could avulse resulting in habitat modification and/or significant property loss. Two sets of unnatural factors would influence channel morphology in that instance:

(1) The river could find a shorter route to areas of lower elevation and abandon the old channel.

(2) The erosive power would be markedly increased because gravel and cobbles pushed by the current would drop out in the lake. The river would no longer dissipate energy by pushing gravel and cobbles because fewer rocks would be available downstream from the lake. Consequently, velocity below the lake would increase, causing increased erosion.

The foregoing discussion illustrates some effects that occur when a river enters a deep excavated lake. Studies of effects that took place when the Cowlitz River entered pits near Toledo may be used to examine impacts that occur when a river enters a shallow excavation. (There may be benefits from small-scale mining in some rivers such as establishment of winter-holds for steelhead fry and breaking up of hard-facing that can armor a river bottom and hinder spawning.)

The 1990 map of the East Fork floodplain illustrates the areal extent of previous mining along the subject reach. We believe that the cumulative impacts of these mines together with the proposal should be investigated to determine how much gravel removal can occur without lasting damage to the river. The East Fork lies somewhere on the continuum between a river with no mining and the Los Angeles River, where almost every pebble has been removed and the river is a lifeless flume. The point of no-return in the spectrum for the East Fork should be identified, if possible.

We hope that this additional information helps you to better understand the potential impacts of this proposal. It is for these reasons that the Department believes that the proposal needs to be investigated more thoroughly. We urge Clark County to consider the information contained in this letter as significant new information on this proposal's significant adverse impacts and to withdraw its MDNS.

Cordially,

William S. Lingley, Jr.
Assistant State Geologist

References:

Collins, Brian, 1997, Application of geomorphology to planning and assessment of riverine gravel removal in Washington. In Collins, Brian, Geology and Geomorphology of Stream Channels [short course materials] Brian Collins (Seattle, Wash.) 46 p. Copyright.

Dunne, Thomas; Leopold L. B., 1978, Water in environmental planning: W.H. Freeman and Company, 818. (See page 22.)

cc Neil Smith - DNR Southwest Region
Phil Ferester - Office of the Attorney General
Kim Van Walensburg & Scott Morrison - DOE

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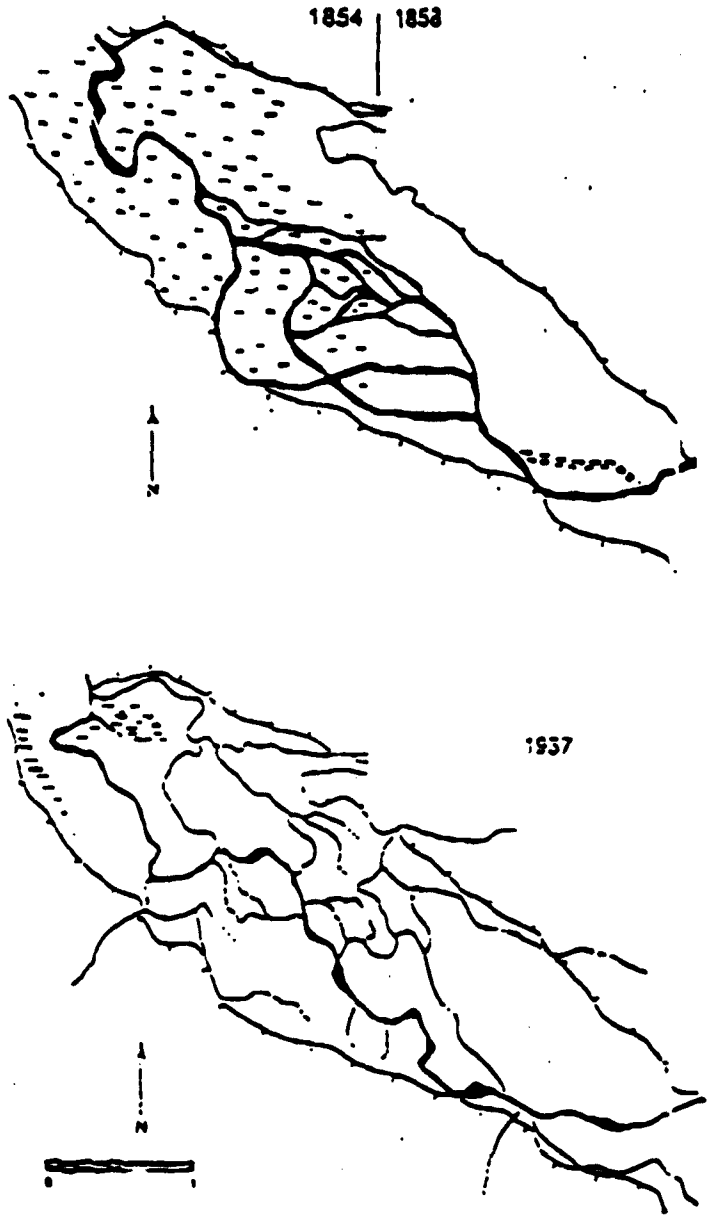

Figure 4. The East Fork Lewis River, from RM 6 to RM 10. River channel pattern s from maps, with year of aerial photographs or ground survey of map indicated. Scale shows one kilometer. Hatchured outline shows approximate edge of valley floor.

Page 6
Lingley to Butts

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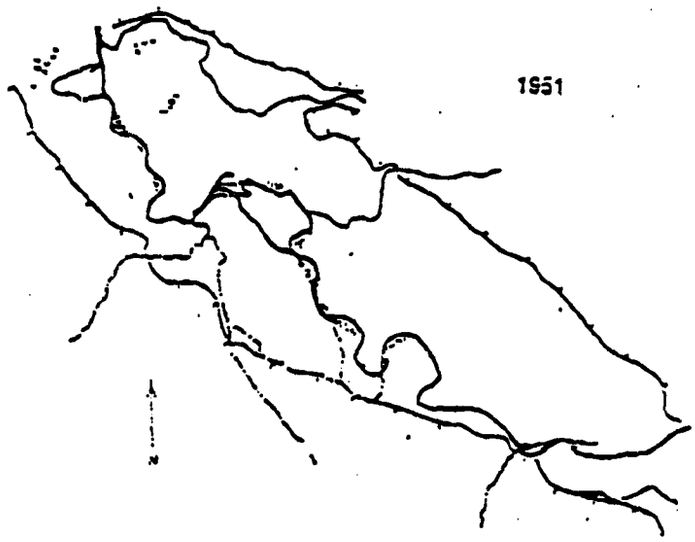

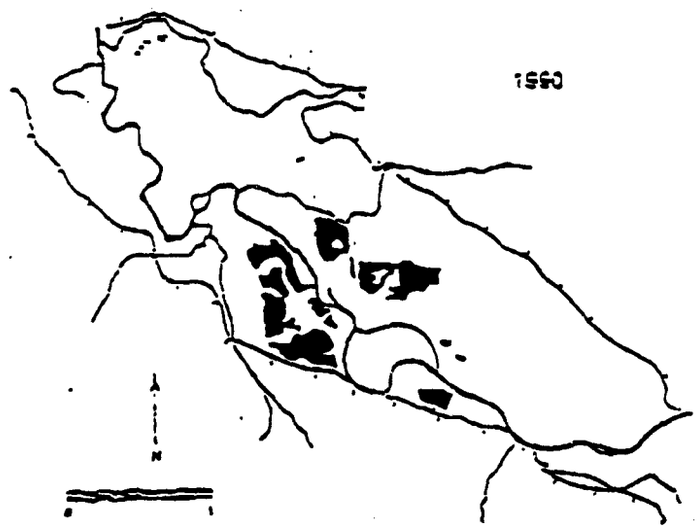

Figure 4 (continued). The East Fork Lewis River, from RM 6 to RM 10.

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May 6, 1997

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CLARK COUNTY
Plan & Dev. Review

Clark County Department of Community Development
Planning Division
ATTENTION: MR. GARY FISH
P. O. Box 9810
Vancouver, WA 98666

RE: Storedahl Company Gravel Mining Application, East Fork Lewis
SPR #96-092

Dear Mr. Fish:

Thank you for the opportunity to review the MDNS and the River Mechanics study by West Consultants.

Comments:
No adequate map showing proposed mine progress, final limits, or access accompanies the proposal. **NO** approval should be granted until accurate engineering plans are shown, and accompany the proposal.

It is my understanding that mining is proposed close to J.A. Moore road and right of way. Any proposal to mine near the county road, needs to be accompanied by a very clear cross -sectional diagram showing present and proposed configurations, drawn to scale. The proposal to have working slope at 1 5H:1V appears to be appropriate for unconsolidated to semi-consolidated gravel deposits as we would expect to encounter at this property.

1. Proposed pit depths of 35' will have the probability of intersecting groundwater. The homes on the north side of J.A. Moore Road have private wells. If these wells produce from the shallow gravel, mining down gradient may have the possibility of dewatering shallow wells. The groundwater usage within the potential dewatering zone of the mining, needs to be clearly addressed.

2. Older mapping available to University of Washington clearly shows the channels of the river to be within the property mining area, during the 1850's. (That's how the gravel got there). This is itself evidence that the floodplain of the river probably lies within the proposed mining area. See attached drawings IX-14, and IX-15. I have added the approximate location of JA Moore road to show how these drawings fit with present properties.

3. Studies of the Becker proposal on property to the east, show a predicted meander migration eastward, onto the proposed Storedahl property. This would appear to indicate at least one study of the area predicted river channel possibly affecting the proposed mine area.

4. Although the 1996 flood may not have significantly affected the property, all our data concerning urban watersheds indicates flood flows become increasingly more volatile, as the percentage of impervious area adds to a watershed. This is happening on the East Fork Lewis with more homes, driveways, and less forest. There is considerable evidence that rivers breaking into mine pits during high water flows create significant environmental damage.

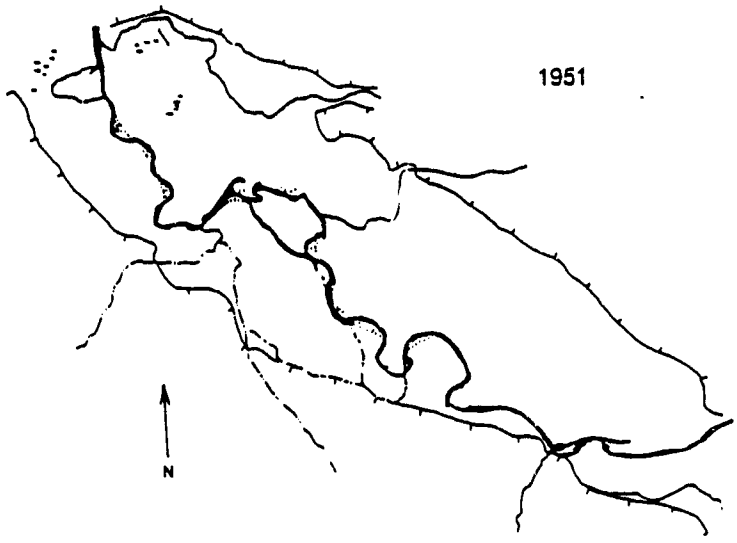
5. The whole mining plan, road stability, and water problem needs to be carefully researched, designed and implemented from the start. I urge a careful multiagency review of the proposal by experienced surface mine professionals. This would include review of drill logs, exploration logs, mine sequencing, and proposed final use. Once again, the apparent lack of an engineering plan or engineering summary accompanying the proposal derails accurate evaluation.

Again, thank you for the opportunity to review the proposal. Please call me at 360-696-8428 x 3160 if I can be of further assistance.

Sincerely,

Reuel F. Emery
Geologist/Environmental Health Specialist.

emery/stored97



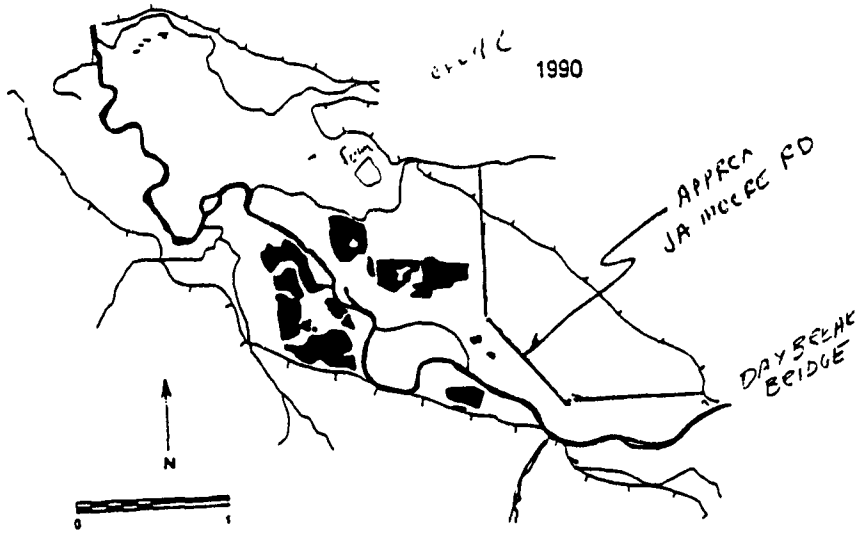


Figure 4 (continued). The East Fork Lewis River, from RM 6 to RM 10.

Floodplain channel from fields

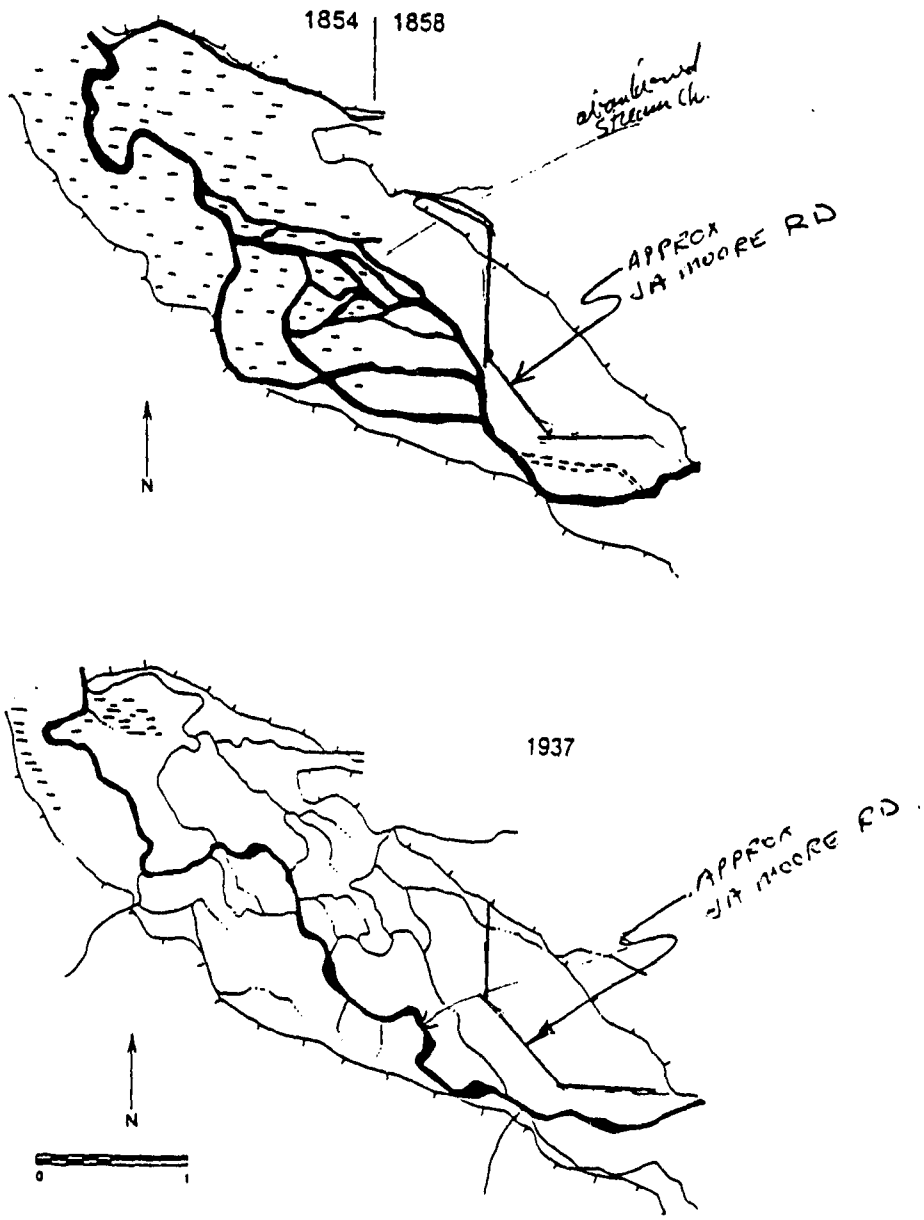


Figure 4. The East Fork Lewis River, from RM 6 to RM 10. River channel pattern is from maps, with year of aerial photographs or ground survey of map indicated. Scale shows one kilometer. Hatchured outline shows approximate edge of valley floor.

David T. McDonald, P.C.

Courtroom Lawyer
510 SW Third Avenue, #302
Portland, Oregon 97204
503-226-0188 (o)
503-226-1136 (f)

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CLARK COUNTY
Plan & Dev. Review

FAX TRANSMITTAL

DATE: May 6, 1997 TIME: 4:55 p.m.

FAX: 360-699-2011 NO. OF PAGES: 10, including cover page

TO: MICHAEL BUTTS

FROM: DAVID T. MCDONALD

COMMENTS:

Letter of this date containing comments on the MDNS. Original will follow by mail.

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David T. McDonald
Courtroom Lawyer
Admitted to Oregon and Washington State Bar
510 S.W. 3rd Ave., Suite 302 (503) 226-0188
Portland, OR 97204 Fax (503) 226-1136

May 6, 1997

Michael V. Butts
Responsible SEPA Official
Clark County Planning Division
P.O. Box 9810
Vancouver, WA 98666-9810

Re: SPR #96-092 (Daybreak Resource Project/Storedahl Mining Operation at or new 100 year flood plain of East Fork of the Lewis River

Dear Mr. Butts:

In addition to the comments we have submitted to your office in an effort to have the County reinstate its original determination of DS for this project, FOEF submits the comments outlined below along with the comments set forth by Kevin Coulton of Phillip Williams and Associates which are set forth in the attached letter of this date.

1. Noise

The applicant should provide mitigation for all noise generated by their mining, processing, loading, and hauling operations. The applicant has already submitted a sound study by Daly and Associates. Some of the data is from 1991 and may or may not indicate current ambient levels of noise. More up to date information should be included. As mitigation, we would suggest that the applicant consider enclosing the crusher in building equipped with sound insulating material, using rubber lining in haul trucks and on screening equipment, and installing state of the art back up alarms that only beep when something is actually behind them.

2. Dust

Dust from the gravel mining, hauling, crushing and loading operations adversely affects fish populations by contaminating the

atmosphere and nearby rivers, streams, wetlands, and sensitive habitats. However, no measures for dust suppression have been included and no engineering standards have been set forth which discuss types available and effectiveness.

3. Spills

No specific plans for prevention and monitoring of petroleum leaks and spills, nor emergency plans for addressing these issues.

4. Bond

Given no reclamation plan is currently in place to deal with the entire project area, much less, this carved out piece of 19 acres, a bond could be posted by applicant to cover the cost of reclamation in case they follow their tradition of ignoring environmental rules and failing to reclaim lands mined by them.

5. Compatibility

There currently are several restoration plans in place to rehabilitate the damaged areas of the East Fork. The best example is the Lewisville preserve (an area mined by Storedahl and left in such poor unclaimed condition that it was sold for the payment of its back taxes) which is directly across from the project site. It is possible that the DOE and DFW will require that the owners of the Preserve redike the river to help the river return to its historical channel. No mention has been made of the impact of the river returning to its natural channel and thus increasing the potential for it to meander back through the project site. In addition, the county is currently planning a partnership with the owners of the Preserve. Yet no mitigations have been set forth which will promote the compatibility of mining/crushing/washing operation with a wildlife enhancement project.

6. Wetlands

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6. Wetlands

Impacts of the mining and processing on adjacent wetlands and ponds in the floodplain should be addressed. No information is in the MDNS which addresses how the proposed mining and excavations will scientifically be adequately separated from the 100 year floodplain which crosses and partially encircles the site.

7. Cumulative impacts

Given the extreme adverse impacts from the previous unclaimed Storedhal operation, the Becker operation the potential for mining on the "Lewis River Ranch area" and the necessity to maintain the long-term viability of the East Fork and its basin, the county should undergo a full and comprehensive study of the damages incurred and how to best address those damages before proceeding with attempting to determine the likely consequences of a proposed new activity.

We thank you for the extension to more fully develop our comments but felt that it was important to try and get some general information about our position to you as early as possible. We continue to urge you on both technical, environmental and legal grounds to reinstate your determination of significance and allow the public a chance to frame the scoping of the EIS.

Sincerely,

David McDonald

cc: President FOEF
John L. Dentler/ Charles B. Roe
Richard S. Lowry

Philip Williams & Associates, Ltd.
Consultants in Hydrology

1654 SW North Star Loop
Troutdale OR 97060
Phone 503-661-7034 / Fax 503-661-6085
e-mail oregon@pwa-ltd.com

May 6, 1997

(PWA Ref. # 1196)

Mr. David McDonald
Courtroom Lawyer
510 SW 3rd Avenue, Suite 302
Portland OR 97204

Dear Mr. McDonald:

SUBJECT: SPR#96-092 (Daybreak Resource Project) Mitigated Determination of Non-Significance (MDNS): Hydrologic and Geomorphic Review

I have reviewed the documents you have provided that relate to the proposed floodplain mining project along the East Fork Lewis River. Specific documents reviewed include: Dyrland, 1997; David J. Newton & Associates, Inc., January 8, 1996 letter; Kondolf, 1996 (referenced in the MDNS); WEST Consultants, Inc. January 9, 1997 letter; WEST Consultants, Inc. Preliminary EF Lewis River Hydrology, Hydraulics, and River Mechanics Study, May 14, 1996, and the Clark County FEMA Flood Insurance Study.

The following comments concern technical items that could be better clarified and geomorphic issues, that are not addressed in the Mitigated Determination of Non-Significance (MDNS) for excavating a floodplain pit adjacent to the East Fork of the Lewis River (Daybreak Resource Project):

Floodplain and river hydraulic connections. The "floodplain" is a geomorphic feature that should be considered as an integral and interconnected part of the river system. The geomorphic floodplain is a depositional feature that is formed over time as sediment is deposited during dynamic river processes, such as during floods or as meanders migrate through the system. The floodplain provides many important functions including:

- ***River flood water storage.*** On the East Fork of the Lewis River, a "secondary" channel was active in conveying flood flow during the 1996 flood (West, 1996). In addition, recent flood events have inundated the proposed project area (Dyrland, 1997). Future construction of berms associated with the pits may lead to a reduction in floodplain storage;
- ***Groundwater storage.*** The floodplain is a aquifer that stores groundwater. Excavation of floodplain pits reduces the capacity of the floodplain sediment to filter groundwater, and water quality may be reduced.

Sands and gravels have the highest hydraulic conductivity (or the rate at which water moves through a unit area of an unconfined aquifer) and permeability of unconsolidated deposits and these materials are obviously present in the location of the proposed sand and gravel mining operation.

The applicant acknowledges that the surface aquifer in the vicinity of the project area is "hydraulically connected to the East Fork Lewis River and nearby surface water bodies" and "The...aquifer at the site likely discharges groundwater to the [East Fork Lewis] river when the river level falls below the elevation of the surrounding water table" and "the high permeability of valley-fill sediments" [David J. Newton & Associates, Inc., January 8, 1996 letter] and has observed "Visual comparison of existing pond and [East Fork Lewis] river water-levels indicates these surface waters are at similar elevations." indicating the unconfined surface aquifer in the project area is "hydraulically connected to the East Fork Lewis River and nearby surface water bodies."

There has been little analytical work done to evaluate the hydraulic connection between surface and ground water bodies, especially during flood events. The technical investigations for the applicant considered normal seasonal groundwater conditions, but did not evaluate those conditions during and after flood events. Water quality impacts from the proposed mining activity may be more pronounced during floods when there would be a greater potential for water movement through the floodplain sand and gravel aquifer.

Figures 1A and 1B show schematic diagrams of a river and river floodplain aquifer cross-section with high and low water table conditions. Figure 1C shows possible flood water table conditions imposed on the floodplain aquifer during a flood event. Potential impacts to the water quality of the adjacent surface water bodies surrounding the proposed mining project during flood events, as well as normal flow periods, should be clarified.

Historic meander migration. The process of long-term meander migration has not been fully taken into account within the study area. There is geologic evidence that at sometime in the past the river channel meandered on the northern side of the East Fork in the project area because meandering and fluvial deposition must occur in order to create the floodplain itself. The MDNS should evaluate historic topographic or planimetric maps that provide data on the river's position prior to 1935, or should consider using a predictive meander model to predict future trends. Given the fact that the river occupied the proposed project area during some time in the past, and the fact that meander migration is a dynamic component of natural rivers, there is the potential for the river to migrate toward the proposed project area in the future, as noted by Kondolf, 1996 (referenced in the MDNS).

Since there is a long-term potential for meanders to migrate on either side of the floodplain in the

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project area, there is also the long-term potential for breaching of the strip of land separating the river from the pit, and subsequent "river capture," (the term avulsion is used in the MDNS). This processes may occur if the main channel migrates toward the pit, or if the secondary channel migrates toward the pit. Potential impacts of river capture include rapid upstream and downstream incision, erosion of banks and riparian habitat, and loss of aquifer storage.

Floodplain protection measures. The MDNS states that "appropriate measures will be implemented (if at any time the floodplain's integrity is threatened). However, measures to "protect or restore the floodplain prior to commencing further mining" are not defined.

Gravel pit reclamation. The MDNS states that "the site will be reclaimed as open space, as foreseen at this time." However, the MDNS does not describe the methods that could be used to restore a floodplain pit to riparian habitat. Floodplain pit excavation reclamation is difficult, largely because floodplain pits that have steep sides and are excavated lower than the thalweg of the river provide little opportunity for natural development of vegetation and little habitat value. In addition, there is often a large seasonal water surface elevation fluctuation in the pits that makes it difficult to sustain vegetation.

Aggregate resources management plans. In other instances where floodplain sediment extraction has occurred, it has been done in accordance with comprehensive aggregate resources management plans. In general, these plans include the following provisions:

- ***The maximum depth of floodplain gravel extraction pits should remain above the channel thalweg elevation.*** Floodplain gravel pits should not be excavated below the elevation of the thalweg (or lowest in-water elevation) in the adjacent river channel bed. This will minimize the impacts of potential river capture by limiting the potential for headcutting and the potential of the pit to trap sediment. A shallow excavation (above the water table) would provide a depression that would fill with water part of the year, and develop seasonal wetland habitat;
- ***Side slopes of floodplain excavation pits should range from 3:1 to 10:1.*** Side slopes of a floodplain pit should be graded to a slope that ranges from 3:1 to 10:1 in order to allow for a range of vegetation from wetland to upland to be established during reclamation. Steep side slopes excavated in floodplain pits on other systems have not been successfully reclaimed, since it is difficult for vegetation to become established;
- ***Place stockpiled topsoil outside of floodplain areas.*** Stockpiled topsoil can introduce a large supply of fines to the river during a flood event and degrade salmonid habitat. Storage above flood inundation levels will minimize this risk;
- ***Establish a long-term monitoring program.*** A long-term monitoring program should provide data illustrating any impacts to river stability, groundwater, fisheries, and riparian

vegetation. The monitoring program should assess the success of any reclamation or restoration attempted;

- ***An annual status and trends report should be produced by the County, or another regulatory agency.*** A status and trends report should include a section on the hydrologic and biologic components of floodplain pit reclamation.

Mining buffer distances from floodplain. The technical basis for establishing the buffer distance between the floodplain limit and the limit of mining [WEST Consultants, Inc. January 9, 1997 letter] should be clarified. For example, the City of Tuscon, Arizona establishes setback requirements based on hydrologic and geomorphic criteria including: the estimated 100-year flood flow, the top width of the channel and the radius of curvature of the river channel centerline.

Groundwater monitoring. The MDNS requires inspections of "soil conditions and the stability of created slopes" by a geotechnical engineer a minimum of every 3 months. The MDNS includes no provisions for monitoring groundwater conditions for potential water quality impacts from the mining activity.

As a part of the hydrogeologic investigation by the applicant "Elevation gauges were recently installed at selected locations on Dean Creek and the existing site ponds. These gauges are intended to allow surface-water elevations to be measured. Comparison of the measurements over time should indicate the hydraulic relationships between these surface water features" [David J. Newton & Associates, Inc., January 8, 1996 letter]. This indicates gauges are available to provide some level of groundwater monitoring at the project site.

Groundwater analyses. The hydrogeologic investigations for this application present raw water well and surface water level data, but there appears to be little analysis of these data for developing conclusions. It is stated that:

> "Turbidity is not expected to reach the river or nearby private wells since the formation will provide natural filtering" and [because] "groundwater gradients appear to be low" [David J. Newton & Associates, Inc., January 8, 1996 letter] and "sediments entering the groundwater from the pond would be expected to be filtered out by the soils and sands within the ½-mile distance between the pond and the EFLR" [R2 Resources Consultants, Inc. March 13, 1997 letter]

These statements may be true, but it may be prudent to support the opinions with data analyses and consider monitoring programs (similar to that proposed for the geotechnical side slope stability) to confirm the stated beliefs.

For example, a brief review of water-level elevations from Table A1 from the hydrogeologic evaluation [David J. Newton & Associates, Inc., January 8, 1996 letter] indicates groundwater gradients across the project site, between the Woodside #6 well and the Storedahl well, approach one-percent during the August and September 1996 water-level measurements. Engineering estimates of the surface aquifer capability to "filter" sediments, using groundwater gradients estimated from available water-level data and known information on the aquifer geology, would be informative to provide some quantitative support to the "expectation" that turbidity from the project will not reach the river through this "highly permeable" aquifer.

Seasonal water table indication. Water well data indicate there is high groundwater throughout the proposed mining location. Per the Site Plan Review, the Existing Conditions Plan shall include the approximate location of the seasonal water table (Item 6e). It is not clear if this has been included.

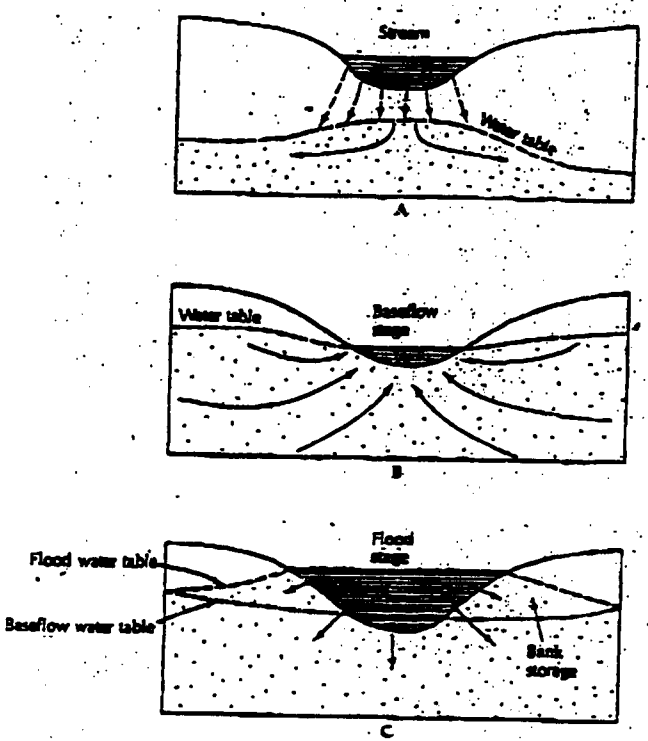
Recent flood observations and floodplain definitions. Recent flood events have inundated the proposed project area (Dyrland, 1997). This suggests that floods with recurrence interval's less than 100-year inundate the proposed site, and that the proposed site is within the regulatory boundary. The term "floodway" and "floodplain" are both used in various documents; however, these terms are not interchangeable, and should be clarified.

Please call me at 661-7034 if you have any questions concerning the above comments.

Sincerely,

Kevin G. Coulton

Kevin G. Coulton, P.E.
Associate



Cross sections of gaining and losing streams. A. A losing stream; B. A gaining stream; C. A stream which is gaining during low flow periods but which may temporarily become a losing stream during flood stage.

Figure 1

Schematic Diagrams of a River Floodplain Aquifer

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Update: May 31, 1997

Monty Anderson, Director, Clark County Community Development, Planning Group
Larry Epstein, Appeals Hearing Examiner
Clark County, Vancouver, WA

Re: SPR #96-092 (Daybreak Resource Project/Storedahl Mining Operation on or near the East Fork of the Lewis River

Dear Mr. Anderson and Mr. Epstein:

My name is Richard Dyrland and I am a graduate hydrologist representing the Friends of the East Fork. My past 31 years of experience in hydrology and watershed management included duties as Regional Hydrologist for the Intermountain Region, Regional Hydrologist for the Pacific Southwest Region, and member of the National Watershed Management and Flood Rehabilitation Team, and review person for the watershed and hydrology components of all Forest Service Forest Plans in the Pacific Northwest Region. Recently I took early retirement to do consulting in watershed management and environmental analysis.

The items of interest that I will address are:

What are the functioning characteristics of the flood plain and channel reaches in the area of the proposed project, and the relationship to the East Fork of the Lewis River <u>NOW</u> ---including the 100-year 1% annual chance flood.

The various reaches of the stream channel below the area where the flood plane widens dramatically have gone through many changes in the last 60 years, some of this was due to natural causes and much to the increase in human related activities.

Allow me to clarify the hydrologic environment of the stream reaches in the proposed project area in relation to the stream gage at Heisson (USGS 14222500 - East Fork Lewis River) that has been used as a source of flood flow data.

The stream gage drains approximately 125 square miles of upland and mountainous area and is characterized by a relatively narrow flood plain and entrenched often bedrock channels --see Figure 1. The area below from the gage to the proposed project area, adds about 31 square miles, and is a mixture of foothills and valley lowlands. About 3.3 miles below the gage the shape of the floodplain changes into a broad meandering lowland floodplain with wider and less entrenched channels whose stream banks and bottoms are composed of cobble, gravel, and sand materials --see Figures 2. and 3.

Point 1. The proposed project area is about 10.5 miles below the gage and about 7 miles below the point where the lowland floodplain begins --see Figure 4. **It is essential that the gage data although useful, <u>should be applied and interpreted with caution</u> as the stream flow data at the gage represents conditions and events happening in the watershed area above the gage. Its application to the area below is limited.**

In addition, an increasing rate of vegetation modification, roading, mining, and urbanization have changed the hydrologic condition of the watershed and affected the stream flow runoff relationships in the last 40 years (Leopold - 1994, USGS - 1979)

Point 2. The color aerial photo taken February 10, 1996 which has been used numerous times in discussions regarding the level of a "100-year" flood plain, does not represent the peak of flooding or the flood peak. The peak occurred on February 8th, two days earlier. For example the February 10th photo does not show the extent and level of flooding across NE 61st Ave. and onto the proposed project area, nor does it show how the house on the north corner of NE 61st Ave. and 259th St. was completely surrounded by flood flow. Refer to "Point 4:" for a related discussion.

Point 3. The stream channel reaches starting at about 2.5 miles above the project area as well as below the proposed project area, are of a very active and unstable character. A stereoscopic analysis of a series of aerial photos starting in the 1930's show that the stream channel has meandered all over the floodplain valley and their were numerous active flood overflow channels across the valley. Studies by the University of Washington indicate substantial meandering and changing of the basic characteristics of the lowland stream channel between 1854 and 1990 (University of Washington, 1997).

The bankful width/depth (WD) is key to understanding the distribution of available energy within a channel, and the ability of various discharges occurring within the channel to move sediment. The W/D ratio is the most sensitive and positive indicator of trends in channel stability (Leopold, 1992, and Rosgen, 1996). As channel W/D ratios have been increasing in these lower reaches, it has essentially been raising the level of flood flow water surface occurring for a given flood event --see Figures 5. and 6.

The stream channels above the gage in the upland areas are of the B1 and B4 classification, and have width to depth (W/D) ratios between 8 and 14 which indicates high level of stability --see Figures 7. and 8. Their stream beds are predominantly bedrock and boulder.

In contrast, the lowland floodplain channels are mostly of the C3 and C4 classification, and have deteriorated to width/depth ratios that range from 37 to 48, which is quite high --see Figures 9., 10. and 11. It indicates considerable instability at flood flow levels and a substantially reduced transport capability to handle suspended sediment and bed load. The channel stream bed and banks are predominately a mix of cobble, gravel, and sand alluvial materials. This initiates a high tendency for stream channel meandering (Rosgen-1996, Miller-1992). In addition, a few short reaches of the channel and some longer reaches below the proposed project area have transitioned into the D4 stream type. The W/D ratios are over 40, which is very unstable and the reach will degenerate into a shallow braided channel.

A May 31, 1997 follow up field inspection of the various stream reaches above and below the proposed project area was done to update that done in early May of 1997. It was observed that the channels had formed several new point bars, increased their sinuosity within channel, eroded more stream bank, and lengthened the rapids/delta section into the old ponds below the breach. **The channel reaches are very active**

With the more recent deterioration of the channel stability condition and the increasing rate of runoff for a given climatic event, one can expect the rate of stream channel shifting and meander to accelerate.

Point 4. Flooding adjacent to and across the proposed project area has occurred several times in the past 70 years and can be expected to occur again and more frequently with the deteriorated condition of the lowland stream channel reaches and as urbanization increases.

"It is usual for the annual flood to equal or exceed bankful stream stage 2 years out of 3. (This is the meaning of a recurrence interval of 1.5 years.) In terms of number of cases per year in a natural basin influenced by humans, bank full would be equaled or exceeded somewhat more often than once a year, (recurrence interval of 0.9 year (Leopold, 1994)". **Since the fall of 1995, the lowland channel in the project area has exceeded bankful level at least 3 times or more.**

The proposed project area and the current sand and gravel washing area have been subject to flooding in the past and under the current conditions are at an increasing risk of flooding.

An analysis of the time series of aerial photos bears this out. The photos taken in 1939 prior to mining, show two active major flood overflow channels going through the middle of the proposed project area and westward back into the main channel further downstream. They also show the overflow channel adjacent to the current access road on the south side of the project area as well as the main channel in the current sand and gravel washing area. It also shows a large "oxbow" or old channel in the area that was mined in the recent past on the south side of the channel --see Figure 12.

The 1948 photo series show dramatic channel deterioration caused partly by mining operations that occurred in the river channel and about a mile and a half above the Daybreak Park bridge. Again the active flood overflow channels are present as well as the flow adjacent to the current access road on the south side of the proposed project area. The channel is also shifting northward in this area --see Figure 13. which is in two parts. The 1975 photo set shows some mining on both sides of the river, including the areas presently used for the gravel washing operation. This set, taken on December 4th 1975 is at flood stage (11,700 cfs peak flow-USGS 1997) and shows a large flow in the flood overflow channel adjacent to the current Storedahl access road on the south side of the proposed project area --see Figure 14.

A 1989 photo set shows that the one of the overflow channels across the west end of the proposed area had been mined for gravel and that the other overflow channel that crossed east to west through the middle of the project area, had been filled in, partly leveled and then used for agricultural crop production **(Note that the flood overflow from the February 8th, 1996 flood again used this route).** In addition, the overflow channel along the access road on the south side of the project was active.

During the flood of February 8th, 1986 the flood overflow activated the east-west flood overflow channel across NE 61st Ave.- J.A. Moore Rd, and 259th St. Again the overflow channel along the south side of the proposed project and adjacent to the access road was running well over its banks. Other flood flows in the past 3 years have also gone well over bankful along the south side of the project area --see Figure 15.

The occurrence of the "breach" by the main channel into the old mining pits on the south side of the river near the project area will have limited effect on the risk of flooding to the proposed project area. Much of the flood water overflow breakout occurs in reaches located above the area. Under the existing highly unstable channel conditions throughout, one could expect the channel to again do the same as it did in the past, ---move across the valley flood plain, <u>but at a faster rate.</u>

The two recently abandoned sections of main channel have stream beds that are below the bankful level, they are subject to flooding annually and are part of the main system. This would bring flood flow directly against the current sand and gravel washing operation, as it has done in the past. Also as of May 31, 1997 with moderate level stream flow, the height of flow needed to activate the upper old main channel was about 1.3 ft. and the lower old main channel that flows directly at the current gravel washing site, would need to increase a height of 2.7 ft. to activate. These are relatively low flows and the bankful heights of the old channels at these points are about 5.1 ft. and 4.6 ft. respectively, which is well above the 1.3 ft and 2.7 ft. current activation height.

Stated another way, a main channel flow height increase of about 50% or less of "bankful level" would activate the two old main channels near the project area. With the recurrence interval range of 0.9 years to 1.5 years for bankful stage, this relationship indicates that the probability for a relatively frequent activation of the two old channels and their attendant cumulative effects and connected actions, ---is quite high.

Point 5. The level of the February 8, 1996 flood plain level needs to be put into perspective with one of the main factors that affected it. When the flood flow broke through the old dike located on the south side of what is the old upper main channel, the water flowed into two ponds (not the old Storedahl south side ponds further downstream) that are remnants from an earlier period of gravel mining. The breakthrough into the ponds took some of the flood pressure off the upper reaches of the channel. The original old channel had a high flow resistance on its north bank due to the numerous tree length logs and debris that had built up as it curved around to the southwest. Related to this was a loss of transport capability and buildup of bed load material that raised the level of the channel bed.

When the dike broke and the flow split into two channels, the 15 feet deep or greater ponds behind the dike began to catch part of the bed load and suspended sediment from upstream. The immediate effect on stream flow was to began lowering the height of the flood plain overflow. And, if the flood peak in the reach at the project area was of a 200-year or 300-year event or more, the dike failure would have reduced the level of that particular flood peak and related flooding

This is quite similar to what the Army Corp. of Engineers did when they blew up a main dike on the Mississippi River to reduce flood flow pressure and levels on farmland and communities further downstream during the last major flood. .

Currently, in the project area in East Fork Lewis River, the new upper main channel has already filled in the old ponds near the dike and channel characteristics are returning to a state similar to before. They are primarily the unstable "C4" and "D4" channel types with large width/depth ratios.

It is quite likely that the related effect on the East Fork was to lower the actual flood height peak and amount of flooding during the day when flows from the February 8, 1996 flood were the highest. This essentially indicates that the flood levels observed were actually lower than what they normally would have been. This would cause an underestimate of the 100-year flood plain level when used as a basis for an update of the 100-year flood plain.

Stage discharge relationships are also an important factor. The actual stage discharge curve for the flood peaks at the Heisson gage rises relatively steep and then begins to flatten out at a moderate rate at the higher flows due to the deep "U" shape of the bedrock channel and the relatively steep stream bank and side slopes. The hydraulic geometry of channels of the lowland valley in the proposed project area have an entirely different hydraulic geometry and relationship for a stage discharge curve. It rises at a less steep rate, and begins to flatten sooner then the one for the Heisson gage located 10.5 miles above **(see discussion in Point 6. for more details)**. Compared to a stage discharge curve for the channel conditions at the project area, the increments of stage height increase at high flows are greater at the Heisson gage.

Point 6. Although the stream gage data is important, it is also limited in its use for analysis of the channel dynamics in the lowlands below. More emphasis needs to be put on what has actually happened to the lowlands and the proposed project area as is shown through analysis of time series aerial photos, special studies, and analysis and evaluation of field measurements that describe the current hydraulic geometry of the existing channel reaches.

As was discussed in Point 5, the stage discharge curve for the stream reaches above and below the proposed project area in the broad lower valley would exhibit a relatively less steep initial curve and would began to flatten out or lose slope angle faster than the one for the gage upstream at Heisson. Basically, this is because of the wide shallow channels, relatively low bankful flow height, and the wide relatively flat valley floor. **The flatter stage discharge angle at higher flows also means that the difference between the height of flood flow decreases faster at the higher, 50-yr, 100-yr, 200-yr, etc., return periods** (T.Beer-1991). In addition, bankful levels in themselves mean that in 2 out of 3 years a certain area of land outside the main channel will be under water.

Another way to state this relationship is to say that the incremental difference between the height of flow for each successively higher flood event, will decrease until a flood occurs someday that is big enough to reach both the north and south side of the valley where the flood plain would change from a relatively flat valley floor to steep valley side slopes.

<u>To summarize, there now is an entirely new situation</u>, the ponds below the dike break have essentially filled in and built up point bars. The "new channel" through the old Storedahl south side ponds below the lower channel breach is no longer just a simple delta, but has filled in and extended over 150 feet in the last month, and new C4 and D4 channel types have formed. The "pressure release" conditions created earlier have all but disappeared.

As a net effect, one can expect future flood events for the same return period to shift to higher peaks and the actual area flooded would increase.

It is also highly likely that we will see higher flood peaks and more flooding due to increasing urbanization. This will add to the level of risk as well as the level of the flood plain for a given climatic event or flood frequency such as the 100-year event. (Leopold -1994, Pacific NW Research Station and Oregon State University-1996) --see Figure 16.

Richard Dyrland

Richard Dyrland
Hydrologist,
Friends of the East Fork

Attachments:

Figures 1-16

REFERENCES:

T.Beer, Applied Environmetrics and Hydrologic Tables, *Extreme Value Statistics*, CSIRO Research Unit, Mordialloc, Austraila, 62 pp, 1991

L. Leopold, PhD. "A View of the River", A Technical Book on River Hydrology, Morphology and Hydraulic Geometry Characterization of River Channels, Harvard University Press, 298 pp, 1994

J. Miller, L. Leopold and M. Wolman, PhD's. Fluvial Processes in Geomorphology, *Initiation and Development of Meanders*, Dover Publications, Inc., 1992.

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US Geological Survey, 79-553, Magnitude and Frequency of Floods in Western Oregon by Four Flood Zones Including Parts of Washington, 1979.

US Geological Survey, Listing of Peak Flood Flows and Other Flow Data, East Fork of the Lewis River at Heisson, Stream Gage 14222500, May 1997.

ure 1. Upland Channel Cross Section

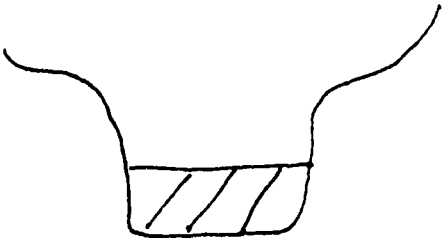


Figure 2. Lowland-Valley, Channel Cross Section

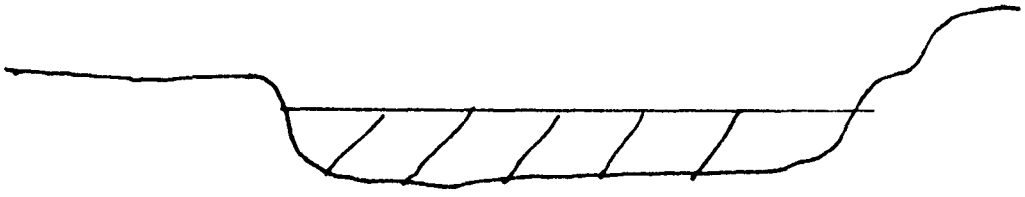


Figure 3. Comparison Of Valley Lowland Flood Plain Width To Upland Flood Plain Width -East Fork Lewis River Watershed

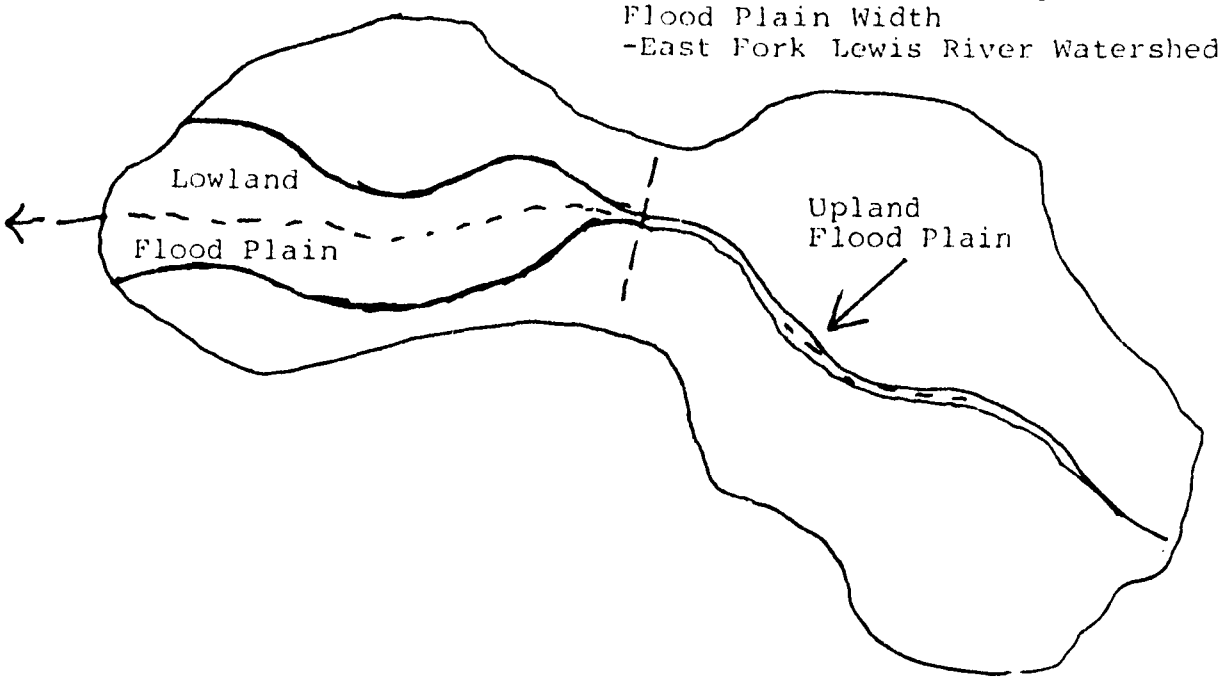


Figure 4. Comparison of Relative Flood Plain Widths
--Upland and Lowland Flood Plains, East Fork Lewis River

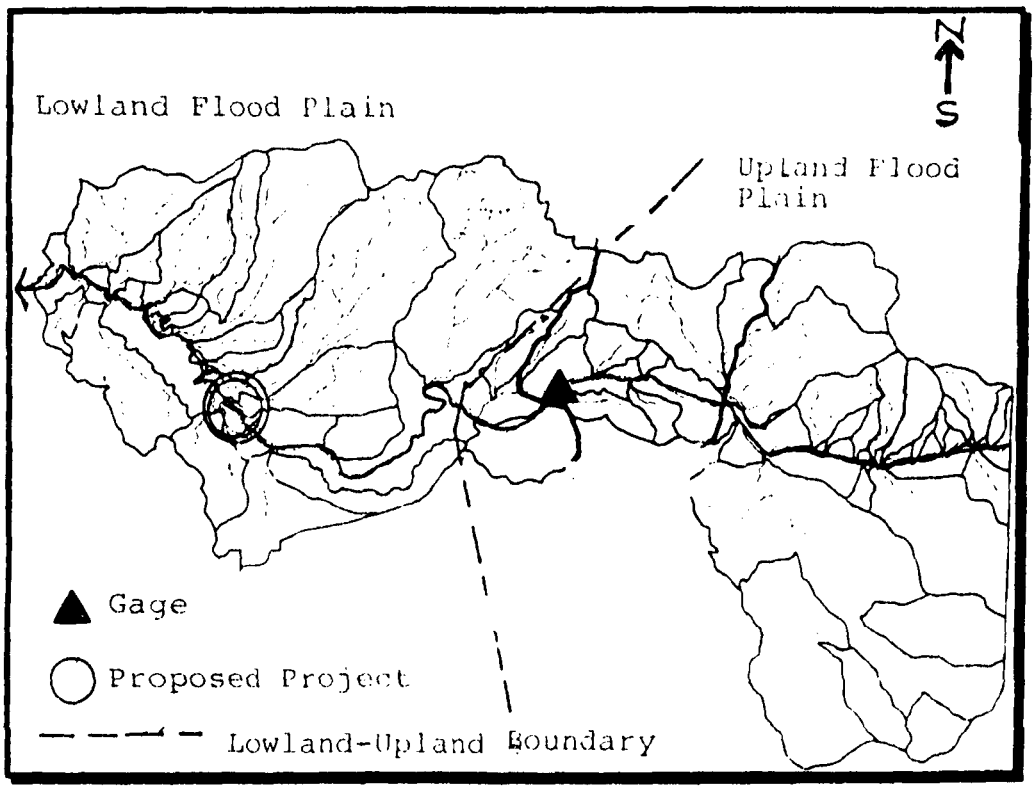
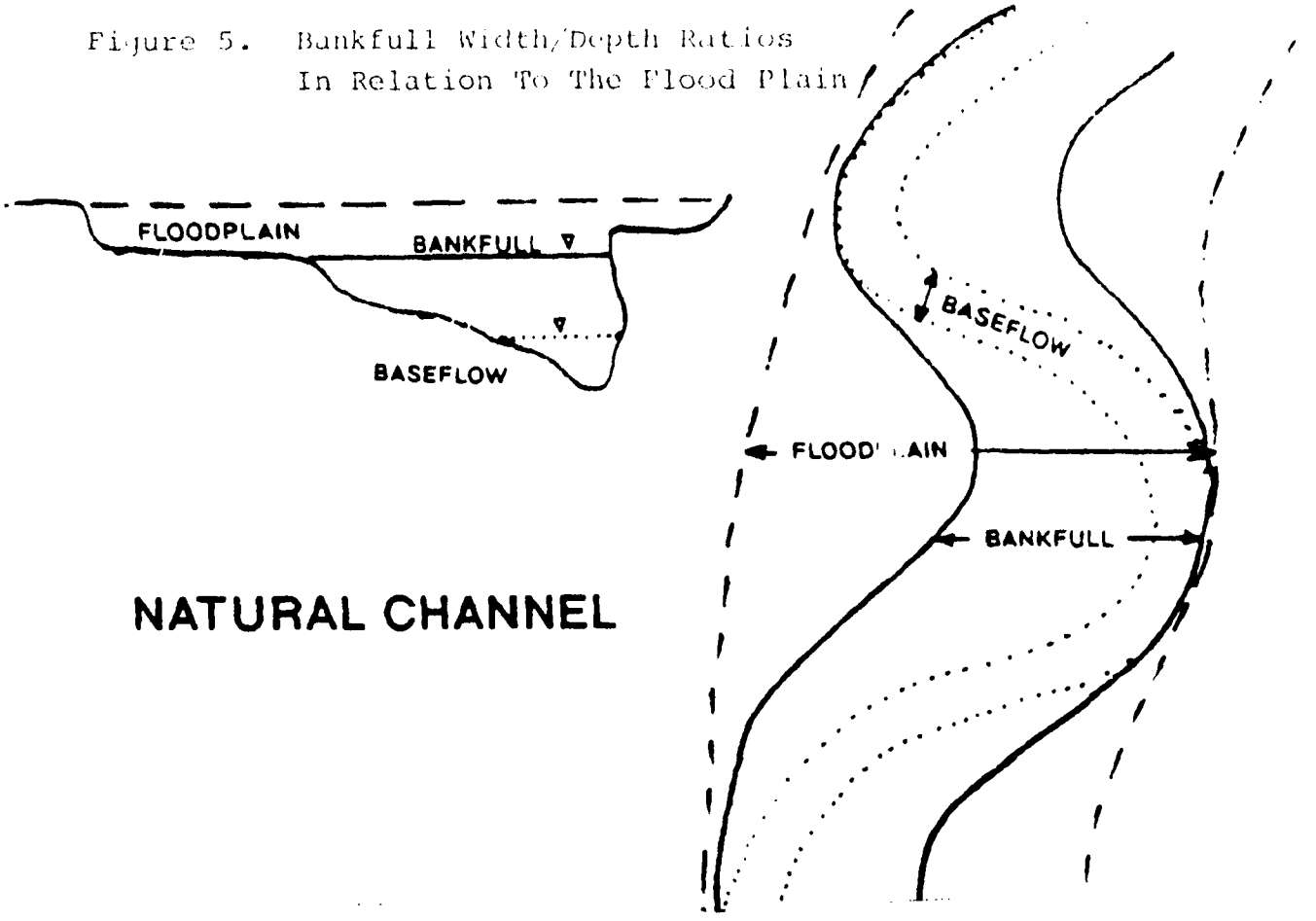


Figure 5. Bankfull Width/Depth Ratios In Relation To The Flood Plain



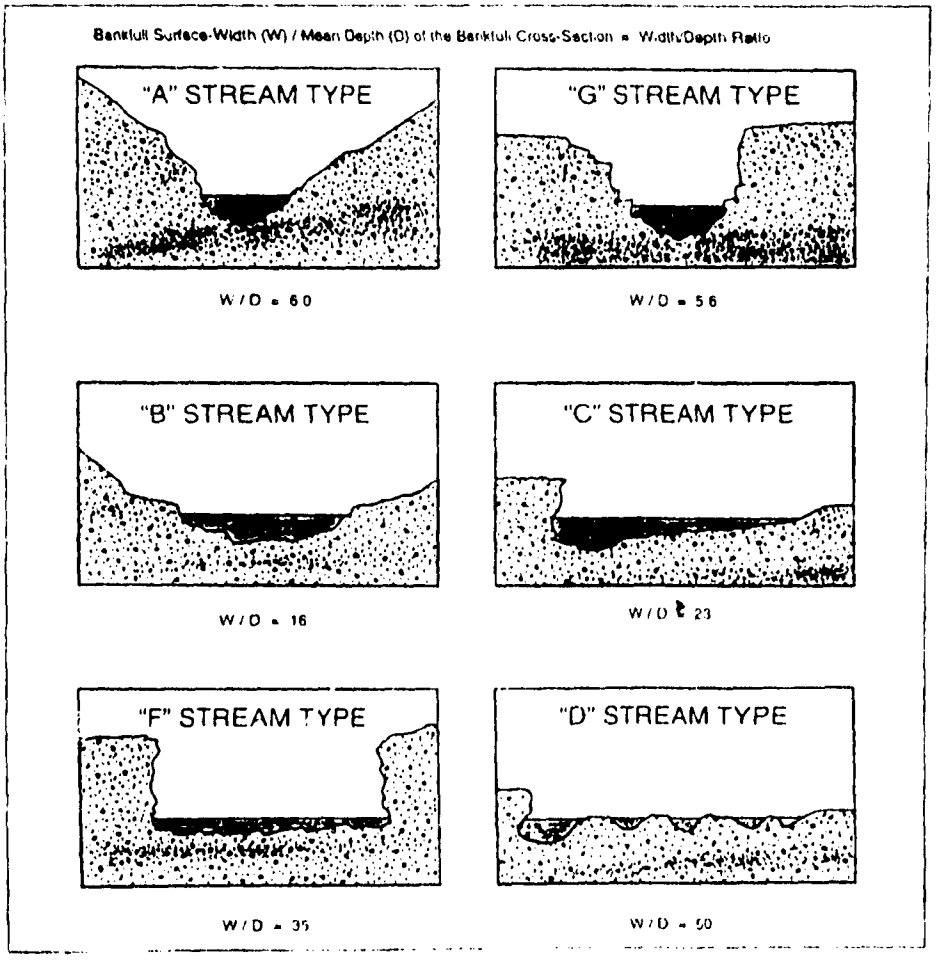
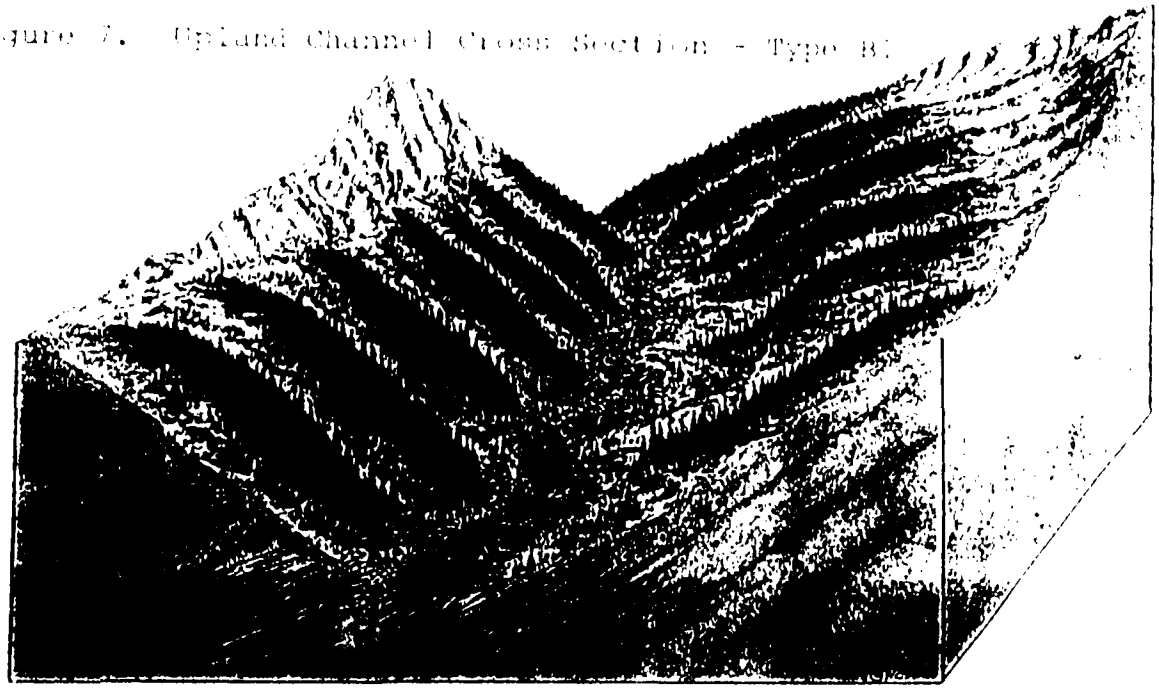


FIGURE 6. Examples of various Width/Depth Ratios for selected stream types

Figure 7. Upland Channel Cross Section - Type B1



DELINEATIVE CRITERIA (B1)

Landform/soils: Structural controlled narrow valleys with moderate side slopes

Channel materials: Bedrock bed with streambanks composed of boulders, cobble and gravel

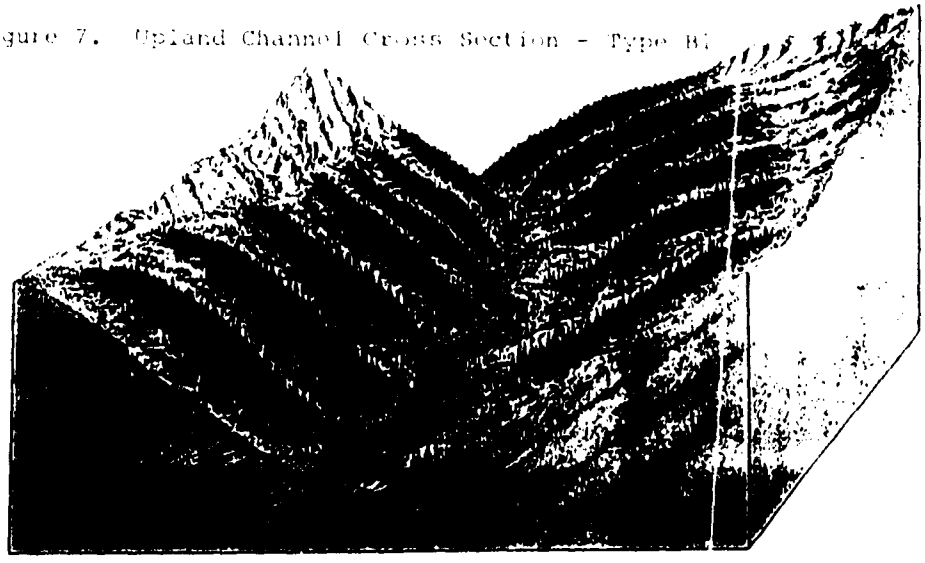
Slope Range: .02 - .04 (B1c < .02)

Entrenchment Ratio: 1.4 - 2.2

Width/depth Ratio: > 12

Sinuosity: > 1.2

Figure 7. Upland Channel Cross Section - Type B1



DELINEATIVE CRITERIA (B1)

Landform/soils: Structural controlled narrow valleys with moderate side slopes.

Channel materials: Bedrock bed with streambanks composed of boulders, cobble and gravel

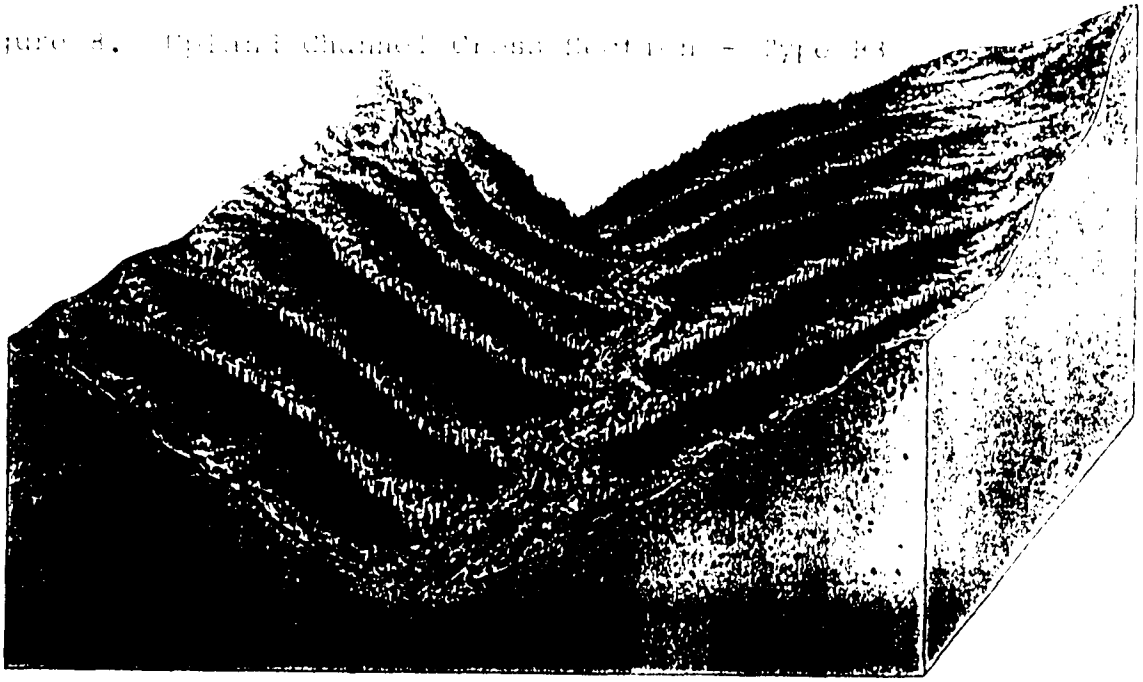
Slope Range: .02 - .04 (B1c < .02)

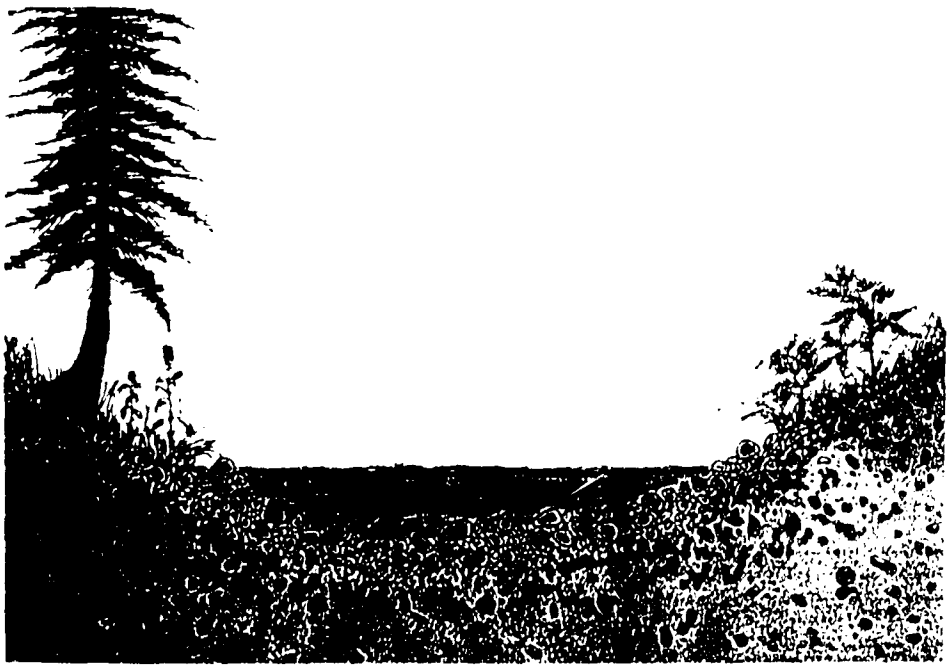
Entrenchment Ratio: 1.4 - 2.2

Width/depth Ratio: > 12

Sinuosity: > 1.2

Figure 8. Typical Channel Cross Section - Type B3





DELINEATIVE CRITERIA (B3)

Landform/soils: Narrow, moderately steep colluvial valleys with gentle side slopes. Soils are colluvium and/or alluvium. Often in fault line valleys or on well vegetated alluvial fans

Channel materials: Predominantly cobble with lesser amounts of boulders, gravel and sand. Streambanks are stable due to coarse material

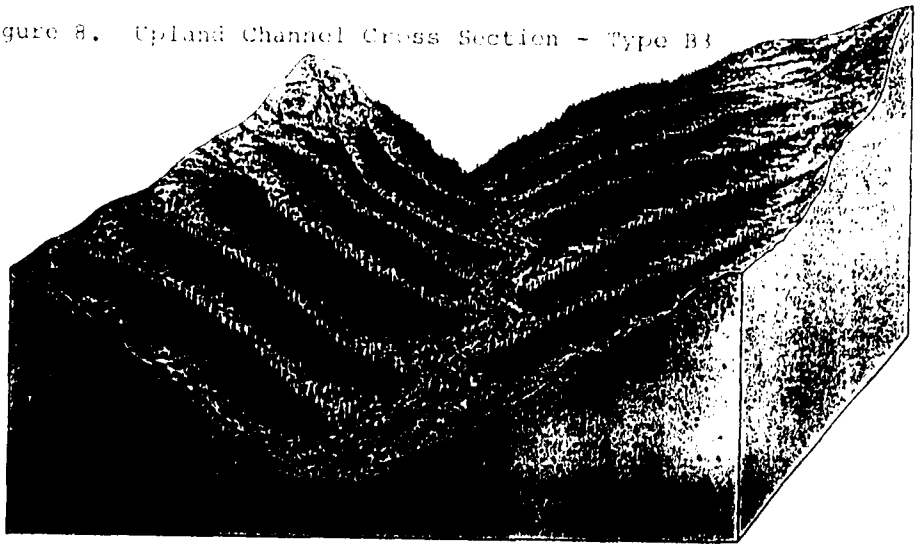
Slope Range: .02 - .04 (B3c, < .02)

Entrenchment Ratio: 1.4 - 2.2

Width/depth Ratio: > 12

Sinuosity: > 1.2

Figure 8. Upland Channel Cross Section - Type B3



DELINEATIVE CRITERIA (B3)

Landform/soils: Narrow, moderately steep colluvial valleys with gentle side slopes. Soils are colluvium and/or alluvium. Often in fault line valleys or on well vegetated alluvial fans.

Channel materials: Predominantly cobble with lesser amounts of boulders, gravel and sand. Streambanks are stable due to coarse material.

Slope Range: .02 - .04 (B3c, < .02) **Entrenchment Ratio:** 1.4 - 2.2

Width/depth Ratio: > 12 **Sinuosity:** > 1.2

Figure 9. Lowland Channel Cross Section - Type C3

DELINEATIVE CRITERIA (C3)

Landform/soils: Broad alluvial and glaciated valleys, holocene terraces generally present. Soils are glacial deposition and alluvium.

Channel materials: Predominantly cobble with lesser amounts of gravel and sand. Banks are finer in material size than channel bed.

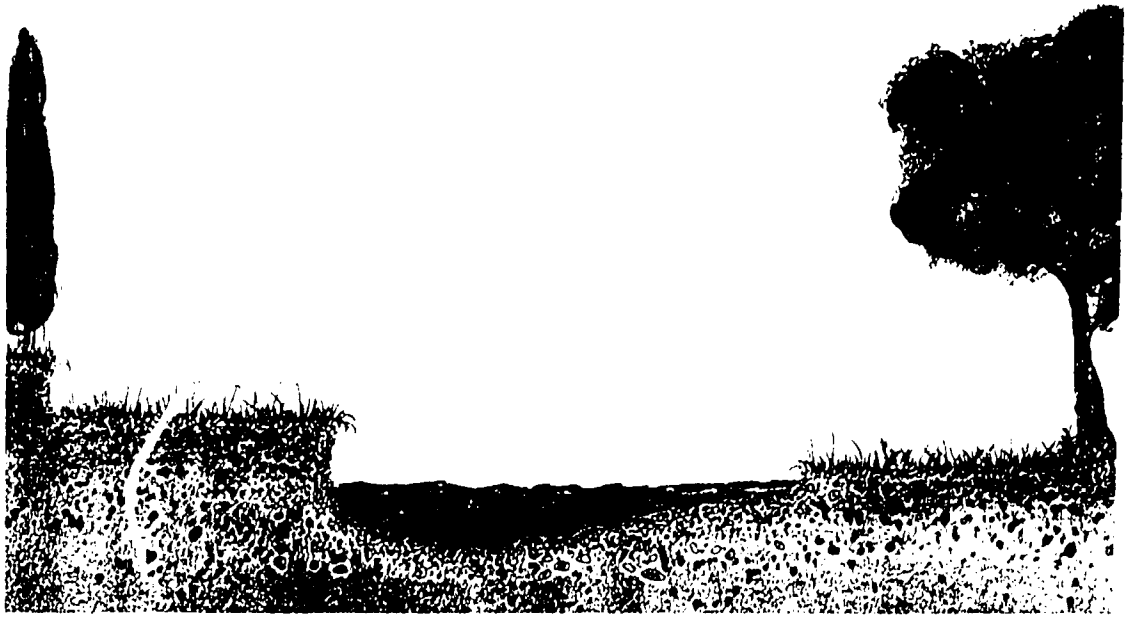
Slope Range: < .02 (C3c- .001)

Entrenchment Ratio: > 2.2

Width/depth Ratio: >12

Sinuosity: >1.2

Figure 10. Lowland Channel Cross Section - Type C4



DELINEATIVE CRITERIA (C4)

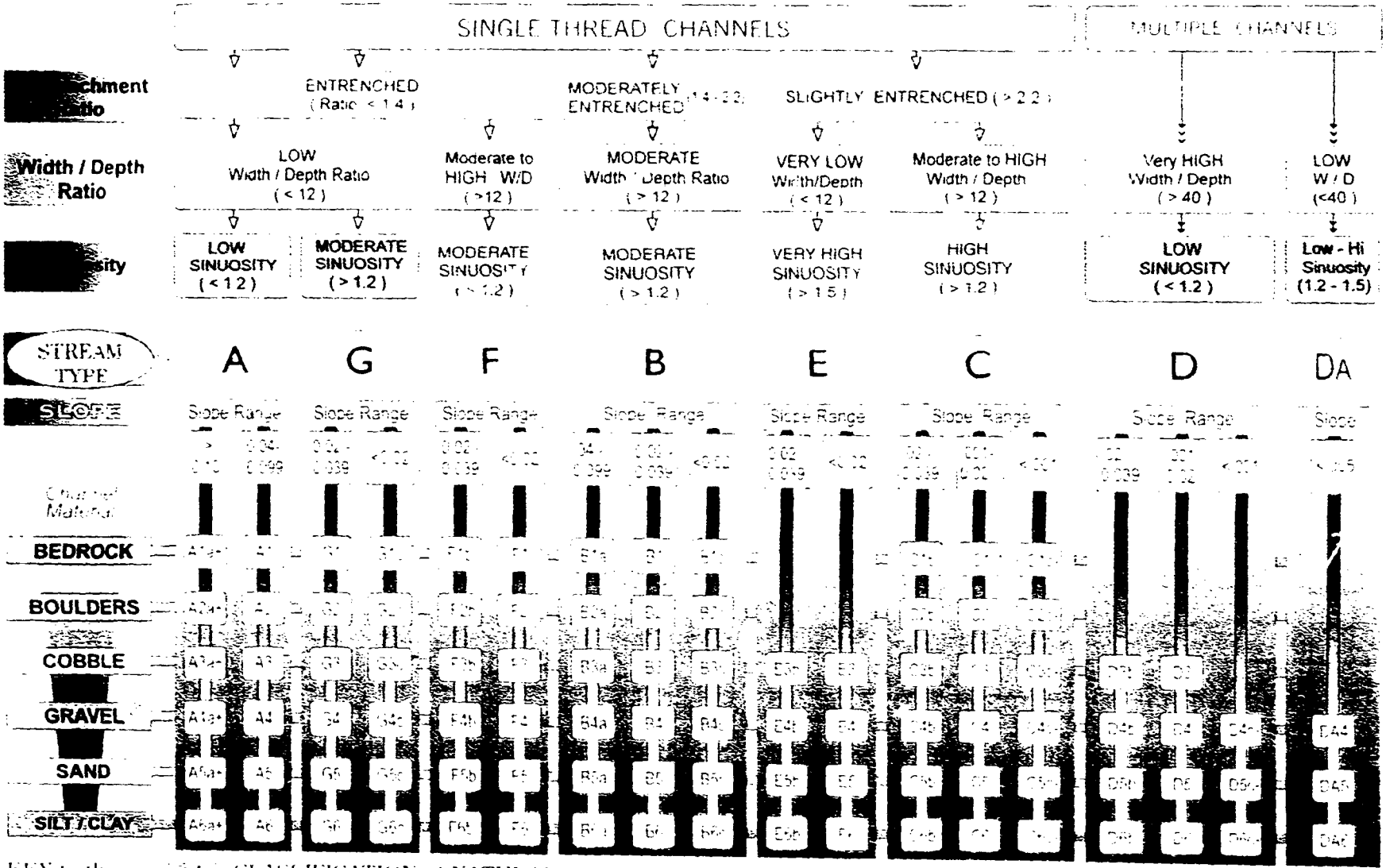
Landform/soils: Broad, gentle gradient alluvial valleys and river deltas. Soils are alluvium

Channel materials: Predominantly gravel, with lesser amounts of cobble, sand and silt/clay

Slope Range: < .02 (C4c .001) **Entrenchment Ratio:** > 2.2

Width/depth Ratio: >12 **Sinuosity:** >1.4

Figure 11. Natural Channel Classification System - Leopold & Rosgen, 1996



KEY to the [illegible] CLASSIFICATION of NATURAL RIVERS. As a function of the *continuum of physical variables* within stream reaches, values of ***Entrenchment*** and ***Sinuosity*** ratios can vary by [illegible] 0.2 units, while values for ***Width / Depth*** ratios can vary by [illegible] 20 units.

Classification key for natural rivers.

MAIN CHANNEL
1736

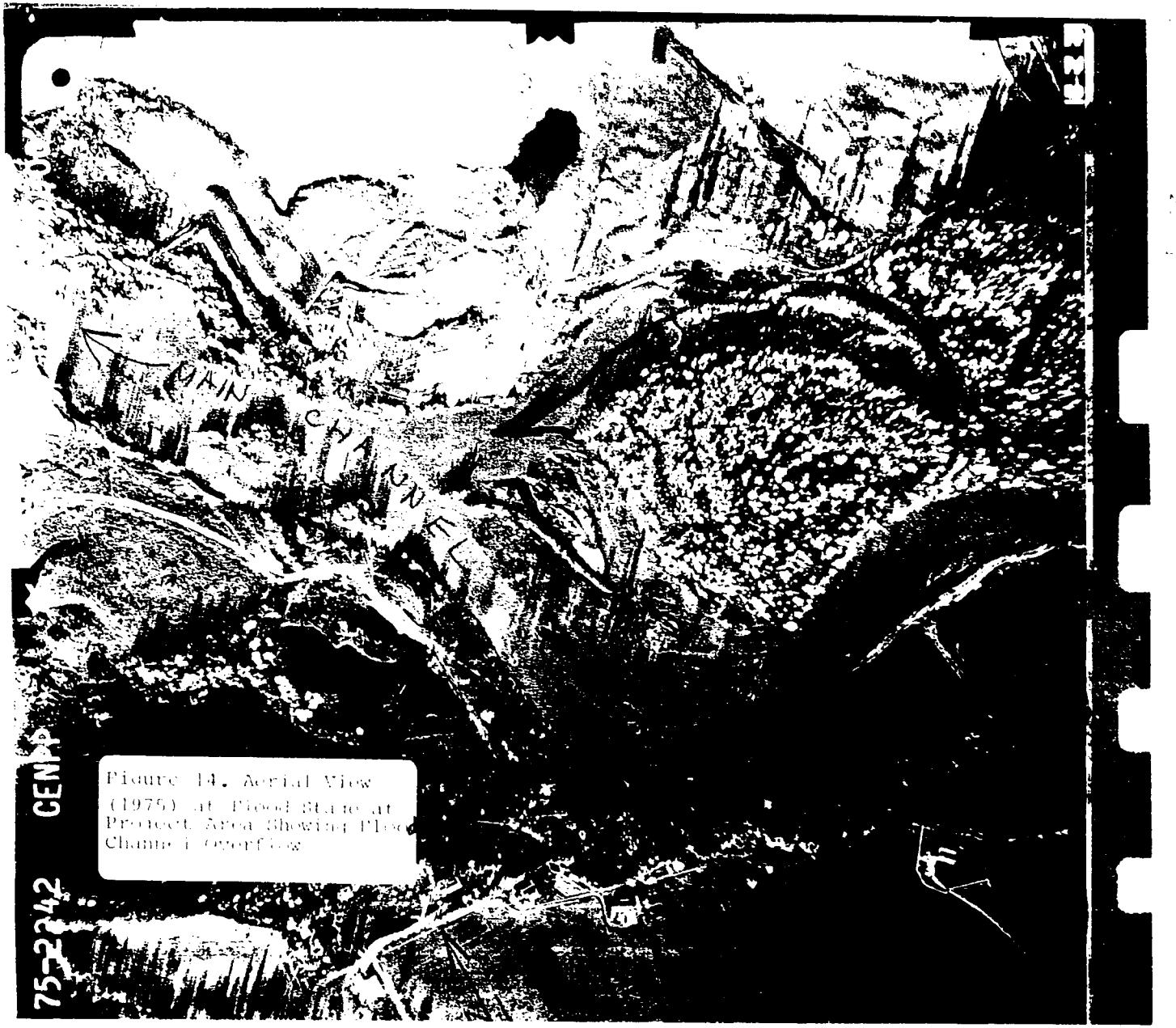


Figure 14. Aerial View (1975) at Flood Stage at Project Area Showing Flood Channel Overflow

Figure 16. An Illustration of How "Urbanization and Vegetation Removal" Raise Flood Hydrograp Peaks

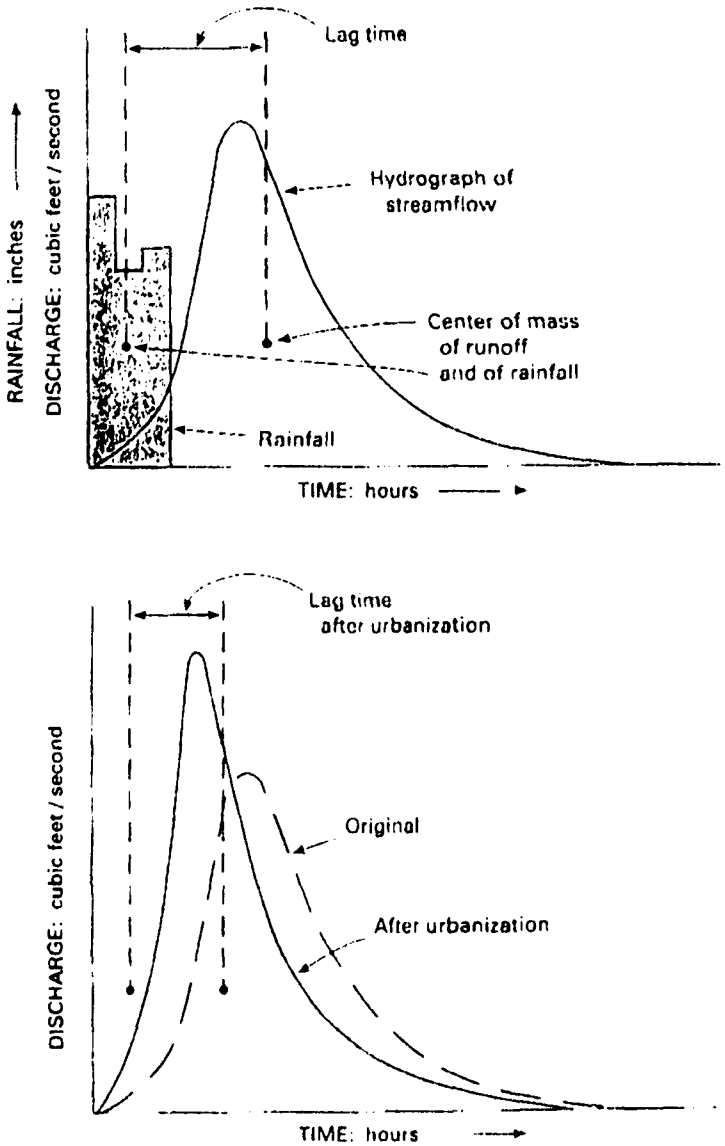


Figure 7.4 Hypothetical unit hydrographs relating runoff to rainfall, with definition of significant parameters, showing the effect of decreased lag time on flood peak.

A View of the River - L. Leopold, 1994

DECLARATION OF CONNIE HALPERIN

I, CONNIE HALPERIN, make this declaration in support of the Friends of the East Fork's appeal of the County's determination that a shoreline permit is not required for the proposal SPR #96-092.

I am an assistant in the firm of David T. McDonald, P.C. On May 5, 1997, I called Cedarapids Inc. and asked who I would speak to regarding information about stackable conveyors. I was transferred to and spoke with Dave McLoughlin at Cedarapids Inc. I identified myself, said that I needed information about the stackable conveyors, explained that we were talking about a gravel mining operation and that the length of the conveyor we were concerned about was about 450 feet.

Each one piece 60' unit has a lifting eye in the center of the section. Mr. McLoughlin said that you use a crane or a loader, lift the section up and drop it into place. In addition, each section requires two supports; one near the tail section and one towards the head. The supports are 'A-frame' type supports and that you could have sections from 5' high to 20' high.

Each flatbed can carry 8-30" wide sections but it would take more than one flatbed to carry that many 36' sections.

I then asked about dissembling the structure. Each 30" wide section weighed 5500 lbs. plus the weight of the drive, which was 328 lbs. The 36" wide section would weigh about 6500 lbs. Therefore, assuming 8-30' sections on a flatbed, the flatbed would weigh 44,000 pounds plus the weight of the flatbed.

/ / / / /

/ / / / /

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Signed at Portland, Oregon on June 3, 1997.

CONNIE HALPERIN

HALL, HOLLAND & DIMITROV
Attorneys at Law
1109 Broadway
Vancouver, WA 98660-3292

EXHIBIT # 57

Ned Hall, Of Counsel
James I. Holland, P.S.
Jessica W. Dimitrov

(360)694-3351
Fax (360) 694-3342

RECEIVED
JUN 09 1997
Clark County
Community Dev/Records

June 6, 1997

Larry Epstein, Esq.
Clark County Hearing Examiner
P. O. Box 9810
Vancouver, WA 98666-9810

Re: In Re: Matter of J.L. Storedahl & Sons, Inc. Notice and Order No. 95-Z-1195

Dear Examiner Epstein:

Enclosed please find the original Affidavit of Service regarding service of Subpoena to Attend Motion to Compel Hearing served on Ray Woodside.

This matter is scheduled before you on June 12, 1997 at 2:00 p.m.

Very truly yours,

Jessica Dimitrov (lsh)

Jessica W. Dimitrov

JWD:lsh
Enclosures
cc: John Shaffer

BEFORE THE CLARK COUNTY HEARINGS EXAMINER

IN RE: MATTER OF J.L. STOREDAHL & SONS, INC. NOTICE AND ORDER	)	NO. 95-Z-1195
	)	AFFIDAVIT OF SERVICE

STATE OF WASHINGTON)
) ss.
County of Clark)

I, DONALD J. BOYLAN, being first duly sworn, upon oath depose and say: That I am a citizen of the United States, a resident of Washington, over the age of 18 years, and competent to testify in the above-referenced matter. That I personally served a true copy of the SUBPOENA TO ATTEND MOTION TO COMPEL HEARING on Ray Woodside, by substitute service, by leaving said Subpoena with a woman who identified herself as the wife of Ray Woodside and stated residency for him at 5015 NE J A Moore Rd., LaCenter, Washington on the 3rd day of June, 1997 at approximately 6:35 p.m.

DONALD J. BOYLAN, Process Server
Clark County Registration #2001

SUBSCRIBED AND SWORN to before me this 4th day of June, 19 97.

JANICE M. BOYLAN, Notary Public for the State of Washington, Residing at Vancouver
My commission expires: 3-15-99

AFFIDAVIT OF SERVICE
SERVICE FEE: $40.00

Exhibit 58

David T. McDonald
Courtroom Lawyer
Admitted to Oregon and Washington State Bar
510 S.W. 3rd Ave., Suite 302 (503) 226-0188
Portland, OR 97204 Fax: (503) 226-1136

June 1, 1997

Mr. Michael Burts
Mr. Monty Anderson, Commercial/Industrial Team leader
Mr. Gary Fish
Department of Community Development for Clark County
1408 Franklin Street
PO Box 9810
Vancouver, Washington 98666-9810

RE: **Reconsideration of Determination allowing operations in the floodplain without a shoreline permit**

By Facsimile and by First Class Mail

Dear Gentlemen:

This letter is to specifically request that the County reevaluate its stop work order issued against JLS and clarified by letter from Monty Anderson to Charlie Roe dated August 15, 1995 (a copy of which is attached for your easy reference) and ban washing, screening, and stockpiling of aggregate and sand (i.e., stop all operations on the site until all issues are resolved) upon the grounds and for the reasons that:

1. JLS is alleged to have continued mining operations such as washing, stockpiling, and screening for almost two years now without complying with any environmental or surface mining laws;

2. JLS has now proposed an extensive *expansion* of mining operations not only within the 100 year floodplain but on the very banks of the East Fork of the Lewis River without any required permit or study; and

3. The County has now requested an EIS on SPR-96-092 which necessarily should include this property, and the mining operations which have been, and might continue to occur which highlights the environmental sensitivity of this parcel.

It has been almost two years since the county stopped all work except the screening, stockpiling and washing and the chances of environmental degradation continues to climb given the lack of oversight over the activities on the site. Moreover, it is quite clear that JLS is anticipating a huge expansion of operations on the site. Recently JLS has added a massive Sand Classifier to its operations (a picture of the structure is enclosed). The Classifier is clearly a structure and is affixed to a concrete foundation. Therefore, it appears that JLS has poured a concrete foundation in floodplain and within 200' feet of the shore and moved in a massive sand classifier, all without a permit or any environmental review. How can this be in compliance with state/county laws?

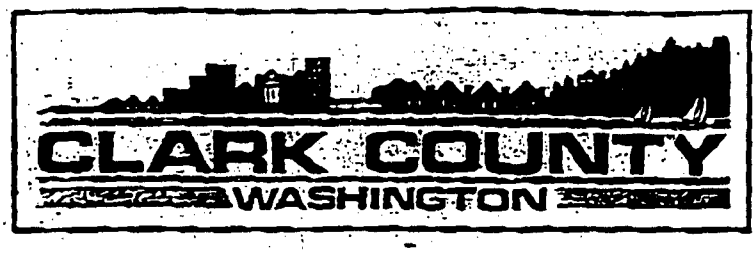
In addition, recent photos show that orange markings have been set out on the property which indicates *further* expansion (a picture of the structure is enclosed. The orange markers are to the right of the structure). Clearly such expansions of processing were not anticipated when Mr. Anderson wrote his letter of August 15, 1995, especially given the fact that at time, according to JLS, the total tonnage being sold from the site has been reduced from a high of 633,000 tons in 1991 to a mere 12,000 tons in 1995.

Therefore we request that you revisit this issue and ban *all* mining related operations on this extremely environmentally sensitive site until the preparation of the EIS or the applicant's obtaining a shoreline permit.

Sincerely,

David T. McDonald

Enclosures
cc: President, FOEF (w/ enclosures)
Board of County Commissioners (w/ enclosures)
Rich Lowry (w/ enclosures)
John L. Deutler (w/ enclosures)
Rex Happala (w/ enclosures)
Kim VanZwalenburg (w/ enclosures)



DEPARTMENT OF
COMMUNITY DEVELOPMENT
Planning Division

August 15, 1995

Mr. Charles B. Roe, Jr.
Perkins Coie
1110 Capital Way South, Suite 405
Olympia, Washington 98501-2251

RE: Storedahl Mining Operations at Daybreak

Dear Mr. Roe:

Thank you for the opportunity to meet and discuss the referenced operations on the 1st and 7th of August, 1995. This is to memorialize the results of those discussions.

First, the Stop Work Order issued on August 3, 1995 pertains only to grading, excavating, mining and similar earth moving activities on the site. Although the screening, washing and stockpiling of imported aggregate occurring within the flood plain also requires a shoreline permit, we have determined to allow these uses to continue on an interim basis pending resolution of the overall issues involved with the operation.

Among those overall issues are the following concerns: (1) the current prohibition on surface mining within the 100-year flood plain, which may be addressed by the Growth Management Hearing Board; (2) the effect of rezoning much of the site by removing the Surface Mining Combining District to implement this GMA Plan policy; (3) the propriety of State recognition of the original 71-acre mining permit applying to the entire 349.94-acre site; (4) historic rights, if any, held by the owner or operator with regard to mining, crushing, zoning and the Shoreline Management Act; (5) the need to complete an environmental impact statement for continued processing of the shoreline permit pending since 1991; and (6) potential interim operating options and related permit requirements.

Regarding the first two items above, the current County Code allows mining to occur on only about 60 acres of the site; unless or until the County Plan is changed as a result of a GMA Board ruling, any further mining would be limited to areas outside the 100-year flood plain. As for Item #3, all evidence to date points to an approved reclamation plan for only 71 acres, none of which is currently zoned for mining. Your client indicated that a letter from the Attorney General supports the State Geologist's ruling that Permit #10139 applies to the entire 349.94 acres; we request a copy of this legal opinion. Regardless of that ruling, however, our current position is that mining can occur only under the appropriate zoning, which is limited to the 60 acres referenced above.

1408 FRANKLIN STREET • P.O. BOX 5810 • VANCOUVER, WASHINGTON 98666-5810
(360) 699-2375 • FAX (360) 699-2011 • TDD (360) 737-6057

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The issue of grandfathered rights is perhaps the most perplexing. First, it is clear that there are no grandfathering rights under the Shoreline Management Act, so that any work within the flood plain requires a shoreline permit. It is our understanding that mining and crushing have not occurred on a regular basis on the site since 1992. The Clark County Zoning Code provides that a nonconforming use that ceases for a period of six months or more "shall be considered abandoned, and said premises shall thereafter be used only for uses permitted under the provisions in the district in which it is located" (CCC 18.412.030B).

It is our position that nonconforming rights for mining and crushing have not existed on this site for some time, and most certainly not since before new zoning took effect on January 1, 1995. As we discussed in the meetings, there is no meaningful case law in the State of Washington concerning the doctrine of diminishing resources, so that any reversal of our position on this issue would need to be based on hard, factual information (e.g., demonstration that all periods of discontinued mining and/or crushing have been less that six months in duration or were based on market conditions, such as no demand for materials).

Concerning Item #5 above, it is our understanding that your client has agreed to complete the EIS process so that a shoreline permit decision can be made. We also discussed the requirements for allowing an interim operation to occur within a properly zoned portion of the site outside the 100-year flood plain. These requirements would include the following: (a) approval of a conditional use permit through the public hearing process for rock crushing; (b) administrative site plan approval for mining, crushing, and other activities within the Surface Mining Combining District; and (c) a new SEPA review for these permit applications. A grading permit would be required only for earth moving activities undertaken prior to other permit approvals, as both the shoreline permit and site plan approval substitute for this permit requirement.

I hope this adequately summarizes our discussions, and thank you again for meeting with us. Please call me at (360) 699-2375, extension 4499, if there are any questions.

Sincerely,

Monty K. Anderson
Commercial/Industrial Team Leader

cc: Craig Greenleaf
Rich Lowry
Chris Horne
Rich Hines
Linda Maddy

MA/RH:roe.ltr

J. L. Storedahl & Sons, Inc.
2233 TALLEY WAY KELSO, WASHINGTON 98626
Jerry L. Storedahl, Owner
Phone: (206) 63

June 16, 1995

Clark County
Attention: Chris Horne

As per your request in our meeting of June 12, 1995, please find breakdown of quantity of materials sold from our Daybreak facility from 1991 through present:

1990		833,000 Tons
1991		560,000 Tons
1992	January - June	89,000 Tons
1992	July - December	45,000 Tons
1993	January - June	38,000 Tons
1993	July - December	42,000 Tons
1994	January - June	28,000 Tons
1994	July - December	30,000 Tons
1995	January - May	12,200 Tons

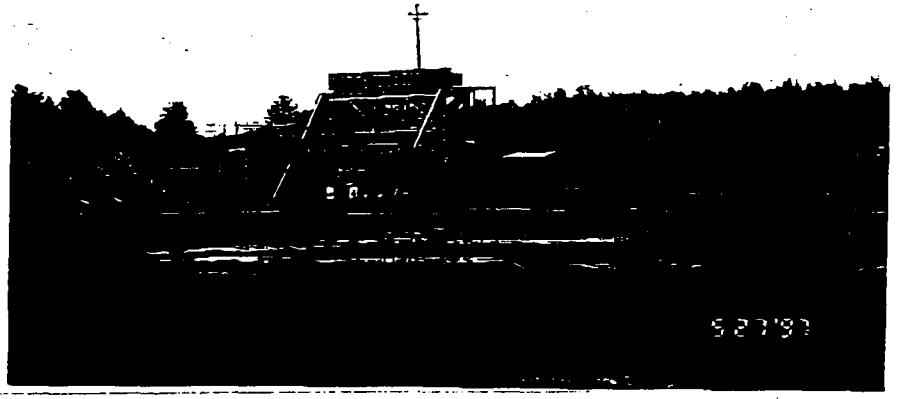
As stated in our meeting, we have been in continuous operation since the purchase of the Lease Agreement with the property owner, Ray Woodside.

If you need additional information, please call me:
Mobile # 921-0114
Office # 687-5663

Thanks,

Virgle Barnett

VB;ch



VERY POOR COPY WILL NOT
DUPLICATE.

HALL, HOLLAND & DIMITROV
Attorneys at Law
1109 Broadway
Vancouver, WA 98660-3292

EXHIBIT # 59

Ned Hall, Of Counsel
James I. Holland, P.S.
Jessica W. Dimitrov

(360)694-3351
Fax (360) 694-3342

RECEIVED

JUN 05 1997

Clark County
Community Dev/Records

June 3, 1997

Larry Epstein, Esq.
Clark County Hearing Examiner
P. O. Box 9810
Vancouver, WA 98666-9810

Re: In Re: Matter of J.L. Storedahl & Sons, Inc. Notice and Order No. 95-Z-1195

Dear Examiner Epstein:

Enclosed please find the following original documents:

1. Notice of Hearing on Pacific Rock Environmental Enhancement Group's Motion to Compel Responses to Requests for Production of Documents and Subpoena;

2. Motion to Compel Responses to Requests for Production of Documents and Subpoena;

3. Affidavit of James I. Holland in Support of Motion to Compel; and

4. Subpoena for Ray Woodside's attendance at the Motion to Compel Hearing.

This matter is scheduled before you on June 12, 1997 at 2:00 p.m.

Very truly yours,

Jessica W. Dimitrov

Jessica W. Dimitrov

JWD:lsh
Enclosures
cc: John Shaffer

BEFORE THE CLARK COUNTY HEARING EXAMINER

IN RE: MATTER OF J. L. STOREDAHL & SONS, INC. NOTICE AND ORDER	NO. 95-Z-1195 NOTICE OF HEARING ON PREEG'S MOTION TO COMPEL RESPONSES TO REQUESTS FOR PRODUCTION OF DOCUMENTS AND SUBPOENA

TO: Clark County, Washington, a municipal corporation and your attorney, Rich Lowry

J. L. Storedahl & Sons, Inc. and your attorney, James L. Sellers

Ray and Merry Woodside, dba Sammamish Farm and Virginia Woodside, and your attorney, Philip G. Marshall

Friends of the East Fork and your attorney, David T. McDonald

Scott and Carol Rose, pro se

AND TO: HEARING EXAMINER, LARRY EPSTEIN

PLEASE TAKE NOTICE that Pacific Rock Environmental Enhancement Group, will on the 12th day of June, 1997, at the hour of 2:00 p.m. or as soon thereafter as the attention of Hearing Examiner Larry Epstein may be had in Conference Room A or B at 1408 Franklin, Vancouver, Washington 98660, call up for hearing Pacific Rock Environmental Enhancement Group's Motion to Compel Responses to Requests for Production of Documents and Subpoena, previously served upon you.

DATED this 3rd day of June, 1997.

HALL, HOLLAND & DIMITROV

By _____

James L. Holland, WSBA# 5196
Jessica W. Dimitrov, WSBA# 20758
Of Attorneys for Pacific Rock
Environmental Enhancement Group

HALL, HOLLAND & DIMITROV
ATTORNEYS AT LAW
1109 BROADWAY
VANCOUVER, WASHINGTON 98660-3292
AREA CODE 360 - TELEPHONE [illegible]
FAX 360 - TELEPHONE [illegible]

BEFORE THE CLARK COUNTY HEARINGS EXAMINER

IN RE: MATTER OF J. L. STOREDAHL & SONS, INC. NOTICE AND ORDER	)	NO. 95-Z-1195 PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP'S MOTION TO COMPEL RESPONSES TO REQUESTS FOR PRODUCTION OF DOCUMENTS AND SUBPOENA

COMES NOW Pacific Rock Environmental Enhancement Group and moves the Clark County Land Use Hearing Examiner to issue an Order compelling Ray and Merry Woodside, dba Sammamish Farms, to produce documents pursuant to the Subpoena Duces Tecum and Request For Production of Documents previously served upon the aforementioned individuals.

This motion is made pursuant to CCC 32.08.040, WAC Chapter 1-08 and Clark County Land Use Hearing Examiner Larry Epstein's Second Pre-Hearing Order filed in this matter on July 16, 1996 the records and files herein, the attached Affidavit of James I. Holland and any other affidavits or memoranda submitted herewith in support of this motion.

DATED this 16 day of May, 1997.

James I. Holland, WSBA #5196
of Attorneys for Pacific Rock
Environmental Enhancement Group

HALL HOLLAND & DIMITROV
ATTORNEYS AT LAW
1109 BROADWAY
VANCOUVER WASHINGTON 98660-3292
AREA CODE 360 - TELEPHONE 694-3351
FAX 360 - TELEPHONE 694-3341

BEFORE THE CLARK COUNTY HEARINGS EXAMINER

IN RE: MATTER OF J. L. STOREDAHL & SONS, INC. NOTICE AND ORDER	)	NO. 95-Z-1195
	)	AFFIDAVIT OF JAMES I. HOLLAND IN SUPPORT OF PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP'S MOTION TO COMPEL RESPONSES TO REQUEST FOR PRODUCTION OF DOCUMENTS AND SUBPOENA

STATE OF WASHINGTON)
ss.
County of Clark)

JAMES I. HOLLAND, on oath deposes and states as follows:

1. I am attorney of record for Pacific Rock Environmental Enhancement Group ["PREEG"], a party to this administrative hearing and make this affidavit on personal knowledge in support of PREEG's Motion to Compel Responses to Requests for Production of Documents and Subpoena Duces Tecum.

2. On or about April 3, 1997, I mailed to Ray and Merry Woodside, through their counsel of record, Casey Marshall, a Subpoena Duces Tecum and Request for Production of Documents. See Exhibit "A", attached hereto. Allowing three days for delivery, pursuant to the Civil Rule 7, service was completed on April 6, 1997.

3. The Subpoena and Request for Documents requested that the carefully described documents be produced at my office on or before 30 days after service, or on

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ATTORNEYS AT LAW
1109 BROADWAY
VANCOUVER, WASHINGTON 98660-3293
AREA CODE 360 - TELEPHONE 694-1135
FAX 360 - TELEPHONE 696-3731

May 5, 1997. See Exhibit "A".

4. On April 29, I telephoned Casey Marshall to ask whether he intended to object to any of the documents we had designated in our Request for Documents. He stated at that time that he had no intentions at that time of objecting to our discovery.

5. On May 2, 1997, I sent a letter to Casey Marshall reminding him that the documents were due to be delivered by May 5 and requested the status of the documents.

6. The documents were not delivered on May 5. On May 9, 1997 I received a letter from Casey Marshall, attached hereto as Exhibit "B", acknowledging receipt of my May 2 letter and stating that he intended to have the documents delivered a week to ten days after May 9. As a result of that reaffirmation of his intention to fully comply with our Request for Production, I decided to wait until after May 17 before bringing this motion to compel.

7. On May 21, 1997, I received a partial response to the Requests for Production, indicating that all documents requested would be made available for my inspection and review at a mutually convenient time. See Exhibit "C", attached hereto. Accompanying the Response, Mr. Marshall sent a letter stating that his only objection to the documents requested went to "matters relating to the dairy farm and to a potential sale of the property." See Exhibit "D". Mr. Marshall also indicated there were "two boxes full of materials" available for my inspection.

8. On May 29, 1997, my partner Jessica Dimitrov and two PREEG representatives went to Mr. Marshall's office to inspect the documents provided. There

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FAX 360 - TELEPHONE 694-334

were not two full boxes as represented, but only one box, mostly filled with farm records. Ms. Dimitrov asked Mr. Marshall's assistant, Christie, if there were any other documents and was told there were not.

9. Upon review of the documents, it became clear that there were substantial documents missing. Immediately upon return to the office, Ms. Dimitrov sent Mr. Marshall a letter requesting all withheld documents or an itemized list identifying them together with an explanation of their nondisclosure. See Exhibit "E".

10. Several weeks ago I scheduled the deposition of Ray Woodside for June 5, 1997 and incurred the expense of having him personally served. I made my intention clear to Mr. Marshall that I wanted the opportunity to review Mr. Woodside's documents well in advance of his deposition. Ms. Dimitrov also stated in her letter to Mr. Marshall that I wanted the withheld documents sufficiently in advance of the deposition.

11. Mr. Marshall informed this office for the first time last week that Mr. Woodside intends to take an extended trip outside of the Vancouver area beginning Monday, June 9. As of the date of preparing this affidavit, I have received no response from Mr. Marshall to Ms. Dimitrov's letter.

12. Request is therefore made that the Hearing Examiner issue an order compelling the production of all requested documents that have not been produced as set forth in Exhibit "A" by a time certain. Request is further made that Mr. Woodside be ordered to attend a deposition in person in Clark County, at a time either agreed to by the parties or at a time ordered by the Examiner if agreement cannot be reached. Finally, request is made that PREEG be allowed to provide substitute service upon Mr.

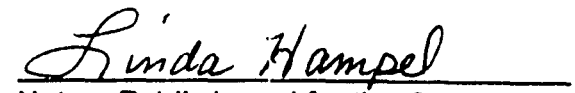
HALL, HOLLAND & DIMITROV
ATTORNEYS AT LAW
109 Broadway
VANCOUVER, WASHINGTON 98660-3292
[illegible]

Woodside by service upon his attorney of record, Mr. Casey Marshall.

DATED this 3rd day of June, 1997.

JAMES I. HOLLAND

SWORN AND SUBSCRIBED before me this 3rd day of June, 1997.



Notary Public in and for the State of Washington, residing in Vancouver, therein. My commission expires: 1-24-01

HALL, HOLLAND & DIMITROV
ATTORNEYS AT LAW
1109 BROADWAY
VANCOUVER, WASHINGTON 98660-3292
AREA CODE 360 - TELEPHONE 694-3535
FAX 360 - TELEPHONE 694-3541

BEFORE THE CLARK COUNTY HEARINGS EXAMINER

IN RE: MATTER OF J. L. STOREDAHL & SONS, INC. NOTICE AND ORDER	NO. 95-Z-1195 SUBPOENA DUCES TECUM

THE STATE OF WASHINGTON TO : RAY AND MERRY WOODSIDE, dba SAMMAMISH FARMS

You are hereby required to appear and produce all the items listed in Pacific Rock Environmental Enhancement Group's First Request for Production on Ray and Merry Woodside to James I. Holland at 1109 Broadway, Vancouver, WA 98660, on or before 30 days from your receipt of this subpoena. A copy of the Request for Production is attached and incorporated by this reference.

DATED this 22 day of April, 1997.

James I. Holland, WSBA #5196
of Attorneys for Pacific Rock
Environmental Enhancement Group

EXHIBIT "A"

Page 1 of 5

HALL, HOLLAND & DIMITROV
ATTORNEYS AT LAW
1109 BROADWAY
VANCOUVER WASHINGTON 98660-3297
AREA CODE 360-TELEPHONE 694-3351

BEFORE THE CLARK COUNTY HEARINGS EXAMINER

IN RE: MATTER OF J. L. STOREDAHL & SONS, INC. NOTICE AND ORDER	)	NO. 95-Z-1195
	)	PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUPS' FIRST REQUEST FOR PRODUCTION ON RAY AND MERRY WOODSIDE

To: RAY AND MERRY WOODSIDE, dba SAMMAMISH FARMS,

PURSUANT TO CCC 32.08.040, WAC Chapter 1-08, CR 26, and the Second Pre-Hearing Order, filed in this matter on July 16, 1996, Pacific Rock Environmental Enhancement Group requests that Ray and Merry Woodside produce for inspection and copying to James I. Holland, a the law offices of HALL, HOLLAND & DIMITROV, 1109 Broadway, Vancouver, WA 98660, within 30 days of the receipt of this document, the documents and tangible things described below. This request is continuing.

If any of the requested documents and other tangible things cannot be produced in full, produce said items to the extent possible, specify a description and the reasons for your inability to produce the remainder, state what information, knowledge or belief you have concerning the unproduced portion.

This request for documents is submitted together with a Subpoena Duces Tecum pursuant to the Second Pre-Hearing Order.

EXHIBIT A

Page 2 of 5

HALL HOLLAND & DIMITROV
ATTORNEYS AT LAW
1109 BROADWAY
VANCOUVER WASHINGTON 98660 3292
AREA CODE 360 - TELEPHONE 694-3351
FAX 360 - TELEPHONE 694 3341

DEFINITIONS

A. As used herein, "documents" refers to any medium upon which information is or can be recorded, including without limitation, original papers, tapes, computer disks, information contained on the hard drive of any computer, copies of original papers if the original papers are not available, data or spread sheets, or any other substances on which communications, data or information is recorded or stored, whether manually, mechanically, magnetically, photographically, or electronically. This definition includes all drafts or superseded revisions of each original document, which are currently in existence. Additionally, as used herein, "documents" includes, but is not limited to, letters, memoranda, notes, papers of any kind or character, permits, pamphlets, brochures, books, ledgers, reports, receipts, invoices, bills, checks, purchase orders, contracts, agreements, evidence of indebtedness, schedules, calendars, diaries, transcripts of testimony, appointment schedules, correspondence, telegrams, cables, telex messages, journals, summaries, photographs, maps, minutes of meetings and computer input or printouts.

B. As used herein, "Woodside Property " refers to that certain real property owned by Ray and Merry Woodside in Sections 13, 18, 19 & 24, Township 4 North, Range 1/2 East, Clark County, Washington.

EXHIBIT A

Page 3 of 5

HALL HOLLAND & DIMITROV
ATTORNEYS AT LAW
1108 BROADWAY
VANCOUVER WASHINGTON 98660-3292
AREA CODE 360-TELEPHONE 694-3351
FAX 360-TELEPHONE 694-3342

DOCUMENTS REQUESTED

1. All personal and business tax returns from 1971 to the present which in any way relate to Woodside Property.

2. All documents involving or in any way concerning the removal of aggregate and related material from the Woodside Property from 1971 to the present, including but not limited to weigh tickets, correspondence, time cards, internal reports, internal memoranda, royalty checks, invoices, accounting and bookkeeping records and bills paid.

3. All documents showing mining and mining-related activity at the Woodside Property from 1971 to the present.

4. All documents to or from any state, federal or local governmental agency in any way regarding the Woodside Property or its owners, operators and the like from 1971 to the present.

5. Any and all documents involving or in any way concerning the importation of aggregate and related material to the Woodside Property, from any source whatsoever, from 1971 to the present, including but not limited to weigh tickets, time cards, internal reports, internal memoranda, royalty checks, invoices, and bills paid.

6. A list of all employees, independent contractors, agents, accountants, engineers, consultants and the like who have worked for or on your behalf in any respect related to the Woodside Property, together with their phone numbers and addresses.

EXHIBIT A

Page 4 of 5

HALL HOLLAND & DIMITROV
ATTORNEYS AT LAW
1108 BROADWAY
VANCOUVER WASHINGTON 98660-3292

7. Any and all chain of title documents for each parcel of Woodside Property reflecting ownership of the real property from 1965 to date.

8. All financial records and information reflecting depletion allowances and cash flows for the Woodside Property.

9. All documents to, from or in any way related to J. L. Storedahl & Sons, Inc., Jerry Storedahl, their agents, employees or related entities.

10. To the extent not already provided, all documentation regarding the transfer of Washington State Department of Natural Resources permits and the area of mining operations at the Woodside Property.

11. All documents related to all mining operators involved in any way with the Woodside Property.

12. All documents revealing all mining operators at the Woodside Property and dates in which they conducted mining operations thereon.

DATED this 30 day of April, 1997.

HALL, HOLLAND & DIMITROV

By [signature] WSBA# 7075 for
JAMES I. HOLLAND, WSBA# 5196
Of Attorneys for Pacific Rock
Environmental Enhancement Group

EXHIBIT A
Page 5 of 5

HALL, HOLLAND & DIMITROV
ATTORNEYS AT LAW
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VANCOUVER, WASHINGTON 98660-3292
AREA CODE 360-TELEPHONE 694-3351
FAX 360-TELEPHONE 694-3342

LANE & MARSHALL ATTORNEYS AT LAW

514 West 9th Street, Vancouver, WA 98660 Telephone: (360) 696-0791 • Fax: (360) 696-0063

DENNIS W. LANE
PHILIP "CASEY" MARSHALL
* VICTORIA T. BLACKWELL
DEREK J. VANDERWOOD

* Also licensed in Oregon

May 9, 1997

RECEIVED
MAY 1 1997
Hall Holland & Dimitrov
CC-CL via fax

James I. Holland
Hall Holland & Dimitrov
1109 Broadway
Vancouver, Washington 98660

re: *Motion to Produce for Pacific Rock*
PREEG v. Storedahl, et al.

Dear Mr. Holland:

This letter is to acknowledge your letter of May 2, 1997.

My clients are still processing your requests and I should have the documentation within a week to ten days.

Sincerely yours,

LANE & MARSHALL

PHILIP "Casey" MARSHALL

PHILIP G. MARSHALL

cc: client

EXHIBIT "B"

Page 1 of 1

IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON

FOR THE COUNTY OF CLARK

PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP, a Washington non-profit corporation, Petitioner, v. LARRY EPSTEIN, Clark County Land Use Hearing Examiner, CLARK COUNTY, WASHINGTON, a municipal corporation; J.L. STOREDAHL & SONS, INC., a Washington corporation, RAY and MERRY WOODSIDE, husband and wife dba SAMMAMISH FARM, VIRGINIA I. WOODSIDE, SCOTT and CAROL ROSE, husband and wife, and FRIENDS OF THE EAST FORK, a Washington non-profit corporation, Respondents.	Cause No. 96 2 03238 1 RESPONSE OF WOODSIDE dba SAMMAMISH FARM TO PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS

TO: PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP and ATTORNEY JAMES I. HOLLAND, Hall Holland & Dimitrov, 1109 Broadway, Vancouver, Washington 98660

1. REQUEST FOR PRODUCTION NO. 1: WOODSIDE will permit inspection of personal and business tax returns that are in the possession or control of WOODSIDE as it relates to and concerns the mining activities of J. L. STOREDAHL & SONS and the predecessors.

2. REQUEST FOR PRODUCTION NO. 2: WOODSIDE will provide.

3. REQUEST FOR PRODUCTION NO. 3: WOODSIDE will provide.

4. REQUEST FOR PRODUCTION NO. 4: WOODSIDE will permit inspection of any government correspondence in the possession or

EXHIBIT "C"

Page 1 of 7

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

control of WOODSIDE as it relates to and concerns the mining activities of J. L. STOREDAHL & SONS and the predecessors.

5. REQUEST FOR PRODUCTION NO. 5: WOODSIDE will provide.

6. REQUEST FOR PRODUCTION NO. 6: WOODSIDE will produce any of such list of all such people included in such request as it relates to and concerns the mining activities of J. L. STOREDAHL & SONS and the predecessors. To Wit:

Vern Peterson & Associates
7714 Northeast Hazel Dell Avenue
Vancouver, Washington
574-0614

7. REQUEST FOR PRODUCTION NO. 7: This request is readily available to PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP as publicly available documents.

8. REQUEST FOR PRODUCTION NO. 8: None, except as to tax records already provided.

9. REQUEST FOR PRODUCTION NO. 9: This has already been supplied except for any and all documentation regarding a possible sale of the WOODSIDE property which is hereby objected to.

10. REQUEST FOR PRODUCTION NO. 10: WOODSIDE will provide.

11. REQUEST FOR PRODUCTION NO. 11: WOODSIDE will provide.

12. REQUEST FOR PRODUCTION NO. 12: WOODSIDE will provide.

EXHIBIT "C"
Page 2 of 7

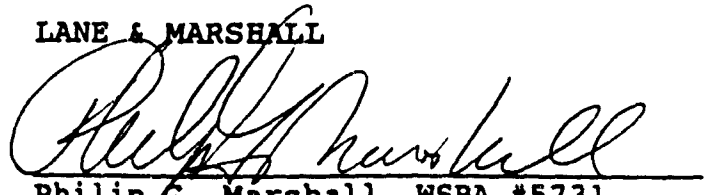
LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

The documentation and records that will be supplied will be available at the offices of LANE & MARSHALL for such review and copying, if needed, at .20¢ per page. The time and date will be set as mutually convenient between the parties.

DATED this 20th day of May, 1997.

Respectfully submitted,

LANE & MARSHALL



Philip G. Marshall, WSBA #5731
Attorney for Defendants Woodside

EXHIBIT "C"

Page 3 of 7

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON

FOR THE COUNTY OF CLARK

PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP, a Washington non-profit corporation, Petitioner, v. LARRY EPSTEIN, Clark County Land Use Hearing Examiner, CLARK COUNTY, WASHINGTON, a municipal corporation; J.L. STOREDAHL & SONS, INC., a Washington corporation, RAY and MERRY WOODSIDE, husband and wife dba SAMMAMISH FARM, VIRGINIA I. WOODSIDE, SCOTT and CAROL ROSE, husband and wife, and FRIENDS OF THE EAST FORK, a Washington non-profit corporation, Respondents.	Cause No. 96 2 03238 1 OBJECTIONS OF WOODSIDE dba SAMMAMISH FARM TO CERTAIN REQUESTS OF PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP

TO: PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP and ATTORNEY JAMES I. HOLLAND, Hall Holland & Dimitrov, 1109 Broadway, Vancouver, Washington 98660

On or about April 7, 1997, the law office of Lane & Marshall received on behalf of RAYMOND and MERRY WOODSIDE dba SAMMAMISH FARM a request for production of documents from PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP. The twelve requests for production include documentation and memorandum involving certain areas for which RAY and MERRY WOODSIDE dba SAMMAMISH FARM do object to as not being relevant nor would it lead to any relevant evidence. These areas include the following:

EXHIBIT "C"

Page 4 of 7

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

1. Any and all documentation relating to the dairy farm operation of SAMMAMISH FARM. This is separate and apart and is in no way related to the mining operation of J. L. STOREDAHL.

2. Any and all correspondence or documentation concerning any potential sale to J. L. STOREDAHL or any other party.

In the meantime the parties have provided and will make arrangements for the inspection and copying of any and all documentation as requested in PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP's First Request for Production of Documents.

This objection is made pursuant to the Hearing Examiner's Second Prehearing Order dated July 16, 1996.

Respectfully submitted,

LANE & MARSHALL

Philip G. Marshall, WSBA #5731
Attorney for Defendants Woodside

EXHIBIT C

Page 5 of 7

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON

FOR THE COUNTY OF CLARK

PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP, a Washington non-profit corporation, Petitioner, v. LARRY EPSTEIN, Clark County Land Use Hearing Examiner, CLARK COUNTY, WASHINGTON, a municipal corporation; J.L. STOREDAHL & SONS, INC., a Washington corporation, RAY and MERRY WOODSIDE, husband and wife dba SAMMAMISH FARM, VIRGINIA I. WOODSIDE, SCOTT and CAROL ROSE, husband and wife, and FRIENDS OF THE EAST FORK, a Washington non-profit corporation, Respondents.	Cause No. 96 2 03238 1 CERTIFICATE OF SERVICE

I hereby certify that, on this date, I served a copy of the attached RESPONSE OF WOODSIDE dba SAMMAMISH FARM TO PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS and OBJECTIONS OF WOODSIDE dba SAMAMMISH FARM TO CERTAIN REQUESTS OF PACIFIC ROCK ENVIRONMENTAL ENHANCEMENT GROUP on the following parties by placing said copy in the U.S. Mail with postage prepaid:

Larry Epstein
Clark County Hearing Examiner
P. O. Box 9810
Vancouver, Washington 98666-9810

James I. Holland
Hall Holland & Dimitrov
1109 Broadway
Vancouver, Washington 98660-3292

EXHIBIT C
Page 6 of 7

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791

DATED this 20th day of May, 1997.

Kristi Straight

Kristi Straight

EXHIBIT C

Page 7 of 7

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

LANE & MARSHALL

ATTORNEYS AT LAW

514 West 9th Street, Vancouver, WA 98660

Telephone: (360) 696-0791 • Fax: (360) 696-0063

DENNIS W. LANE
PHILIP "CASEY" MARSHALL
* VICTORIA T. BLACKWELL
DEREK J. VANDERWOOD

* Also licensed in Oregon

FAXED
May 20, 1997

James I. Holland
Hall Holland & Dimitrov
1109 Broadway
Vancouver, Washington 98660

Re: *Response to Motion to Produce for Pacific Rock*
PREEG v. Storedahl, et al.

Dear Jim:

Enclosed please find the Response to your client's First Request for Production of Documents and an Objection filed with the Hearing Examiner.

The Objection only goes to matters relating to the dairy farm and to a potential sale of the property.

I have two boxes full of materials for your inspection. These are readily available at a mutually convenient time. The inspection will be held at my offices and any documentation that you want copied can be copied at my office at .20¢ per page.

Please call me upon receipt so we can set up an appropriate time.

In addition, the time you have requested for the deposition of Ray Woodside conflicts with a medical exam which has taken months to schedule. Ray's appointment is on June 5, 1997, at 11:00 a.m. If that leaves enough time for Ray, then this setting is fine. Otherwise, Ray is available on June 3 or 4, 1997.

Sincerely yours,

LANE & MARSHALL

PHILIP G. MARSHALL
PGM:kcs
cc: client

EXHIBIT "D"
Page 1 of 1

EEG. Admin.

HALL, HOLLAND & DIMITROV

Attorneys at Law
1109 Broadway
Vancouver, WA 98660-3292

Ned Hall, Of Counsel
James I. Holland, P.S.
Jessica W. Dimitrov

(360)694-3351
Fax (360) 694-3342

May 29, 1997

VIA FACSIMILE (360) 696-0063

Casey Marshall, Esq.
Lane & Marshall
514 West 9th Street
Vancouver, WA

Re: PREEG v. Storedahl

Dear Casey:

I reviewed the one box of Ray Woodside's documents that were provided to me today. It appears that there are a large number of documents that are either missing or were not provided. We will need to obtain those additional documents as soon as possible due to Mr. Woodside's deposition next Thursday.

It is impossible for me to know everything that was not provided, but I was able to determine that the following documents were not provided:

1. There were no records of rock sales prior to 1977.
2. There were no records of rock sales for April and July of 1981.
3. There were no records of rock sales for December of 1982.
4. There were no records of rock sales for 1983 through 1989.
5. There were no records of rock sales for December 1994.
6. There were no records of rock sales for July or March of 1995.
7. There were no records of rock sales for March, May, June and August of 1996.
8. There were no records of rock sales after February of 1997.

In addition to the lack of all rock sales records, there are a number of income tax returns that are missing:

1. There are no tax returns, personal, partnership or otherwise from 1991 to the present.

EXHIBIT "E"

2. There is no 1991 10-40 for Ray and Merry Woodside--only a K-1 and Partnership return.

3. No tax returns of any kind between 1988 and 1986.

4. There is no K-1 for Ray and Merry Woodside for 1986.

5. There is no tax return, including 10-40 for Ray and Merry Woodside for 1983 or 1984.

6. There is no 10-40 for Ray and Merry Woodside in 1982, although there was a K-1.

7. There are no tax returns, including 10-40s, Partnership returns and the like for Ray and Merry Woodside from 1981 back.

There were absolutely no correspondences provided other than in the DNR file. For example, there were no correspondences with Clark County, Storedahl, Zimmerly Rock, etc. There also appear to be numerous documents missing from the DNR file, such as the Yearly Inspection Reports.

Please check into the location of all other documents which were requested in our Request for Production so that we can inspect, copy and review them prior to Thursday's deposition. If you intended to withhold any documents, other than the dairy farm records that truly have nothing to do with the mining activities, please provide us with a detailed list of all documents withheld and the reason for their withholding.

Thank you in advance for your attention to this matter.

Very truly yours,

Jessica W. Dimitrov

JWD:lsh
cc: Mr. John Shaffer
Mr. Jeff Wriston

EXHIBIT "E"
Page 2 of 6

HALL, HOLLAND & DIMITROV
Attorneys at Law
1109 Broadway
Vancouver, WA 98660-3292

Ned Hall
James I. Holland, P.S.
Jessica W. Dimitrov

(360)694-3351
Fax (360) 694-3342

FAX TRANSMITTAL SHEET

DATE : May 29, 1997

TO: Philip Marshall

FAX NO: 696-0063

RE: PREEG- Storedahl

FROM: Jessica Dimitrov

TOTAL PAGES INCLUDING THIS COVER PAGE: 3

COMMENTS: Please see attached letter

We are transmitting to you from Sharp FO-4810, Telecopier No. (360) 694-3342. If you are not receiving properly or should for some reason not receive all pages, please telephone us immediately at (360) 694-3351. Thank you.

By Linda

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Page 3 of 6

P.01

TRANSACTION REPORT

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Page 4 of 6

HALL, HOLLAND & DIMITROV
Attorneys at Law
1109 Broadway
Vancouver, WA 98660-3292

Ned Hall
James I. Holland, P.S.
Jessica W. Dimitrov

(360)694-3351
Fax (360) 694-3342

FAX TRANSMITTAL SHEET

DATE: May 29, 1997

TO: John Shaffer/Jeff Wriston

FAX NO: 254-0404

RE: Preeg v. Storedahl

FROM: Jessica Dimitrov

TOTAL PAGES INCLUDING THIS COVER PAGE: 3

COMMENTS: Please see attached letter to Casey Marshall.

We are transmitting to you from Sharp FO-4810, Telecopier No. (360) 694-3342. If you are not receiving properly or should for some reason not receive all pages, please telephone us immediately at (360) 694-3351. Thank you.

By Linda

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Page 6 of 6

BEFORE THE CLARK COUNTY HEARINGS EXAMINER

IN RE: MATTER OF J. L. STOREDAHL & SONS, INC. NOTICE AND ORDER	)	NO. 95-Z-1195
	)	SUBPOENA TO ATTEND MOTION TO COMPEL HEARING

THE STATE OF WASHINGTON TO: Ray Woodside

You are hereby commanded to be and appear in Conference Room A or B at 1408 Franklin Street, Vancouver, Washington before Hearing Examiner Larry Epstein on June 12, 1997 at 2:00 p.m. then and there to give evidence in the above-entitled case, and to remain in attendance at the said Hearing until discharged, and HEREIN FAIL NOT AT YOUR PERIL.

DATED at Vancouver, Washington, this 3rd day of June, 1997.

HALL, HOLLAND & DIMITROV

By _____
JAMES L. HOLLAND, WSBA# 5196
Of Attorneys for Pacific Rock Environmental Enhancement Group

HALL HOLLAND & DIMITROV
ATTORNEYS AT LAW
1109 BROADWAY
VANCOUVER WASHINGTON 98660 3290
AREA CODE 360 - TELEPHONE 694 3351

BEFORE THE CLARK COUNTY HEARINGS EXAMINER

IN RE: MATTER OF J. L. STOREDAHL & SONS, INC. NOTICE AND ORDER	)	NO. 95-Z-1195 AFFIDAVIT OF MAILING

STATE OF WASHINGTON)
: ss.
County of Clark)

THE UNDERSIGNED, being first duly sworn upon oath, deposes and states as follows:

1. My name is Linda S. Hampel. I am a citizen of the United States, over the age of eighteen (18) years, a resident of the State of Washington, and not a party to this action.

2. On June 3, 1997, I served a true copy of Notice of Hearing on Pacific Rock Environmental Enhancement Group's Motion to Compel Responses to Request for Production of Documents and Subpoena, Motion to Compel, and Affidavit of James I. Holland in support of Motion to Compel, on the following:

Philip G. Marshall (via hand delivery)
Attorney at Law
514 W. 9th Street
Vancouver, WA 98660

HALL, HOLLAND & DIMITROV
ATTORNEYS AT LAW
1109 BROADWAY
VANCOUVER WASHINGTON 98660-3292
AREA CODE 360-TELEPHONE 694-3351

Rich Lowry (via 1st class mail)
Prosecuting Attorney
604 West Evergreen
Vancouver, WA 98660

James Sellers (via hand delivery)
Attorney at Law
500 W. 8th, Suite 270
Vancouver, WA 98660

Scott and Carol Rose (via 1st class mail)
27313 NE Bennett Road
Battle Ground, WA 98604

David T. McDonald (via facsimile)
Attorney at Law
510 SW Third Avenue, Suite 302
Portland, Oregon 97204

Larry Epstein (via 1st class mail)
Clark County Hearing Examiner
P. O. Box 9810
Vancouver, WA 98666-9810

Linda S. Hampel

Linda S. Hampel

SUBSCRIBED AND SWORN to before me this 3rd day of June, 1997.

Anna Corinna Venters

Notary Public for Washington
Residing in Vancouver, therein.

HALL, HOLLAND & DIMITROV
ATTORNEYS AT LAW
1109 BROADWAY
VANCOUVER, WASHINGTON 98660-3292
AREA CODE 360 - TELEPHONE 694-3351
FAX 360 - TELEPHONE 694-3341

CF - Monty - Gary - Michelle

LANE & MARSHALL

EXHIBIT # 6D

ATTORNEYS AT LAW

514 West 9th Street, Vancouver, WA 98660

Telephone: (360) 696-0791 • Fax: (360) 696-0063

DENNIS W. LANE
PHILIP "CASEY" MARSHALL
VICTORIA T. BLACKWELL
DEREK J. VANDERWOOD
• Also licensed in Oregon

RECEIVED
JUN 11 1997
CLARK COUNTY
Plan & Dev. Review

June 10, 1997

Mr. Larry Epstein
Attorney at Law
722 Southwest Second, Suite 400
Portland, Oregon 97204

Re: J. L. Storedahl & Sons, Inc. v. Clark County Washington, Department of Planning and Community Development, No. 95-Z-1195

Dear Mr. Epstein:

Enclosed please find another Affidavit of Merry Woodside in response to PREEG's Motion to Compel Production of Documents. This affidavit should be read in conjunction with Merry Woodside's previous affidavit in support of the Motion to Quash the Subpoena of Ray Woodside as well as my affidavit.

If you have any questions, please advise.

Sincerely yours,

LANE & MARSHALL

PHILIP G. MARSHALL

PGM:kcs

cc: clients
Mr. Monte Anderson
Mr. James Holland
Mr. James Sellers
Mr. Richard Lowry
Mr. and Mrs. Scott Rose
Mr. David McDonald
Mr. John Dentler

BEFORE THE HEARINGS EXAMINER
FOR CLARK COUNTY, WASHINGTON

IN RE: MATTER OF J.L. STOREDAHL & SONS, INC., NOTICE AND ORDER ISSUED BY CLARK COUNTY DEPT. OF COMMUNITY DEVELOPMENT TO J.L. STOREDAHL & SONS, INC., RE: MINING ALONG THE EAST FORK OF THE LEWIS RIVER IN UNINCORPORATED CLARK CO.	No. 95-Z-1195 AFFIDAVIT OF MERRY WOODSIDE IN RESPONSE TO PREEG'S MOTION TO COMPEL RESPONSES TO REQUESTS FOR PRODUCTION OF DOCUMENTS

STATE OF WASHINGTON)
) ss.
County of Clark)

MERRY WOODSIDE, on oath deposes and states:

I am the bookkeeper of the records for SAMMAMISH FARM, a dairy farm in Clark County. My husband is RAY WOODSIDE. My husband has no responsibility with regard to the keeping of the records. I receive monies and make all the payments with regard to the farm and store records.

I have done my best in reviewing and searching our farm records looking for documentation relating to the mining activities. I have spent in excess of twenty (20) hours trying to comply with this request.

This affidavit should be read in conjunction with my previous affidavit in support of the Motion to Quash the Subpoena of Ray Woodside as well as the affidavit of my attorney, Philip G. Marshall, in that same matter.

DATED this 10th day of June, 1997.

Merry Woodside
MERRY WOODSIDE

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

SUBSCRIBED AND SWORN to before me this 10th day of June, 1997.

NOTARY PUBLIC in and for the State of Washington, residing at Vancouver
My Commission Expires: 11.15.97

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

BEFORE THE HEARINGS EXAMINER
FOR CLARK COUNTY, WASHINGTON

IN RE: MATTER OF J.L. STOREDAHL & SONS, INC., NOTICE AND ORDER ISSUED BY CLARK COUNTY DEPT. OF COMMUNITY DEVELOPMENT TO J.L. STOREDAHL & SONS, INC., RE: MINING ALONG THE EAST FORK OF THE LEWIS RIVER IN UNINCORPORATED CLARK CO.	)	No. 95-Z-1195 AFFIDAVIT OF MAILING

STATE OF WASHINGTON)
: ss.
County of Clark)

Kristi Straight, being first duly sworn says on her oath:

That I am over the age of 18 years and not a party to this action and competent to be a witness herein;

That on the 11th day of June, 1997, I caused delivery of true copies of MERRY WOODSIDE'S AFFIDAVIT IN RESPONSE TO MOTION TO COMPEL RESPONSES TO REQUESTS FOR PRODUCTION OF DOCUMENTS, by the means indicated, to the following:

Monte Anderson Senior Planner Clark County Planning Department P. O. Box 9810 Vancouver, Washington 98666-9810	HAND DELIVERED
Larry Epstein Clark County Hearing Examiner 722 Southwest Second, Suite 400 Portland, Oregon 97204	HAND DELIVERED
James I. Holland Hall Holland & Dimitrov 1109 Broadway Vancouver, Washington 98660	HAND DELIVERED
James L. Sellers Sellers & Jacobs P. O. Box 51535 Vancouver, Washington 98666	HAND DELIVERED

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

Richard S. Lowry
Chief Civil Deputy
Clark County Prosecuting Attorney
Civil Division
604 Evergreen
P. O. Box 5000
Vancouver, Washington 98668

HAND DELIVERED

Scott and Carol Rose
27313 Northeast Bennett Road
Battle Ground, Washington 98604

U. S. MAIL

David T. McDonald
Attorney at Law
510 Southwest Third Avenue, #302
Portland, Oregon 97204

U. S. MAIL

Charles B. Roe, Jr.
John L. Dentler
Perkins Coie
1110 Capitol Way South, Suite 405
Olympia, Washington 98501-2251

U. S. MAIL

Kristi Straight

Kristi Straight

SUBSCRIBED AND SWORN to before me this 11th day of June, 1997.

Notary Public for Washington
Residing in Vancouver
My Commission Expires: 11-15-00

LANE & MARSHALL
Attorneys at Law
514 West 9th Street
Vancouver, WA 98660
Phone: (360) 696-0791
Fax: (360) 696-0063

Exhibit 61

PERKINS COIE

A LAW PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS
1110 CAPITOL WAY SOUTH, SUITE 405 · OLYMPIA, WASHINGTON 98501-2251
TELEPHONE: (360) 956-3300 · FACSIMILE: (360) 956-1208

June 16, 1997

RECEIVED
JUN 17 1997
CLARK COUNTY
Plan & Dev. Review

Mr. Michael V. Butts
Mr. Gary Fish
Mr. Monty Anderson
Clark County Community Development
1408 Franklin Street
P.O. Box 9810
Vancouver, WA 98666-9810

Re: Appeal No. 97-004/Motion to Strike and Responsive Brief

Dear Gentlemen:

I am enclosing a Motion to Strike and/or Responsive Brief in response to materials submitted by Mr. David McDonald and other participants in the aforenoted appeal.

Sincerely,

John L. Dentler

Enclosure

cc: The Honorable Larry Epstein
Rich Lowry
David McDonald

[/97167.009]

BEFORE THE LAND USE HEARING EXAMINER,
CLARK COUNTY

FRIENDS OF THE EAST FORK, Appellant, v. CLARK COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT, STATE OF WASHINGTON, Respondent.	Appeal No. 97-004 MOTION TO STRIKE AND, IN THE ALTERNATIVE, REPLY BRIEF OF J. L. STOREDAHL & SONS, INC., APPLICANT AND PARTY OF RECORD

I. MOTION TO STRIKE

Comes now J. L. Storedahl & Sons, Inc., by and through its attorneys, Charles B. Roe, Jr., and John L. Dentler, and moves the Land Use Hearing Examiner to strike the following documents or portions thereof submitted to the Land Use Hearing Examiner in Appeal No. 97-004, for the reasons stated:

1. Exhibit No. 51 submitted by Mr. John P. Calnan. The exhibit presents no evidence in any way remotely relevant to Appeal No. 97-004. The letter states opinion only and none of which bears on any matter within the scope of the appeal before the Hearing Examiner.

2. Exhibit No. 52 submitted by Mr. David McDonald. Exhibit 52 presents no evidence relevant to Appeal No. 97-004. Furthermore, subsequent to the letter of Mr. Monty K. Anderson (included by Mr. McDonald as a part of Exhibit 52), the Planning

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Olympia, Washington 98501-2251
(360) 956-3300

Director issued a Notice and Order, the central findings and conclusions of which supersede the subject of and findings contained in Mr. Anderson's letter. The Notice and Order which, apparently overlooked or ignored by Mr. McDonald, confirmed the long-standing processing activity carried out on the Woodside property beginning as early as 1968. Storedahl requests that the Notice and Order, In the Matter Re J. L. Storedahl & Sons, Inc., be made a part of the record of this appeal.

3. Exhibit No. 53 submitted by Mr. Scott Rose. Exhibit 53 presents no evidence relevant to Appeal No. 97-004. As noted in paragraph #2, supra, the Planning Director has previously confirmed, via a Notice and Order, that long-standing aggregate processing activities are established on the Woodside property.

4. Exhibit No. 55 submitted by Mr. Richard Dryland on behalf of Friends of East Fork. Portions of Mr. Dryland's letter are irrelevant and are otherwise not germane to Appeal No. 97-004. In particular, portions of Mr. Dryland's letter entitled "Point 1," "Point 3," "Point 4," and "Point 5" do not address evidence relevant to determinations under Appeal No. 97-004. With respect to "Point 2," no evidence is presented that "the house" was surrounded by "flood flow" or in the alternative that the "flood flow" was from the East Fork Lewis River, or, if it was, why such information is relevant, if at all, to Appeal No. 97-004.

5. "Exhibit No. 56" submitted by Mr. McDonald. The "evidence" submitted is not "evidence" but a "supplemental brief." The only information authorized to be submitted during the two-week period following the close of the May 20, 1997 hearing was "supplemental evidence," due to the fact that the 20 minutes provided each party did not allow sufficient time to offer evidence for the record. No request was made by any party for supplemental briefing and none was granted during the course of the evidentiary hearing or afterward. Therefore, "Exhibit No. 56" should be excluded from the record as it is not

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supplemental evidence and clearly exceeds the authority granted to the parties to supply additional evidence.

6. "Exhibit No. 56." To the extent that Mr. McDonald's "supplemental brief" is admitted as a part of the evidentiary record, then the following objections are made in support of a motion to strike portions of Mr. McDonald's supplemental brief.

a. Strike lines 12 through 23 on page 4. No foundation is presented to support the statement made and it necessarily rests on the rankest hearsay. Furthermore, Storedahl is not aware of any such offer on the part of the Department of Natural Resources.

b. Strike lines 4 through 7 on page 7. No foundation is presented to support Mr. McDonald's statements regarding "a claim by Storedahl that they are in an extended lease/option to purchase agreement with Ray Woodside for the entire 349-acre parcel and, therefore, it shows their intention to have a presence on the entire parcel and to mine it." Further, the existence of options to lease or purchase Woodside property or portions thereof, if any, are irrelevant to the issues before the Hearing Examiner in Appeal No. 97-004.

c. Strike line 26 on page 7 and lines 1 and 2 on page 8. No foundation is presented to support statements made by Mr. McDonald regarding Storedahl's "intent to take as much rock from the 349-acre parcel as possible." Furthermore, Mr. McDonald's questionable divine powers to determine the intentions of other persons notwithstanding, such an "intent," even if true, is not germane or relevant to any issue on appeal before the Hearing Examiner.

d. Strike lines 17 through 22 on page 13. Mr. McDonald states twice that Storedahl "never reclaimed" an area mined on the opposite side of the river from the

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Olympia, Washington 98501-2251
(360) 956-3300

Woodside property. Such a statement, to the extent that it purports that Storedahl failed to abide by the reclamation requirements of Ch. 78.44 RCW, is completely false, and without foundation or basis. As to the referenced mine, Storedahl's reclamation plan received final approval of completion from the Washington Department of Natural Resources and the bond on such mine was relinquished by the Department of Natural Resources once reclamation was complete. Documents were submitted in the record at the May 20, 1997 hearing in support of the fact that Storedahl did complete reclamation, as required by law. Mr. McDonald's continued statements to the contrary appear to be in total disregard of the facts.

e. Strike lines 6 through 11 on page 15 and the "declaration" of Ms. Connie Halperin that was attached to the brief. The declaration is entirely hearsay and arguments made in the brief are dependent on hearsay.

II. REPLY BRIEF IN THE EVENT FOEF's BRIEF IS ACCEPTED BY THE HEARING EXAMINER

Storedahl submits this brief in reply to the "supplemental brief" submitted by Mr. David T. McDonald, on behalf of Friends of the East Fork ("FOEF"), in the event that the Hearing Examiner allows the supplemental brief to enter the evidentiary record. In reply, Storedahl addresses the three issued raised by Mr. McDonald.

A. Appellant's Arguments as to Storedahl's Desires, Wishes, or Intentions as to Mining on the Woodside Property Are Misplaced and Irrelevant to Appeal 97-004

As a preliminary matter, it should be observed that nowhere in appellant's 16-page "supplemental brief" is any proposition stated to support reversal of the Planning Director's determination. Further, not one single case, statute, or ordinance is cited to support whatever

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theory is being presented to account for the requested reversal of the Planning Director's decision.

Storedahl presumes that the appellant is stating that it can divine the applicant's desires, wishes, and intentions and such divine interpretation requires the Hearing Examiner to reverse the Planning Director's decision. Issues such as whether Storedahl is attempting to purchase, rent, or obtain a real property interest in mineral resources found on the Woodside property is immaterial to the Planning Director's decision. Contrary to FOEF's apparent assertion, Storedahl does not hold a 349-acre surface mining operating permit (issued by the DNR in 1971 to a person now deceased). Even if Storedahl held the 349-acre mining permit, such fact would not mean there is a new application or proposal before Clark County to engage in new excavation of sand and gravel from the 100-year floodplain. See Ch. 192, § 1, Session Laws 1997 (filed April 24, 1997) (amending RCW 78.44.081(7) (reclamation plans need address mining over the next 12-24 months)).

Further, contrary to appellant's assertion and as noted during the oral hearing on this matter, Storedahl has not formally submitted any draft EIS and the County has not accepted any formal DEIS on any proposal to mine in the 100-year floodplain. Nor, at this time is applicant directing any staff or contractor to undertake efforts to develop or advance such EIS or develop proposals to mine in the 100-year floodplain. While Storedahl is challenging the ban on surface mining in the 100-year floodplain, such challenge does not mean that the Planning Director's decision herein should be reversed. The Planning Director's determination was made in the course of a site plan review application to mine 20 acres, nothing more, nothing less.

Under SEPA, 43.21.020(2)(c) RCW, whether environmental analysis is triggered at all depends on whether "the contemplated activity is a proposal or legislation or other major

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action which is not categorically exempt." Richard L. Settle, The Washington State Environmental Policy Act: A Legal and Policy Analysis, § 13 (1992) (internal quotations and footnotes omitted) (citing RCW 43.21C.030(2)(c)); Narrowsview Preservation Association v. City of Tacoma, 84 Wn.2d 416, 425 (1974). For private actions, such as here, SEPA and SMA review does not hinge on what an individual may desire, wish or even intend to do sometime in the future in the 100-year floodplain. Environmental analysis under SEPA and the SMA is not necessary or desirable unless and until there is a proposal for action and that proposal is sufficiently crystallized so as to make environmental analysis sufficiently meaningful. Settle § 13(d)(i); Narrowsview, 84 Wn. 2d at 425.

Rather than requiring shoreline permit applications and concomitant environmental analysis based on subjective or perceived desires or wishes of the applicant, Washington courts have asked whether or not the proposal under consideration would necessarily coerce, prejudice, commit, or force government agencies into granting authority for subsequent development in the shoreline. Id.; Batchelder v. Seattle, 77 Wn. App. 154, 159-160, 890 P.2d 25 (1995), San Juan County v. Natural Resources, 28 Wn. App. 796, 802, 626 P.2d 995 (1981), Cheney v. City of Mountlake Terrace, 87 Wn.2d 338, 343 (1976). Here the proposal under consideration is to engage in mining outside the 100-year floodplain as per the 19-acre site plan review proposal before the County. Granting SEPA review without requiring a shoreline permit in no manner forces, coerces, or commits Clark County into granting subsequent shoreline permits. As such, unlawful segmentation in violation of the SMA is not reached and the Planning Director's decision should be affirmed.

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Olympia, Washington 98501-2251
(360) 956-3300

B. Under the SMA, Actual Criteria Rather Than Erroneous Maps of the Shoreline Govern the Scope of Shoreline Jurisdiction

Empirical data and observation of a rare flood event occurring on the East Fork Lewis River in February 1996 has been characterized as between a 200-1,000 year flood event (testimony of Professor Peter Klingeman, Ph.D., of Oregon State University). Evidence was presented orally at the hearing and in writing demonstrating that much of the Woodside property falling within FEMA's 100-year floodplain map was not inundated with East Fork Lewis River overbank flow during the aforenoted extreme flood event. In addition, the basis and results of a comprehensive analysis conducted by WEST Consultants demonstrated that FEMA's current 100-year floodplain maps are grossly in error. FEMA has also admitted that its maps are in error and the model used to generate FEMA's current floodplain map of the area at issue is no longer applicable to the site. See Rebuttal Testimony of Mr. Thomas Grindeland.

As pointed out during the hearing and in applicant's brief, the SMA provides:

> Shorelines . . . of the state shall be appropriately classified and these classifications shall be revised when circumstances warrant regardless of whether the change in circumstances occurs through man-made causes or natural causes. **Any areas resulting from alterations of the natural condition of the shorelines and shorelands of the state no longer meeting the definition of "shorelines of the state" shall not be subject to the provisions of chapter 90.58 RCW**.

RCW 90.58.020 (emphasis added). Further, rules adopted by the Department of Ecology reflect that it is the defining criteria of the 100-year floodplain that controls the outer geographic scope of the SMA:

> In the event that any of the wetland designations shown on the maps adopted in WAC 173-22-060 conflict with the criteria set forth in this chapter the criteria shall control.

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Olympia, Washington 98501-2251
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WAC 173-22-055 (1996).[1] Thus, the outer geographic extent of applicability of the shoreline area is the "floodplain." In turn, the floodplain does not extend beyond the actual 100-year floodplain, that is, that area "susceptible to being inundated with stream derived water with a one percent chance of being equaled or exceeded in any given year." WAC 173-22-030(2).

FOEF states that there is "nothing to indicate a strong reason to ignore the current FEMA 100-year floodplain delineation." FOEF Supplemental Brief at 14. However, such a statement ignores (i) empirical observation of an extreme flood event of February 1996 on the East Fork Lewis River and the resultant flood elevations on the site at issue; (ii) the results of what is the most comprehensive, thorough, and detailed study and delineation of the 100-year floodplain ever undertaken on such parcels; and (iii) the applicable law. Storedahl presented data, information, and analysis, independently confirmed, demonstrating the actual location of the 100-year floodplain. The proposal here does not fall within that area. The Shoreline Management Act does not state or require that inaccurate FEMA floodplain maps, two decades old, should dictate the geographic extent of Shoreline jurisdiction (actual 100-year floodplain) or until such time as FEMA finally corrects its maps. Rather, the Shoreline Management Act mandates that the floodplain criteria (i.e., the actual probability of flooding during a 100-year flood event) is the controlling factor. RCW 90.58.020, supra, uses the term "shall" which is a "mandatory duty" or command. Dept. of Ecology v. State Finance Comm., 116 Wn.2d 246, 254, 804 P.2d 1241 (1991). This provision mandates that where the probabilistic criteria defining the 100-year floodplain show that the maps are in error, then the

---

[1] The SMA used the term "wetland" to denote the landward reach of a shoreline area until 1996 when "shorelands" was substituted for wetlands. Wetlands was given a new meaning. See RCW 90.58.030(2)(h).

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criteria and not the maps govern the geographic extent of shoreline jurisdiction. RCW 90.58.020; WAC 173-22-055 (1996), WAC 173-22-030(2).

In summary, even if the conveyor belts were, contrary to the finding of the Planning Director, a structure, they would not be placed in the 100-year floodplain and, hence, a shoreline permit is not required.

C. The Planning Director's Determination that Conveyor Belts Proposed For Conveying Aggregate and Sand Are Equipment is Entitled to Deference and Should Be Upheld

Evidence was presented at the hearing showing that the types of conveyor belts under consideration for conveying material to the existing conveyor and processing site is a type of equipment that is highly mobile. In fact, evidence was presented showing that one type of conveyor belt under consideration (supported by pictorial evidence) is mounted on wheels and is moved from site to site or location to location, as needed. Further, no evidence was adduced monstrating that any conveyor belt must necessarily and unalterably be fastened to the ground. Even if a piece of equipment was fastened to the ground there is no reason why that piece of equipment suddenly becomes a structure requiring a permit under the Shoreline Management Act. In short, there is no evidence to support reversal of the Planning Director decision finding that conveyor belts require a shoreline permit.

III. CONCLUSIONS

The Planning Director's decision finding that a shoreline permit is not required for site plan review application SPR 96-092 should be affirmed because:

1. Appellant's assertions as to the ultimate intentions of the applicant, even if true, do not result in a set of facts that would even arguably coerce, commit, or prejudice future County decisions as to proposals, if any, for mining in the 100-year floodplain. Consequently under Washington law, unlawful segmentation is not reached under the Shoreline Management Act.

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2. Due to fundamental errors in mapping the 100-year floodplain of the East Fork Lewis River, the Woodside property under consideration here, by law no longer falls within the jurisdictional purview of the SMA. Further, even if the movement of a conveyor belt onto the site did constitute "development," the conveyance of sand and gravel to the existing processing site can be accomplished by means which do not require moving a conveyor belt onto or necessarily even over the 100-year floodplain and therefore, a shoreline permit is not required for such conveying.

3. No credible evidence has been presented suggesting that the conveyor equipment that must be used by Storedahl must also be affixed to the ground in a manner that somehow converts the equipment into a structure.

For the aforenoted reasons, the Planning Director's determination under appeal here should be affirmed.

DATED: June 16, 1997.

PERKINS COIE

By _____
John L. Dentler, WSBA #24310
Charles B. Roe, Jr., WSBA #648
Attorneys for Applicant J. L. Storedahl & Sons, Inc.

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Gary Michelle

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(Offices in Bellevue, WA, Carlsbad, CA, Phoenix, AZ)

To: Gary Fish Date: 6/16/97

Company: Clark County Planning Dept

Fax Number: (360) 699-2011

From: Tom Grindeland

Number of Pages (including cover): 4

MESSAGE

I have been asked to write the following letter

Please include the letter as part of the official record for Appeal No. 97-004

The letter is being transmitted by both facsimilie and U.S. Mail.

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CLARK COUNTY
Plan & Dev. Review

EXHIBIT # 62

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16 June 1997

Larry Epstein
Land Use Hearing Examiner
c/o Michael V. Butts
Clark County Department of Community Development
1408 Franklin Street
Vancouver, WA 98666-9910

Re: Appeal No. 97-004 - Evidence submitted for rebuttal

Dear Mr. Epstein:

The following rebuttal is submitted on behalf of J.L. Storedahl in response to the information presented in the Supplemental Brief of Appellant in Support of Reversal of the County's Determination for Shoreline Permit SPR-96-092.

July 1996 Letter Of Map Revision (LOMR) Request

As a result of discrepancies observed between the 8 February 1996 flood and the floodplain delineation shown in the current Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS), research was conducted by WEST Consultants into the technical basis of FEMA's floodplain delineation. Flood discharge measurements and statistical analyses of historic records showed that the 8 February 1996 flood was much larger in magnitude and less frequent than the 100-year discharge (possibly up to 1,000 year return period flood) used to define the floodplain in the current FIS. Furthermore, a number of technical errors in FEMA's mapping of the floodplain were identified. A letter was prepared in July 1996 by WEST Consultants requesting Clark County to solicit FEMA to correct the identified deficiencies in the FEMA floodplain through the Letter of Map Revision (LOMR) process. Clark County declined to make the request to FEMA. The request was then forwarded directly to FEMA along with technical evidence in support of the request. Included in the provided information was a suggested revision to the floodplain based on a reinterpretation of the original hydraulic model output and the original topographic mapping used by FEMA for establishment of the current 100-year floodplain.

The request for a LOMR was not accepted by FEMA. **It is important to note that this LOMR request was based on FEMA's original hydraulic modeling results and topographic mapping used to define to current FEMA floodplain.** It was pointed out by FEMA that water breaks out of the main channel and that reinterpretation of the hydraulic model used to develop the FIS 100-year floodplain will not provide satisfactory results. In short, **the hydraulic modeling used by FEMA to produce the current FIS is inadequate to define the floodplain due to split flow conditions** which were not used in the model to develop the current FEMA

maps. The floodplain was mapped based on qualitative not quantitative interpretations based on undefined and undocumented "local knowledge of historic flood events." FEMA has agreed that a revision to the floodplain, based on quantitative hydraulic modeling, must take into account split flow conditions.

Finally, a meeting was held between myself, the counsel for J.L. Storedahl & Sons, Karl Mohr, the Chief of Technical Services for FEMA, and Mike Hirsch, Assistant General Counsel for FEMA, to discuss the requirements to revise the floodplain along the E.F. Lewis River. Karl Mohr of FEMA agreed that the evidence we presented proved that the current floodplain delineation is indeed flawed. He also indicated that a complete restudy of the hydrology and hydraulics of the East Fork Lewis River based on undated information would be necessary to correct the 100-year floodplain. That study was undertaken by WEST Consultants and submitted to Clark County and FEMA as part of a second LOMR application in March 1997. The application and associated technical data are currently under review by FEMA.

March 1997 LOMR

A revised floodplain delineation for the East Fork Lewis River has been developed **based on up-to-date data and technical methods required by the Federal Emergency Management Agency** (FEMA). The new study utilized 22 additional years of hydrologic records for use in defining the 100-year flood discharge. A new 100-year flood peak of 32,187 cubic feet per second (cfs) was determined for the East Fork Lewis River at a location upstream of the confluence with Lockwood Creek; this compares to a discharge of 23,800 cfs which was used in the current FEMA Flood Insurance Study.

Furthermore, the current FEMA floodplain was based on topographic mapping with a 5 foot contour interval, while the revised floodplain delineation is based on much more detailed 2 foot contour interval mapping. The new mapping provides a much higher level of topographic resolution which is necessary for accurate delineation of the floodplain. Evaluation and mapping of shallow split flow conditions based on 5 foot contour mapping is difficult due to the lack of topographic resolution. The up-dated mapping for the study area provides definition of potential split flow areas which would have been impossible with the mapping used to develop the current FEMA floodplain. A major split flow through the area of interest was identified and hydraulically modeled as part of the new analysis. The developed hydraulic models take into account the split flow and accurately reflect this influence in the delineated floodplain.

The influence of downstream backwater effects of the Columbia and Lewis Rivers is also accounted for in the hydraulic modeling conducted. The starting water surface elevation for the hydraulic model were determined by normal depth calculation based on the discharge and an estimated energy slope. The energy slope was estimated from an average of the energy slope at the two cross sections (R at River Mile 7.15 and Q at River Mile 6.78) from the current FIS. In short, the same backwater effects of the Columbia and Lewis Rivers was considered in the new analysis.

Floodplain Differences

The methods, data, and results of the hydraulic analysis conducted by WEST Consultants to

correct the 100-year floodplain maps of the East Fork Lewis River have been submitted to FEMA for review and approval as part of a LOMR application. The analysis has been conducted using up to date information, correct technical methods, and according to a professional standard of care. The methods and results of the analysis have been certified by myself as a registered professional engineer in the State of Washington.

Various differences between the current floodplain and proposed revision to the floodplain are evident. These differences are attributed to 1) the quantitative analysis of current hydrologic and topographic data as opposed to "local knowledge of flooding conditions," 2) up-to-date hydrologic and topographic information which provide an improved estimate of the 100-year flood and better resolution of the floodplain topography, and 3) geomorphic changes in the East Fork Lewis River over the 20 years since the current floodplain was delineated, including changes in the channel profile.

It is important to understand that the three complicating factors (storage, influence of Columbia and Lewis Rivers, and timing of peak stages) noted in the original floodplain analysis by the Corps of Engineers, and attached to the subject supplemental brief, refer to an area between River Mile 2.3 and 5.2. This reach of river is **downstream of the area of interest**. The analysis conducted by WEST Consultants involves the river reach between River Miles 7.24 and 9.95. As previously noted, any backwater effect is considered in the choice of the starting water surface elevation for the hydraulic model. That choice was made considering the **same** criteria as was used to define in the original FEMA floodplain.

Reestablishment of Former Main Channel

The East Fork Lewis River migrated into abandoned gravel pits in late 1996. Available aerial photographs of the river show the it has been migrating in the direction of the pits for a period of approximately 60 years. Migration of the river into the pits has been anticipated for many years. It is a fact that the river has abandoned its former main channel and the floodplain in the vicinity has irrevocably changed. The new analysis takes into account the newly changed river position and its influence on the floodplain.

If you have any questions regarding the above information, I would be pleased to answer them.

Sincerely,

Thomas R. Grindeland

Thomas R. Grindeland, P.E.
Senior Hydraulic Engineer
Submitted for J.L. Storedahl & Sons, Inc.

XHIBIT #

IX. APPLICATION OF GEOMORPHCLOGY TO PLANNING AND ASSESSMENT OF RIVERINE GRAVEL REMOVAL IN WASHINGTON

Brian Collins. 10,000 Years Institute. P. O. Box 2205, Seattle. WA 98111

INTRODUCTION

Washington's rivers typically form bars and floodplains where they emerge from mountainous terrain onto more gently-sloping lowlands. Many of these rivers augment their mountainous-headwater-derived supply of coarse sediment as they meander across lowlands by eroding sand and gravel that derived from Pleistocene glaciation (for example. King County, 1993; Collins. 1994a; Church and Slaymaker. 1989).

In 1991. per-capita demand for sand and gravel was about 12 tons. or one truckload per person (Lingley and Manson. 1992). Washington produced an estimated 60 million tons. valued at about $190 million (Lingley and Manson. 1992). The abundance of sand and gravel in lowland rivers and their proximity to population centers make them attractive sites for commercial sand and gravel mining. While most sand and gravel in Washington is mined from upland Pleistocene glacial deposits (Lingley and Manson, 1992), riverine mining is an important contributor to the state's production. Floodplains were the source of about one-seventh of total state production, and channel bar mines produced an additional few percent in 1970-1991 (Collins, 1997). Altogether. riverine sources in 1970-1991 would have accounted for roughly one-sixth of sand and gravel produced in Washington (Collins. 1997).

Sand and gravel build up in lowland rivers over the long term. Some aggrading lowland reaches are mined on an annual basis to maintain flood conveyance (e. g., Prych, 1988). Previous to levee construction and other engineering modifications earlier this century, this accumulation was spread across a broad valley floodplain. Historic river modifications in some rivers focused deposition to a narrower area, which may have accelerated deposition. In addition, forest land use in the last several decades has increased headwater erosion over previous rates (for Washington examples see Reid et al., 1981, Eide, 1990; for regional summaries see Sidle et al., 1985, Swanson et al., 1987, Meehan, 1991). It is possible that increased headwater erosion has increased deposition in lowland portions of some rivers. However, effects of increased headwater erosion or historic lowland channel modifications on patterns or rates of lowland deposition have not been systematically evaluated in the state's rivers.

The complex and dynamic morphology of laterally-mobile, lowland rivers make them biologically rich and diverse. For example, lowland rivers and their floodplains are important salmonid habitat (Williams et al., 1975) or were so historically (Beechie et al., 1994; Sedell and Luchessa, 1982; Northwest Power Planning Council, 1986) prior to historic land and river modifications. The potential exists for gravel removal to conflict with critical biological processes and habitats.

Poorly-planned gravel removal can create unexpected environmental hazards, such as rapid channel avulsion (e. g., Dunne et al., 1981), or undermining of bridges and other structures (Collins and Dunne, 1990). For example, Kondolf and Swanson (1993) estimate that damage to bridges from in-channel gravel mining in California probably exceeds $1 million per year.

Thus, sand and gravel deposits in lowland rivers and their floodplains are biologically important, represent an economic asset, and are also the focus of flood management and channel engineering efforts. The following discussion provides a geomorphic context for application to: (1) avoiding conflicts between gravel removal and biological systems, (2) avoiding the triggering of hazards, and (3) evaluating the efficacy of gravel removal as a flood management measure.

RIVERINE GRAVEL REMOVAL IN WASHINGTON

Gravel has been mined for engineering purposes from Washington rivers since the late 19th century, according to early Reports of the Chief of Engineers (Reports of the Secretary of War, 1975-1999) and state royalty records on file with the Washington Department of Natural Resources in Olympia. However, while the early history of mining is not well

known, in most rivers and floodplains, large-scale commercial mining does not appear to have begun until the last three or four decades.

Floodplain Pits

Pits have been excavated in the geomorphic floodplain of several Washington rivers (Figure 1), beginning in the 1940s (Figure 2). Pits are typically excavated behind bank protection or levees to a depth of 5-15 m and commonly fill with groundwater. In the last decade, new and existing floodplain pit mines have been permitted to a depth of 20-30 m. These deeper pits are generally excavated using a drag-line dredge.

Most floodplain mines in Washington are along a few rivers (see Collins, 1997, for detail). About two-thirds are along the Yakima River or the lower reaches of two of its tributaries, the Naches and Cle Elum rivers. All but four of about 150 lakes in the Yakima basin are in four reaches totaling 151 kilometers: the Cle Elum area, Ellensburg area, Selah-Moxee valleys, and lower Yakima valley. Most mining occurred in the Yakima River basin after about 1960. The Chehalis River and four of its tributaries account for one-fifth of floodplain mine lakes.

Mining in the Yakima River began in the 1950s. Most mining of floodplains in western Washington rivers has been since about 1970, except for a small amount between 1940 and 1960. Individual lakes ranged in size from 1 to 49 ha. The largest single complex of lakes was 92 ha (in 1986), along the Yakima River near Selah.

River Bar Mining

"Skimming," "scalping," or "harvesting" of gravel is the most common type of bar mining in Washington. Figure 3 shows reaches which have experienced sustained gravel removal since 1970 (see Collins, 1997, for detail). State Hydraulic Project regulations since 1972 have restricted bar skimming to two feet vertically above the low-water level, with the finished excavation surface sloping at least two percent upward toward the bank. Most commercial bar mining takes place annually or every several years during summer, but in some cases is on-going throughout the year. Bar skimming is also used to maintain channel capacity for flood control in several rivers (see later).

Bars have been mined commercially, or for flood control purposes, mostly in western Washington. This may be in part because bedloads of western Washington streams (e.g. Nelson 1971; 1979; 1982) are generally greater than in eastern Washington (e.g. Nelson 1973), and consequently more gravel is available from western Washington rivers.

Digging pits in bars was a common commercial practice prior to its restriction by the Hydraulic Project Code in 1972. In the last few years, commercial operations and government agencies have excavated pits in bars as a flood-control measure in some state rivers. At present, these pits, recently called "gravel traps," are dug several meters deep in river bars near the low-flow channel. Some pits are connected to the low-flow channel to allow access by fish. Sand and gravel that deposit in the intervening flood season is excavated in the subsequent low-flow season.

Channel Dredging

In the past, earth moving equipment or drag-line dredges were used to dig pits in or to dredge the low-water channel of rivers. Many state rivers may have been regularly dredged until regulations instituted in the early 1970s. No operations of this type are on record at present. Deep-water dredging using drag-line or other methods takes place in the Columbia and Snake rivers and the lower reaches of several other rivers, including the Cowlitz and Lewis. Deep-water dredging is excluded from this discussion.

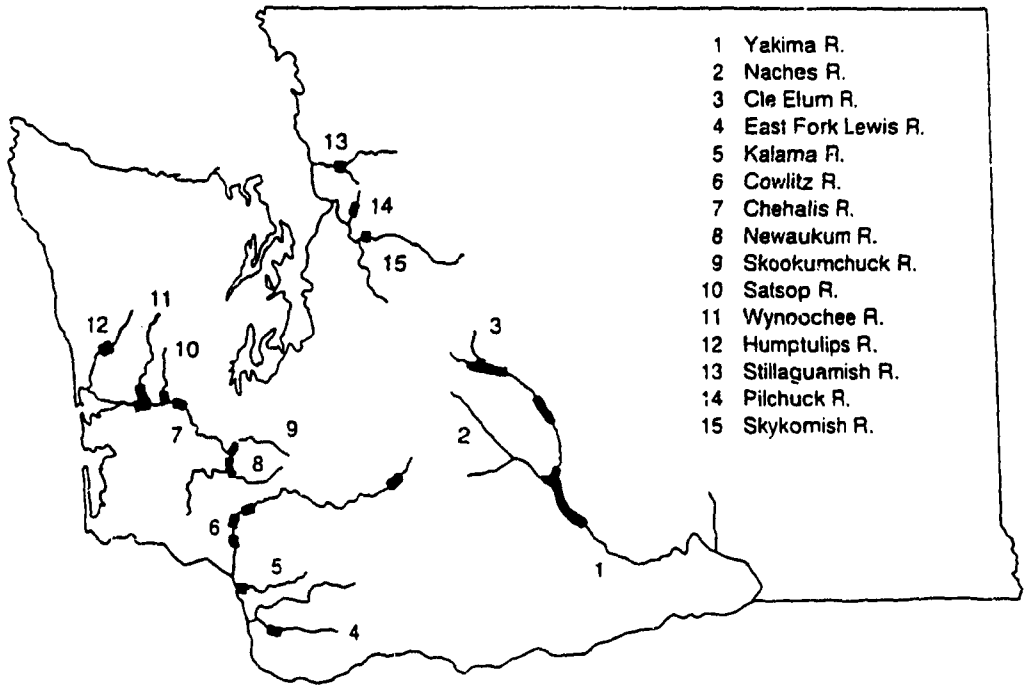


Figure 1. Generalized reaches having sand and gravel mines in active floodplains.

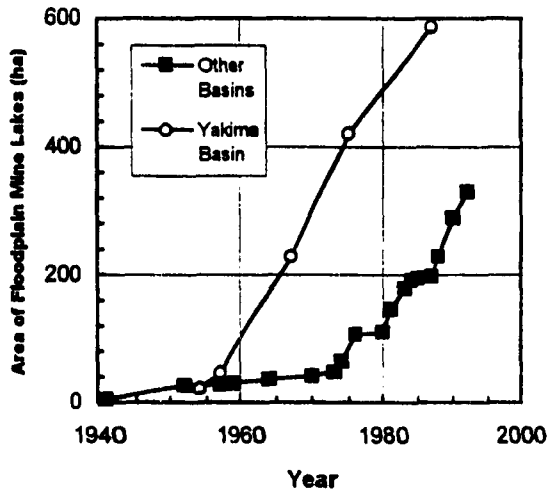


Figure 2. Cumulative area of floodplain mine lakes, measured from aerial photos and topographic maps (see Collins, 1997, for detail).

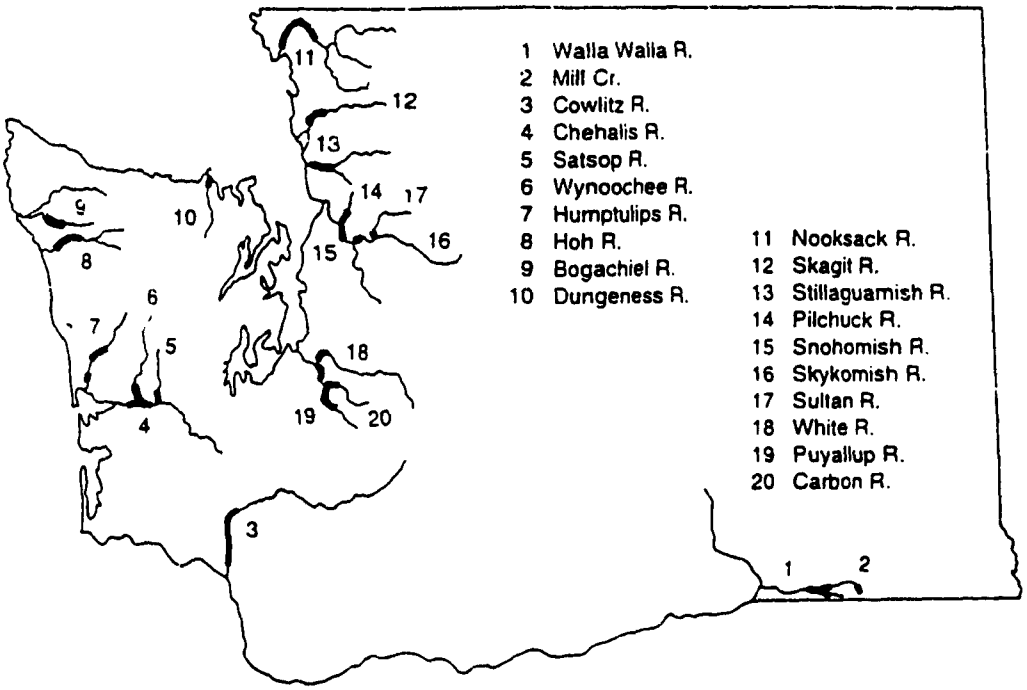


Figure 3. Generalized reaches which have or have had on-going commercial or flood-control mining of channel bars (see Collins, 1997, for detail).

FLOODPLAIN MINING

Introduction

The following discussion has the following purposes: The first is to document the history of channel modifications that led to the widespread siting of floodplain mines in the last five decades. The second purpose is to describe the potential conflicts between mining and riverine ecological function, especially salmonid habitat. The third purpose is to explore ways to minimize or avoid losses to biological function. This discussion is illustrated by reference to three Washington rivers having floodplain mining: the East Fork Lewis, Cowlitz, and Wynoochee rivers.

Study Areas

The East Fork Lewis River drains the southern Cascade Range in southwestern Washington (Figure 1). Floodplain mines are located between river kilometer 10 and 16 (RM 6 and RM 10), where the East Fork averages 0.002 in gradient as it meanders across a 0.7- to 1.4-km wide alluvial valley floor. Valley sides are 50-60 m in height, and composed of Pleistocene drift (Walsh et al., 1987).

The Cowlitz River has a concentration of floodplain mines near Toledo, from kilometer 51 to kilometer 60 (RM 32 to RM 37) (Figure 1). The Toledo reach of the Cowlitz River has a similar geologic setting to the East Fork Lewis River, with an alluvial valley floor 0.6-1.4 km wide, and valley sides of Pleistocene drift 30-45 m high (Walsh et al., 1987). The river has an average gradient of 0.001 in the Toledo reach.

The Wynoochee River drains the southern Olympic Mountains (Figure 1). Similar to the Cowlitz and East Fork rivers, the Wynoochee River historically migrated across a floodplain 0.5-1.2 km in width. Floodplain mines are located in the lower 29 river kilometers (18 river miles), with the densest concentration in the lowest six kilometers (four miles). Valley walls are formed by Miocene mudstones and siltstones, and in the lower four river miles, Pleistocene alluvial terraces (Walsh et al., 1987). In the lowest mile, the river valley opens into the wider Chehalis River valley.

Mid-19th to Mid-20th Century Channel Change

In their unmodified condition, lowland floodplains and channels draining the Washington Cascades and coast ranges historically had a dynamic morphologic and hydrologic

connection. Laterally mobile rivers scroll across their floodplains or avulse, and both processes create, maintain, and modify floodplain sloughs, ponds and creeks (Leopold et al., 1964; Hickin and Nanson, 1975) and vegetative patterns (e.g., Shankman, 1993), which result in diverse aquatic and terrestrial habitat types. Floodplain sloughs, side channels, and wetlands commonly provide extensive and diverse salmonid habitat (Sedell and Luchessa, 1982; Beechie et al.,1994) especially rearing areas and high-flow refugia during winter floods for juvenile coho salmon (Cederholm and Scarlett, 1982; Peterson and Reid, 1984; Bryant, 1984). Particularly in western Washington streams, log jams were important in creating sloughs and marshes (Sedell and Frogatt, 1984; Collins and Abbe, 1997 in prep.). In the late 19th and early 20th centuries, the diking and draining of floodplains for agriculture and settlement commonly narrowed and simplified channels, and eliminated many floodplain sloughs and their habitat (Sedell and Luchessa, 1982; Beechie et al., 1994).

This widespread historic transformation in river morphology is evident in the map record of the East Fork Lewis River. Figure 4 shows the river channel pattern in 1854, prior to extensive river engineering or floodplain land uses. Nearly the entire valley bottom is mapped as wetlands "subject to inundation." The upstream portion of the reach includes an extensive system of channel braids. By 1937 (Figure 4), the braids are replaced by a single channel, and a system of ephemeral floodplain sloughs remain from the former channel braids.

A similar history of a narrowing of active channel area, and elimination of sloughs, characterizes the Toledo reach of the Cowlitz River. Figure 5 shows the river channel pattern in 1854. Like the East Fork, the valley bottom is shown as wetland. The channel pattern includes multiple channels and sloughs. By 1943 (Figure 5), the active floodplain has been narrowed by about half, as agriculture has become established in the southern half of the valley bottom, while the channel remains wide and braided in the northern side of the valley. By 1951, the active river channel has been further narrowed. A prominent floodplain slough, associated with an earlier channel location, remains in the south valley floodplain.

Late 20th Century Habitat Loss Associated with Mine Siting

While diking, draining, and highway construction (e. g., highway construction caused widespread narrowing of the active channel of the Yakima River) prior to the mid-20th century commonly separated floodplain sloughs, creeks and ponds from the channel, or eliminated them, the siting of mines commonly further reduced the amount of floodplain sloughs and habitats. Earliest floodplain mines were sited ~1940, with significant increases in mining in ~1960 along the Yakima River, and ~1970 in western Washington streams (Figure 2). Mines were commonly sited within floodplain sloughs or linked ponds. For

example, prominent left-bank slough present along the Toledo reach of the Cowlitz River in 1953 (Figure 5) was the initial location of mining in the early 1970s, which by 1990 (Figure 5) had eliminated the slough.

In some cases mining was also associated with further diking and bank protection to protect mines from river capture. This narrowed and simplified the morphology of main channels, reducing the amount and diversity of channel habitat. For example, development of extensive mines along the East Fork Lewis River was associated with a narrowing of the active channel (Figure 4). Bank protection in some cases would have reduced sand and gravel supplied to rivers from bank erosion (e. g. Buer et al., 1989), which is an important source of bed material and spawning gravel in some lowland rivers having few tributaries (e. g., Collins 1994; King County, 1994). The removal of riparian forests and their isolation from river migration would also have reduced opportunities for recruitment of large woody debris, and shading and cover for salmonids.

Hazards Associated with River Capture

Floodplain mines create a hazard of potential rapid morphologic change to rivers and their habitat. Because rivers with alluvial floodplains are laterally mobile, it is probable that over a long time period a river will migrate into a pit created by floodplain mining, although this likelihood can be reduced by effective bank armoring and levees. When a river captures a deep floodplain pit, effects can include rapid bed scour upstream or downstream. Several ephemeral rivers in the southwestern United States with bed mining (Bull and Scott, 1974; Scott, 1973; Chang, 1987) have experienced rapid channel adjustment during subsequent floods. Upstream and downstream erosion can be accompanied by catastrophic channel realignment and bank erosion (e. g., Scott, 1973). Scour upstream and downstream of a breached pit can disrupt benthic organisms (Rivier and Seguier, 1985).

Pit capture can also cause the river to abandon its existing channel, become deeper and wider thus, changing water temperature and velocity, and decreasing riffle habitat (Rivier and Seguier, 1985). These effects would persist until a pit refills with bed sediment. MacDonald (1988) estimated that the Naugatuck River would likely take several hundred years to refill in-channel pits because the rate of bedload transport is low relative to the size of the pits. River avulsions can in some cases cause extensive damage to structures (e. g., Dunne et al., 1981).

A series of floodplain mines along the Wynoochee River illustrates the possible effects that can result from river capture. A pit near was excavated near the rivers mouth. The river had a history of lateral migration, and by 1990 had captured the pit (Figure 6). The pit was only moderately wide relative to the main river, and was relatively shallow relative to the river depth. By 1990, the river's bedload had filled in much of the pit, and the river had begun to re-establish its morphology. By contrast, a pit at river kilometer 6 is wide relative

to the river width (Figure 6) and deep, creating the potential for river capture to cause rapid vertical adjustment (upstream and downstream scour) and to establish a long-term increase in channel depth and width prior to the re-establishment of channel form.

Implications for Geomorphic Restoration of Floodplains

There has been recent interest in restoring some measure of historic morphologic and hydraulic connections of floodplains and rivers (e.g., Kern, 1992; Petersen et al., 1992; Petts et al., 1992), including local interest motivated by the potential to recoup previously lost floodplain salmonid habitats (e.g., Beechie et al., 1994). The presence of extensive, deep floodplain pits may limit restoration activities. Restoring the sloughs, small channels, and shallow ponds that characterize natural floodplain habitats would be limited in the short term if a substantial amount of floodplain has converted to lakes because of the large amount of time needed to reconstruct a floodplain by refilling pits by fluvial transport, in cases where pit volume is large relative to the river's transport of sediment.

Floodplain Mines as Habitat

Floodplain pits have the potential to provide important habitat, including rearing and high-flow refugia habitat for salmonids (e. g., Richards et al., 1992). However, most mines are dominated by deep lakes, which receive less use by salmonids than shallow backwater ponds and channels. In most cases, it is possible to modify existing mines or to reclaim current mines (e. g., Norman and Lingley, 1992) to include shallower water habitats and channels. Some successful attempts have been made in non-mining contexts to create or enhance floodplain habitats for juvenile coho salmon (Cederholm et al., 1988; Cederholm and Scarlett 1991) and to modify abandoned floodplain mines into habitat for juvenile chinook salmon (Richards et al., 1992).

The greatest amount of salmonid habitat is created in sites with shallow channels and ponds having vegetative cover (Richards et al., 1992), similar to natural floodplain habitats. An example of a floodplain mine that emphasizes such habitats is at river kilometer 27 on the Wynoochee River (Figure 7). The mine is subject to an ongoing study of habitat use and the efficacy of various habitat enhancement measures (Partee et al., 1993).

In addition, because pits like those at kilometer 27 on the Wynoochee River are shallow, sinuous, and similar in width to the river channel, they create a reduced hazard in the event of a river capture, because they are shaped and sized similar to a relict river channel. For example, Figure 7 indicates a history of channel migration in the vicinity of the pits, suggesting it is likely the river will eventually capture the excavated pits. In addition, because the total volume of the complex of pits is not large relative to the river's sediment

transport regime, they do not complicate the future potential to restore a dynamic river and floodplain system.

Considerations for Minimizing Hazards and Enhancing Habitat

The preceding overview of Washington's history of floodplain mining suggests several considerations relevant to siting mines to minimize habitat loss, avoid compromising future river restoration, reduce hazards, and enhance or increase existing habitat.

To minimize hazards, prior to siting a mine, the potential should be assessed for the river to capture the mine by migrating or avulsing. Examples of river-migration hazard zonation in western Washington include the Snoqualmie, Green, and Cedar rivers of King County (King County, 1993; Perkins, 1993). An evaluation should then be made of the potential risks of mine capture by river avulsion or migration, and the feasibility of adequately preventing such an occurrence by use of appropriate engineering measures.

Attention should be paid to the volume and dimensions of a proposed mine relative to the scale of the river and its sediment transport regime. Pits that are wide and deep relative to the river pose hazards in the event of river capture, and limit the potential for a future restoration of a dynamic river-floodplain connection.

To assure that existing floodplain or channel habitat is not eliminated, a survey should be made of existing hydrology and habitat, and an assessment of how a proposed project would alter those conditions.

To maximize habitat enhancement, consideration should be given to sizing and shaping mines to resemble natural floodplain sloughs or ponds linked by small channels, which commonly form on floodplains in abandoned mainstem channels. Doing so may maximize the amount of habitats useable for salmonids, will reduce the chances of damaging consequences in the event of river capture, and will not compromise the potential for future restoration of a dynamic river-floodplain connection.

Finally, a systematic appraisal should be made of alternative gravel sources from other geologic sources, such as upland terraces (e. g., Dunne et al., 1981), and a complete assessment made of the environmental effects of floodplain mining compared to alternative sources.

Summary

Historic land uses in Washington (~1860 to ~1960) narrowed active river channels and isolated their floodplains, which facilitated the siting of floodplain gravel mines. Beginning

in the 1940s, floodplain gravel mines further changed riverine processes by eliminating remaining floodplain sloughs, and by further narrowing and simplifying channels (Table 1). The presence of large and extensive pits limits the potential to restore dynamic river-floodplain connection and habitat lost to historic land uses, because reconstructing a geomorphic floodplain by allowing fluvial transport to refill pits can require decades where the volume of pits is large relative to the river's transport regime.

Pits also create indirect hazards to habitat because of their potential to be captured by river migration or avulsion, which can cause rapid bed scour upstream and downstream of deep pits, and can create an artificially wide and deep channel (Table 2). These hazards have increased as the number of mines has grown since ~1970, and mines deeper mines have been developed since ~1980.

While pits can create floodplain aquatic habitat, it is generally dominated by deep-water lakes, instead of the small channels and shallow ponds that characterize natural floodplains, and which salmonids favor. It is possible to create a more natural distribution of habitats, and also to minimize the adverse consequences of pit capture by river avulsion or migration, by siting and sizing floodplain pits so as to mimic sloughs and linked ponds that characterize natural floodplains.

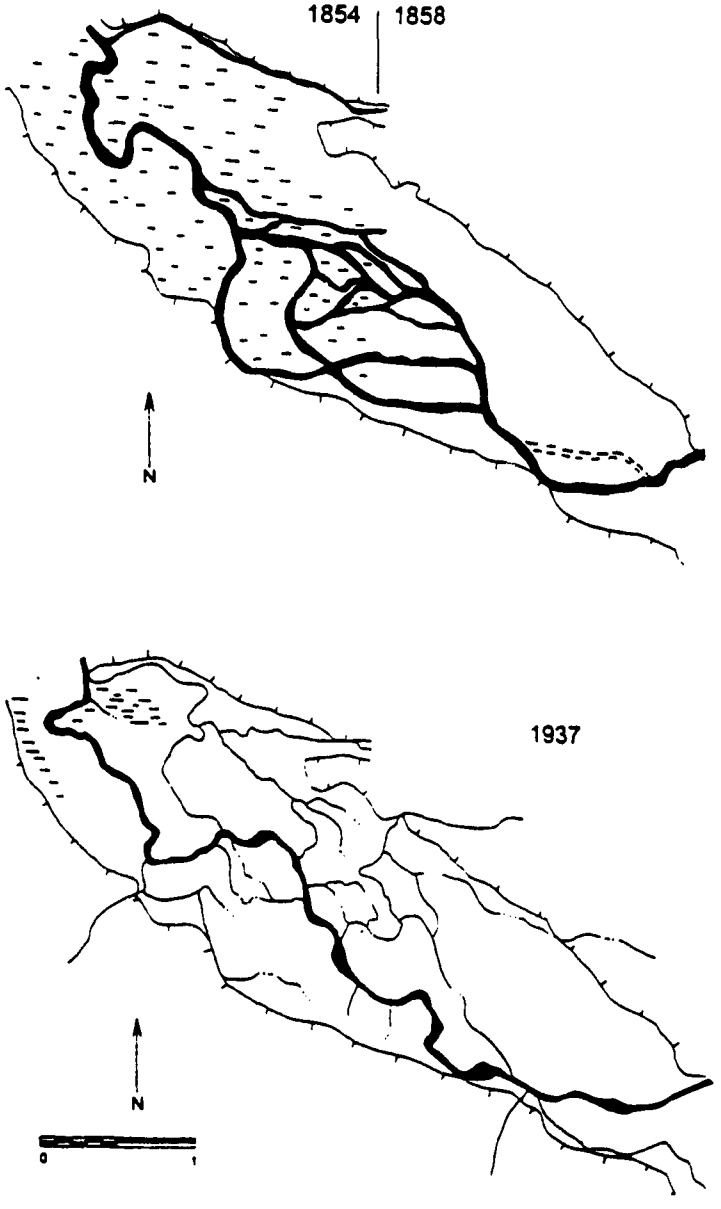
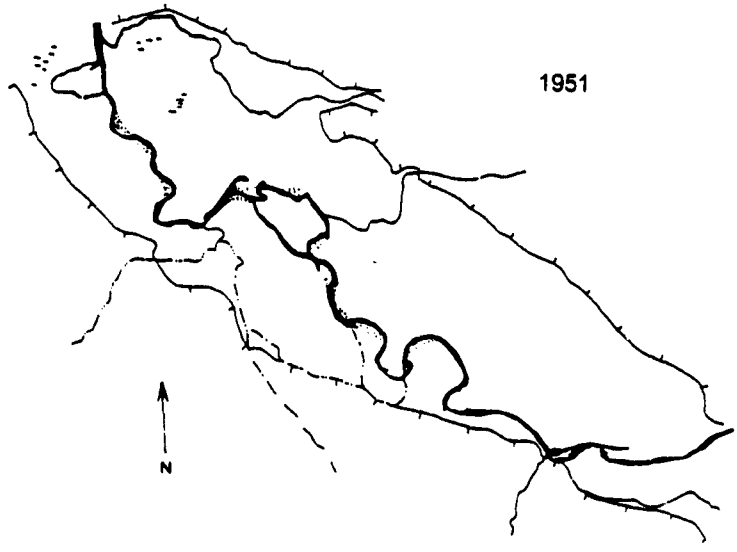


Figure 4. The East Fork Lewis River, from RM 6 to RM 10. River channel pattern is from maps, with year of aerial photographs or ground survey of map indicated. Scale shows one kilometer. Hatchured outline shows approximate edge of valley floor.



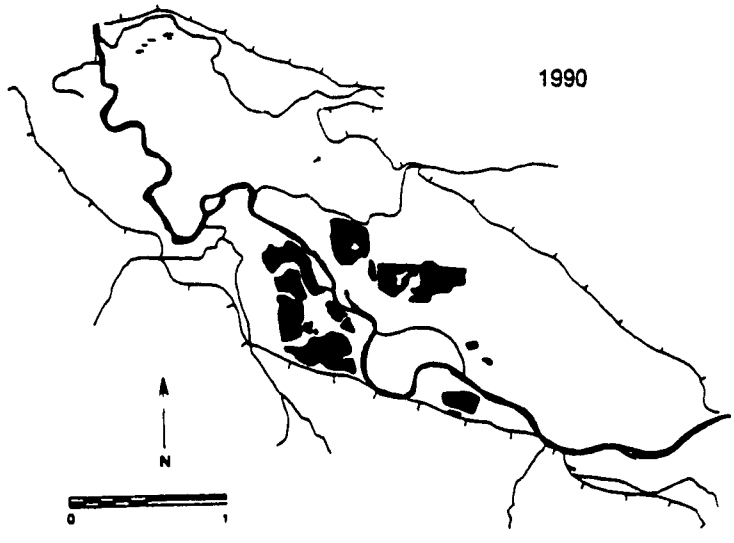


Figure 4 (continued). The East Fork Lewis River, from RM 6 to RM 10.

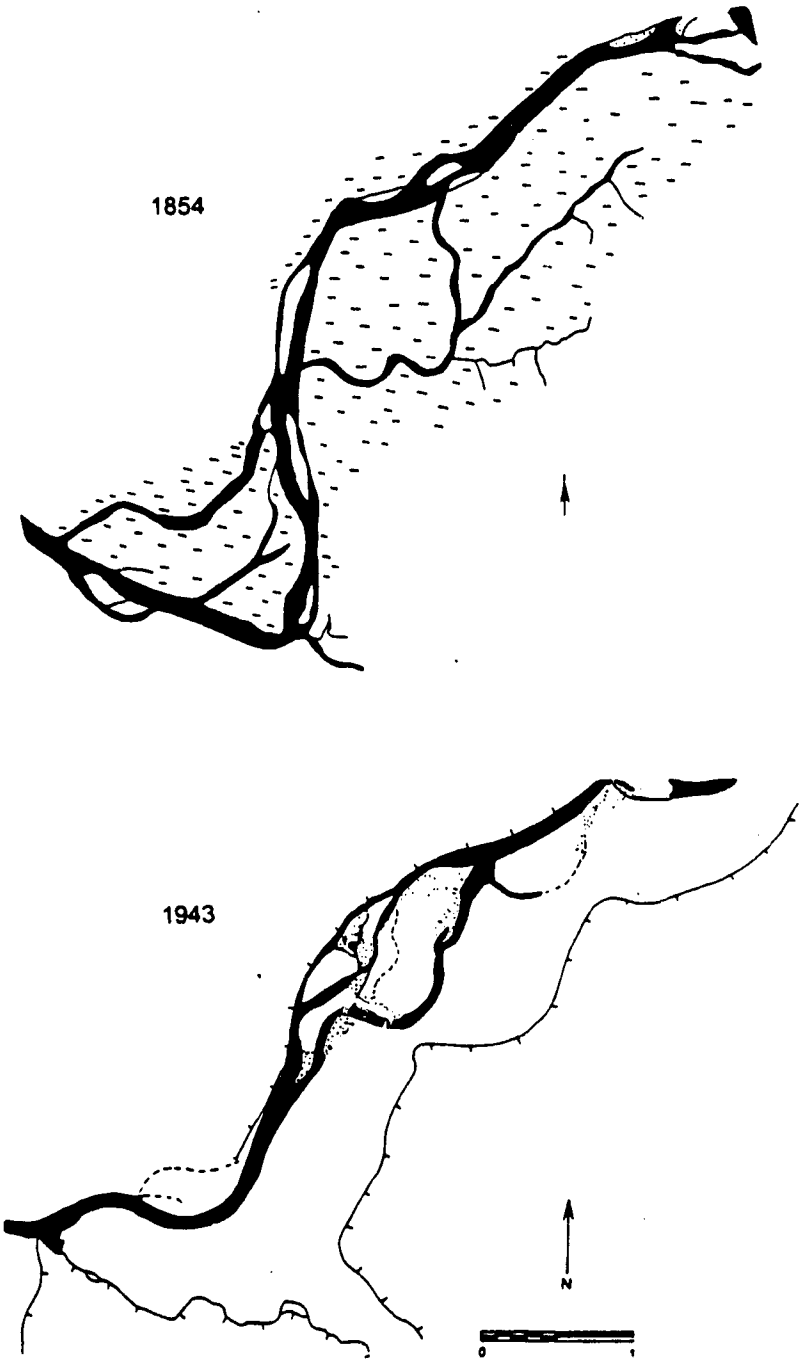


Figure 5. The Cowlitz River near Toledo, from RM 32 to RM 37.

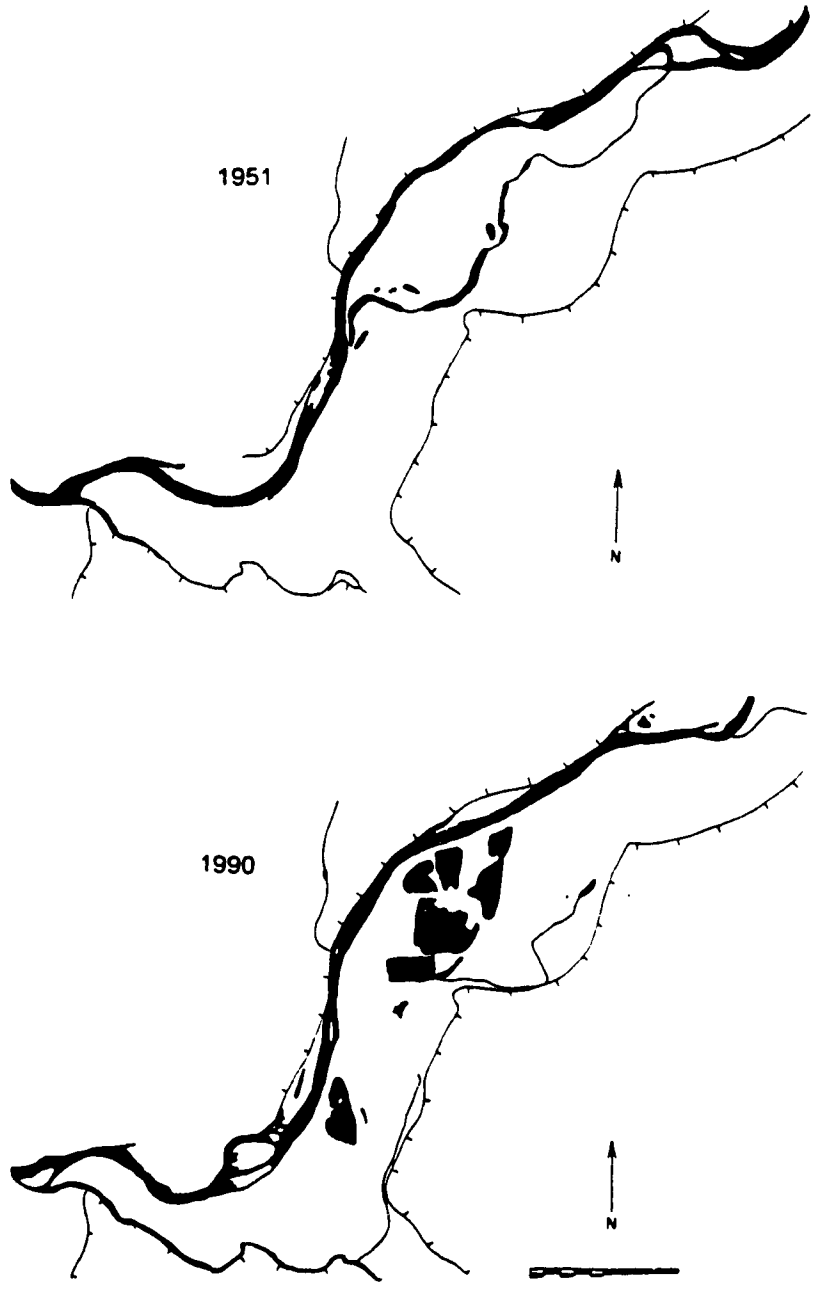


Figure 5 (continued). The Cowlitz River near Toledo, from RM 32 to RM 37.

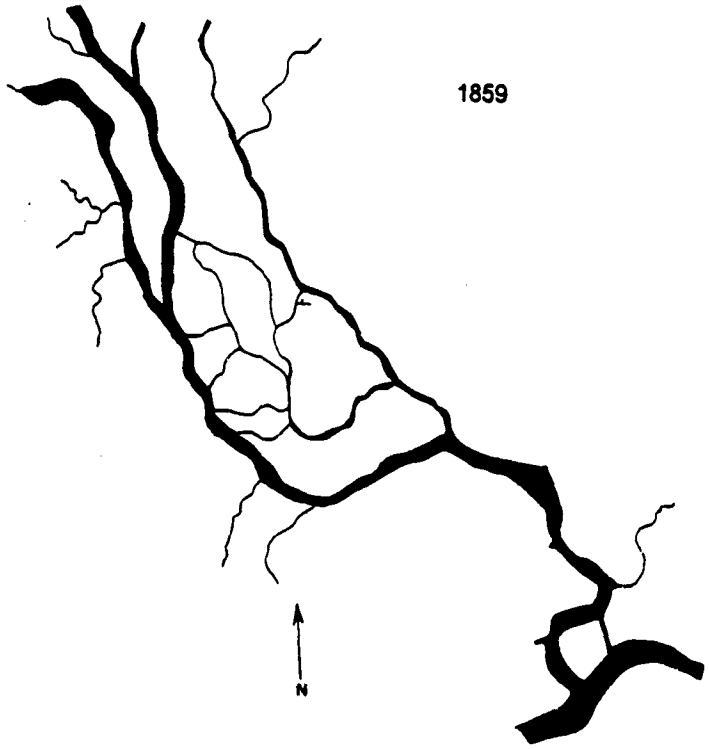
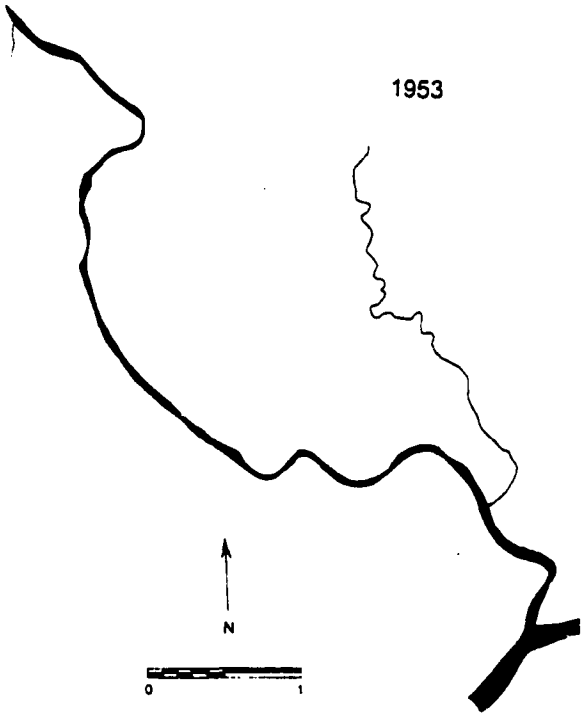


Figure 6. The Wynoochee River, RM 0 to RM 4.



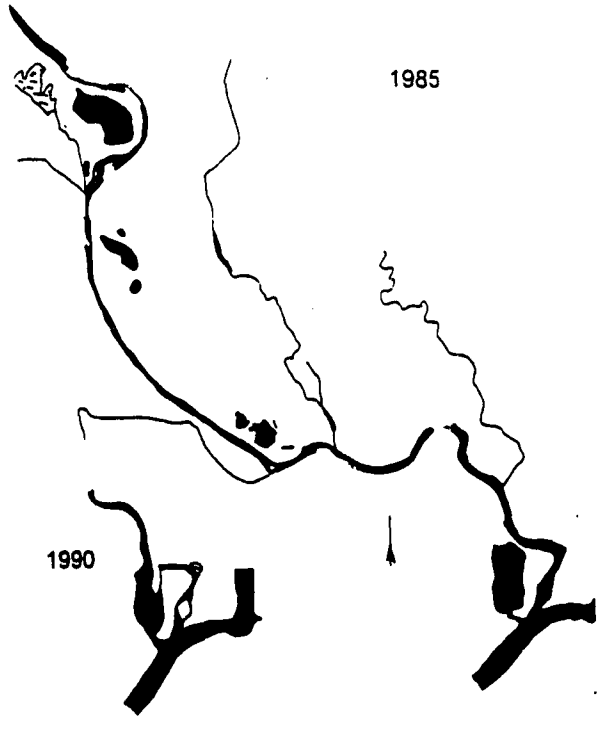
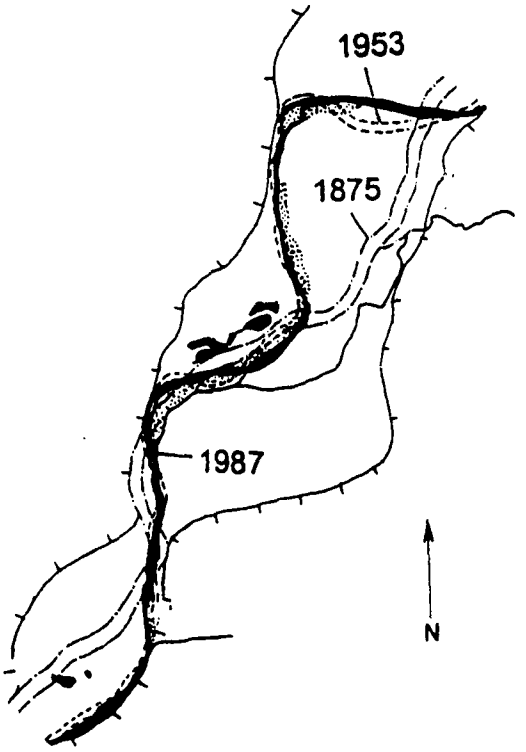


Figure 6 (continued). The Wynoochee River, RM 0 to RM 4.



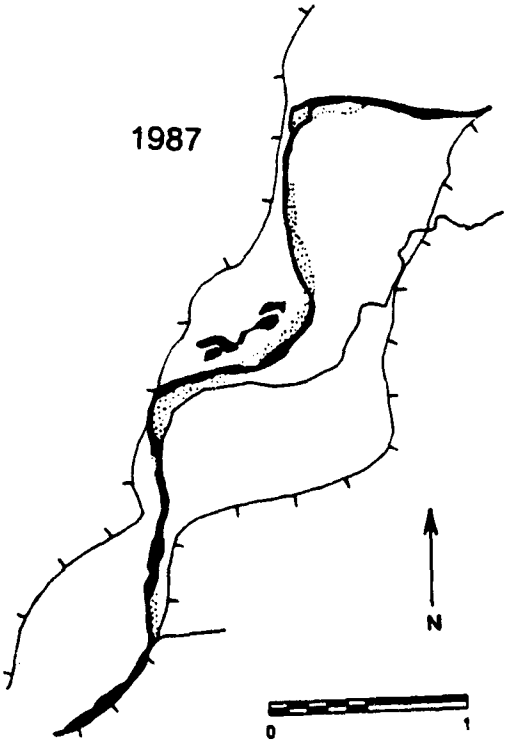


Figure 7. The Wynoochee River, RM 16 to RM 18.

Table 1. Geomorphic effects of floodplain mining, and implications for salmonid habitat.

Element of Floodplain Mining	Physical Effect	Possible Consequence for Salmonid Habitat
Clearing or filling of floodplain hydrographic features.	Loss of sloughs, ponds, and channels that connect to the main river.	Loss of off-channel overwintering and refugia habitat.
Persistence of pits in time	Replacement of floodplain with extensive, deep lakes.	Compromises potential to restore laterally dynamic river-floodplain connection, which creates and modifies a diversity of habitat.
Bank protection commonly required to prevent river migrating into pit.	Sometimes associated with the narrowing and simplification of channel; possible loss of gravel recruitment from banks; reduced recruitment of large woody debris from banks.	Reduction in total amount of habitat; possible reduction in spawning habitat; effects of reduced wood recruitment.
Potential for uncontrolled breaching of pit by river.	Potential for rapid upstream and downstream bed scour and accompanying channel adjustments.	Potential for short- and long-term changes to types, amount, and quality of habitat.
Same as above.	Potential for river reestablishing in wider and deeper channel than natural, causing change to stream morphology, water temperature, and ecology.	Potential for short- and long-term changes to types, amount, and quality of habitat.
Presence of lakes near channel.	Possible effects on flow, temperature, chemistry, or biota of hyporheic groundwater, or the patterns and locations of groundwater and channel water exchange.	Not studied.

PLANNING CONSIDERATIONS (1-5)

(1) [illegible]

(2) [illegible]

(3) ASSESS [illegible] HAB.

(4) MAX HAB. + REDUCED [illegible] ASSOC. @ DESIGNS [illegible]

GRAVEL BAR MINING

Physical effects and the accompanying environmental or ecological effects are organized below by whether they occur locally (near a mined bar) or farther upstream and downstream.

Geomorphic Effects near Gravel Bars

In a typical meandering river, most bedload travels along the channel bed and up onto point bars on the inside of bends. (Where the sediment load of a river is high relative to its transport capacity, bars also form in mid channel, creating braids.) This accumulation of material on the inside of the bend forces the main thread of the river against the concave, outside channel bank, causing undermining and collapse. Together, the deposition of material on the inner bank and the undermining of the outer bank lead to a lateral shifting of the entire channel without any change of the river cross sectional form. As the river moves away from the inner, convex bank, it leaves behind an outward-accreting series of deposits of bed material. Fine sand and silt from the suspended load settle during overbank floods and accumulate on the deposited bed material, and this floodplain surface becomes colonized by vegetation. As the river shifts toward the outer bank of a bend, it may undermine its present floodplain or an older, higher floodplain (terrace), or it may undercut a hillside.

Because it can change the flow of water and sediment through a bend, mining a bar can change physical channel characteristics and habitat in the bar's immediate vicinity. A study in Washington's Puyallup River drainage (Pauley et al., 1989; Weigand, 1991), included cross sections, photographs, and field surveys of salmonid abundance to document changes to salmonid habitat associated with gravel bar scalping. Mining was presumably consistent with state Hydraulic Permit regulations, which includes sloping excavation at least 2% toward the bank. Study investigators found that riffles scoured upstream of the scalped bar, which could decrease survival of eggs in spawning redds (Pauley et al., 1989). This scour presumably occurs because lowering the bar height increases the water surface slope.

The Puyallup study also concluded that juvenile steelhead trout (*Oncorhynchus mykiss*) and juvenile coho salmon (*Oncorhynchus kisutch*) preferred pool or riffle habitats in narrow channels adjacent to bars, and that bar mining reduced the area of these habitat types and increased the area of main-channel habitats. The effect persisted until a bedload-transporting flow or flows rebuilt the bar. The study concluded that bar mining could be forcing juvenile salmonids into marginal or unsuitable habitat. However, the authors also caution that the effects they documented cannot confidently be associated with mining because they studied a small number of sites for only two years (Pauley et al., 1989).

Based on examination of the history of bars in the Snohomish River drainage, Dunne et al. (1981) concluded that if a point bar is lowered by a large amount, the bend can be cut off as streamflow forms a new channel. They report that the consequences of such a channel change are typically a short-term redistribution of sediment and of the locations of pools and riffles.

No studies are available on the consequences of bar pits or "gravel traps" on channel form and habitat. Typically bar pits are connected with the low-water channel, and potentially provide pools available to salmonids and other species during the time between excavation in summer and pit filling during fall and winter floods. Based on observations of pits in bars on the Dungeness River, pits located near the low-flow channel can breach, which can increase the proportion of shallow low-water habitat. This would presumably have similar results as observed in the Puyallup River study by Pauley and others (1989). Pits and breached pits can also fill with fine-grained sediments, creating a finer-grained bed which can undergo more frequent transport. This might attract spawning salmonids to sites with suitable grain sizes, but which are exposed to frequent transport (S. Ralph, personal communication 1994), but this has not been studied.

Reach-Scale Consequences of Changes to Sediment Mass Balance

The sediment discharge, sediment size, channel shape, bed material size, and channel slope are interrelated; changing any one of these variables can change another. Lane (1955) developed a useful qualitative expression of the relation between bed-material load (Q_s), mean water discharge (Q), median sediment size (d_{50}), and gradient (s) as follows:

$$Q_s, d_{50} \sim Q, S$$

For example, a reduction in the sediment discharge (Q_s) at a point would tend to result in the river's regaining its sediment load by scouring its or banks downstream, which could result in bed armoring, or an increase in the bed material grain size (d_{50}). These effects are commonly noted downstream of dams.

Similar effects are associated with gravel bar mining. A number of field studies document these channel responses, but few provide a detailed analysis, or relate these changes in detail to aquatic habitat. In a channel in which the transport into a reach is naturally greater than the transport out of it, bar mining can reduce that aggradation. If removal is large relative to downstream aggradation, or in channel reaches having an approximate long-term balance between input and output, the bed elevation downstream can decrease, because the sediment supply into it is exceeded by transport out of it. Field observations (e. g., Sato, 1971; Meserlyans, 1974; Page and Heerdegen, 1985; Harvey and Schumm, 1987; Collins and Dunne, 1989, 1990; Collins, 1991, 1992; Kondolf and Swanson, 1993)

suggest that degradation occurs downstream for several hundred meters to several kilometers and for a shorter distance upstream.

Reduced bed material supply and resulting river-bed lowering and armoring can have several effects on the river which could be of potential consequence to salmonids. Bed coarsening can reduce habitat for invertebrates, which is limited to particle surfaces not embedded in the streambed (Rivier and Seguier, 1985), and change the suitability of gravels for salmonid spawning or rearing. Where river-bed gravels are thin and overlay clay, bedrock, or other cohesive materials, bed degradation can deplete gravels (e.g., Kondolf 1995).

Interrupting the downstream transport of bed material has been related to reduction in size and number of downstream bars (Dunne et al., 1981; MacDonald, 1988). Effects of these changes or of accompanying channel adjustments (Dunne et al., 1981) on habitat have not been studied. It is possible that removing large amounts of sand and gravel could modify a river's overall pattern. Other engineering modifications that remove large amounts of sediment from a river system, such as large storage dams, can significantly change a river pattern. For example, Kondolf and Swanson (1993) documented the change through time of Stony Creek, California, from a braided stream to a narrower, single-thread channel as a result of interruption in sediment supply by a dam in combination with gravel mining. Vick (1995) documented the effects of dams and mining in changing the Merced River from a dynamic, migrating channel to a narrow, stable remnant having numerous slackwater lakes from old gravel mines, and localized channel steepening associated with mines.

Where a river bed overlies deep alluvium or other erodible materials, and there is a significant interruption in downstream supply of bedload, bed lowering can be substantial. This can in turn lower the groundwater table, which can variously affect floodplain hydrology (Goodwin et al., 1992; Evoy and Holland, 1989) and habitat. A lowered groundwater table can kill riparian vegetation (Kondolf and Curry, 1986). In many cases where bed lowering occurs, depending on vegetation and site conditions, it may be slow enough for some riparian plants to colonize newly exposed streambanks, but this could change the age and species structure of riparian communities. Groundwater lowering can also kill vegetation in floodplain wetlands and along sloughs, where trees might play important roles in providing cover, shade, and a supply of large wood for salmonid habitat.

Groundwater table lowering can eliminate recharge to a stratigraphically higher aquifer or breach and contaminate a lower aquifer. This could in turn affect a river's low-flow regime. Examples of the interplay of bed lowering and groundwater flow changes are Cache Creek, California (Wahler, 1981; Woodward-Clyde Consultants, 1976; Collins and Dunne, 1990) and Russian River (Goodwin et al., 1992). Evoy and Holland (1989) includes a discussion of the interplay between groundwater change and bed lowering. Where bed lowering is large (meters to tens of meters), overbank flooding can be virtually eliminated

(see Cache Creek references cited above). This reduction in overbank flooding can reduce the supply of organic-rich fine sediments to the floodplain, and could reduce the replenishment of water to floodplain wetlands and sloughs and to aquifers. Reduction of overbank flooding can also aggravate downstream flooding because of the loss of floodplain water storage. Large amounts of lowering can also increase bank heights and induce bank erosion and has the potential to cause tributary streambeds to erode.

Mining removes vegetation from the bar and adjacent bank, which can increase water temperature (Beschta et al., 1987; Sullivan et al., 1990), although this effect may be unimportant in most mined rivers which are relatively wide. Removing standing and downed trees on bars reduces the river's load of large woody debris, which is important in creating habitat and supplying nutrients (summarized in Bisson and others 1987, and Murphy and Meehan, 1991), and in promoting vegetative colonization of bars following the disruption of bars by floods (e. g., Abbe and Montgomery, 1996) which can create and stabilize off-channel habitats.

Reclamation and Restoration

Reclamation law typically requires that gravel bar mines be reclaimed. The concept of reclamation is arguable in its application to channel mining (Kondolf, 1993) because mining often causes changes that cannot in the short term be undone afterward, including changes at a distance upstream and downstream from a mine. In most rivers that have experienced substantial bed elevation lowering and associated groundwater changes from channel mining, the period of time required to restore original physical conditions is probably long. In some cases, it may be possible by mechanically reshaping the landscape to restore some elements of lost function. Goodwin and others (1992) describe a plan to restore the geomorphic floodplain to reaches of the Russian River, in which mining has substantially lowered the bed level. The plan proposes mining terrace sand and gravels to a level of the former floodplain, in order to restore the floodplain's role in groundwater recharge and floodwater storage.

Influence of Channel Bed on Flood Heights

Gravel removal can have very different effects on flood heights, depending on the capacity of the channel and floodplain. Where a channel can contain a flood flow with little or none of the flood flow out on the floodplain (for example, an artificially-widened stream confined by high levees), then relatively small changes to the channel itself, such as sediment deposition or dredging, may have a direct influence on local water-surface elevations. On the other hand, if large areas of the floodplain are submerged during a flood, and the volume of water stored in the valley is large relative to the amount conveyed by the channel, flood heights will be little affected by sediment-removal efforts

in the channel, because such a small percentage of the total water volume needing conveyance would be affected. In addition, the location of hydraulic control points can also strongly influence the effectiveness of sediment-removal efforts. If flooding is occurring primarily as a result of a downstream constriction in the flow removal of that constriction will be highly effective. On the other hand, large-scale sediment removal upstream may be completely ineffective.

Table 2. Geomorphic effects of gravel bar mining, and implications for salmonid habitat.

Element of Bar Mining	Physical Effect	Possible Consequence for Salmonid Habitat
Removal of sand and gravel from bar.	Scour of upstream riffle.	Lower success of spawning redds.
"	Diminishment of side-channel area.	Possible loss of spawning and rearing habitat.
Interruption of downstream bed material transport	Bed surface armoring.	Lower quality of spawning and rearing habitat; changes to invertebrate community.
"	Diminishment of downstream bars and accompanying channel adjustment.	Possible loss of spawning habitat.
"	Downstream depletion of alluvial bed.	Reduced amount of spawning gravel.
"	Lower groundwater table	Possible reduced summer low flows; possible reduction of water recharge to off-channel habitat.
Removal of vegetation and woody debris from bar and bank.	Reduce shade	Increase water temperature in narrow rivers.
"	Decrease channel structure from wood.	Possibly reduced cover, number and depth of pools, area of spawning gravel, channel stability.
"	Decrease nutrient input.	Decreased stream productivity.

ASSESSMENT METHODS

This section provides an overview of several methods useful for assessing potential effects of gravel removal. The following methods are summarized: (1) use of sediment budgeting to determine a river's sediment mass balance; (2) use of aerial photographs and field measurements to assess potential effects on river morphology near to a mined gravel bar; (3) use of aerial photographs and maps to assess the potential risk to floodplain mines of river capture; (4) use of hydraulic modeling to assess the effectiveness of gravel removal at reducing flood heights.

Assessment Methods 1: River Channel Sediment Budget

A sediment budget is a conceptual framework useful for assessing the effects of gravel mining on the mass balance of bed material sediment (see Dietrich et al., 1981, for a general discussion of sediment budgets). It is most appropriate for assessing effects on a broad scale (e. g., a ~1-10-km long reach). It is useful to determine the mass balance for a reach, because mining in excess of the rate at which sediment builds up over the long term causes a variety of morphologic changes to channels (see earlier summary), of potential consequences for aquatic habitat and for flood engineering.

A sediment budget for a given reach of river makes use of the relation between input (I), output (O), and change in storage (S):

$$I - O = S \qquad (1)$$

In this case, input is the amount of bed material supplied to a stream reach of interest from upstream. Output refers to the amount of bed material that is transported out of the stream reach. The change in storage is the sum of the change in measurable volume of stored sediment, and the amount of gravel that has been removed, or is proposed to be removed:

$$S = \text{Change in measurable volume of bed material} + \text{Bed material offtake} \qquad (2)$$

In an undisturbed river channel, the change in storage (S) is the amount by which a river bed will build up (aggrade) over a period of time. This amount, particularly when expressed as a rate (e. g., cubic yards or cubic meters per year, or per 10 years), is of critical interest for planning applications; mining more than this amount will cause the reach of interest to erode (degrade) over time.

Thus, the change in storage can be determined by three different approaches. First, in an undisturbed river, S can be measured directly (e. g., by surveying a series of cross sections at two different times). Second, using equation (1), S can be determined by measuring or estimating the amount of bed material that enters a reach (I), and the amount that is transported out of the reach (O). Third, in a system with gravel mining, using equation (2), S can be determined by measuring the change in bed material storage over a period of time, and adding this to the amount of bed material offtake. There are several assumptions and approximations associated with each. These are discussed below as part of a discussion of approaches to determining, in a planning context, the different variables in equations (1) and (2). This is followed by an example of a planning example from the Stillaguamish River.

Determining Sediment Input and Output

Bed material transport can be determined by a variety of means, including (a) bedload transport measurements; (b) bedload equations; (c) suspended sediment data; (d) extrapolation from similar rivers; and (e) aerial photo and field measurements of sediment flux. Whenever possible, it is desirable to determine transport from more than one approach, including at least one that makes use of field measurements.

(a) *Bedload Transport Measurement.* In a few rivers, bedload transport measurements have been made by the U. S. Geological Survey or other agency (e. g., in Washington, a limited amount of information is provided in reports by Nelson (1971; 1973; 1979; 1982) and Prych (1988). Use of bedload transport data is discussed in Dunne and Leopold (1978) and Collins and Dunne (1990). In some planning applications, there may be sufficient time and resources to measure bedload transport in a river of interest. However, several years of data are generally necessary, and specialized equipment and expertise are required for sampling large rivers, which are typically of interest in Washington.

(b) *Bedload Equations.* There are numerous theoretical and empirical bedload transport formulae (e. g., for a review, see Gomez and Church, 1989). Their use generally requires the following information: (1) the bed material grain size distribution; (2) measured channel cross sections; (3) the hydraulic slope; (4) a relation between flow depth and discharge; and (5) a record of continuous discharge measurements. When the appropriate data is available, and when a formula is used that is appropriate for the particular application, it is possible to develop a rough estimate of the bed material transport. More detail is provided in Collins and Dunne (1990).

(c) *Suspended Sediment Data.* For most rivers, data on suspended sediment transport is more common than is bedload data (for a discussion on measurement techniques, see Dunne and Leopold, 1978). Bedload is typically small relative to suspended load (i.e., it typically amounts to a relatively small proportion of the total sediment load). In rivers

where suspended sediment transport has been measured, a useable rough estimate of bedload transport can be made by making use of a relation between bedload and total load in a river with a comparable slope. In low-gradient gravel- and cobble-bed rivers, bedload is typically 2-16 percent of the total load, with lower-gradient channels typically having lower values, and steeper rivers having higher values (see Collins and Dunne, 1990, for more detail, including an appendix listing published sources of bedload data from large river basins in Oregon, Washington, and California).

(d) *Extrapolation from Other Rivers.* Suspended sediment yields generally fall within definable ranges for different physiographic regions. For example, rivers draining the Olympic Mountains have recorded suspended sediment loads of 500 to 2,000 t/mi^2/yr, and rivers in north coastal California have yields ranging between 1,000 and 10,000 t/mi^2/yr. Yields from river basins in the Puget Lowland and western Cascade Range range between 100 and 700 t/mi^2/yr; yields from river basins draining the eastern Cascade Range average 10-100 t/mi^2/yr. These ranges can be narrowed considerably for particular basins within these regions by examining local measured values in comparable basins. While the estimate becomes even more approximate, it may still be useful for preliminary planning purposes to estimate bedload as a percentage of an extrapolated suspended sediment load.

(e) *Aerial Photo and Field Measurements.* In a laterally-mobile river without widespread bank hardening, it may be possible to take advantage of relations between large-scale morphologic changes and sediment flux, because the morphologic changes can be readily measured from aerial photographs and in the field. For example, Neill (1983) measured rates of bank erosion, and Collins and Dunne (1989) measured rates of bar accretion from sequential aerial photographs; both related the measurements to minimum bedload transport rates. Martin and Church (1995) more recently proposed a more field-intensive method involving multiple channel surveys.

In most planning applications, a multiple-year data collection effort is not feasible. Because most methods available for planning assessments are inexact, it is important to use several independent methods. Figure 8 illustrates the results from a planning situation in which it was necessary to rapidly develop an estimate of bedload transport for three rivers subject to gravel mining. Three different methods were used to determine the bedload transport rate in three southwest Washington rivers; more information can be found in Collins and Dunne (1989).

Determining Change in Storage

The change in volume of channel-stored sediment can be measured by various means. These include: (a) repeatedly-measured channel cross sections; (b) stream gage records; (c) aerial photo and field measurement.

(a) *Channel Cross Sections.* Changes in sediment storage are indicated by resurveying cross sections that had been surveyed at an earlier date (e. g., Page and Heerdegen, 1985, Griffiths, 1979; Prych, 1988). In many Washington rivers, as part of Federal Emergency Management Agency (FEMA) flood studies, a series of cross sections were surveyed in the period 1960-1990 (see later example from Stillaguamish River for illustration). In many cases, surveys have not been monumented, because they were not intended for reuse. However, by acquiring field notes, work maps, and other materials from an older survey, it is possible to relocated older cross sections to a useable level of accuracy (e. g., see Collins 1992).

(b) *Stream gage records.* While resurvey of cross sections can provide an excellent record of the overall change in sediment storage between two time periods, records from U. S. Geological Survey stream gages (Form 9-207 records the appropriate summary field measurements) can also provide excellent information at one or several points along a river on how that change has been distributed through time. Gaining more detail on the temporal distribution of change can provide insight into the factors which influence change in stream channel bed storage. For example, Figure 9 and Figure 10 are the record of gage heights at a constant discharge, from gages on the Wynoochee and Pilchuck rivers, both western Washington rivers in which gravel is mined.

In interpreting gage data, it is important to examine all possible factors influencing bed elevation. For example, decade-scale variations in climate may affect sediment and water discharge, which can affect changes in bed material storage (see Collins and Dunne 1989 for example). Gage records may also reflect the effects of local changes to river bed or hydraulics, for example, from a structure, channel dredging or narrowing. Gage records can also record effects of nearby gravel removal operations. In Figure 9, the decrease in bed elevation until the 1980s appeared to relate to the removal of gravel (Collins and Dunne, 1989), and the subsequent increase in bed elevation corresponds to the a period when the amount of removal was regulated at a reduced rate from the earlier period. In Figure 10, the changes in bed elevation were corroborated by resurvey of bridge cross sections at the same location as the gage, and related to an upstream gravel removal operation (Collins, 1991).

(c) *Aerial photo and field measurements.* Bed material storage change can also be estimated by measuring the area of bars and low-flow bed with a planimeter or digitizer, and converting these to volumes by field-measuring bar heights and estimating depths of low-flow-channel scour (XXX).

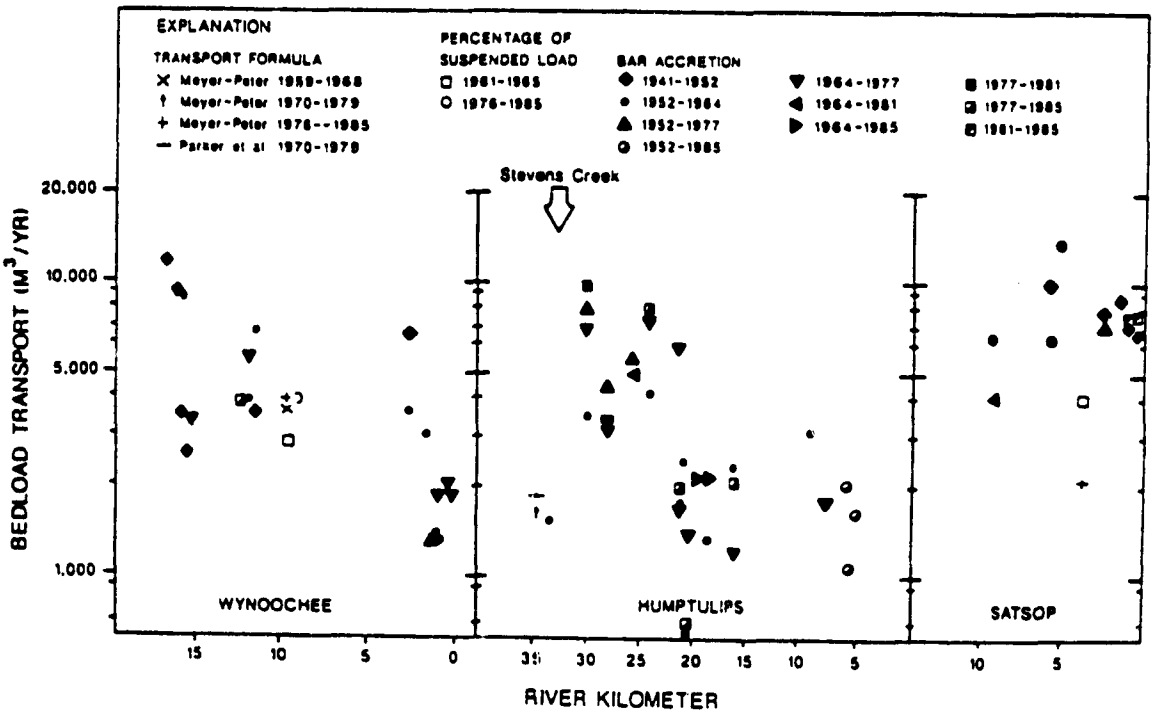


Figure 8 Average annual bedload transport along the Humptulips, Wynoochee and Satsop rivers was estimated by (a) using two bedload transport formulae (cross symbols), (b) taking bedload as 4% of the suspended load measured previously by the U. S. Geological Survey on the Wynoochee and Satsop rivers (Glancy, 1971) (open symbols); and (c) by measuring bar accretion rates from aerial photos in time intervals of roughly a decade, prior to bank armoring (solid and half-solid symbols) (From Collins and Dunne, 1989).

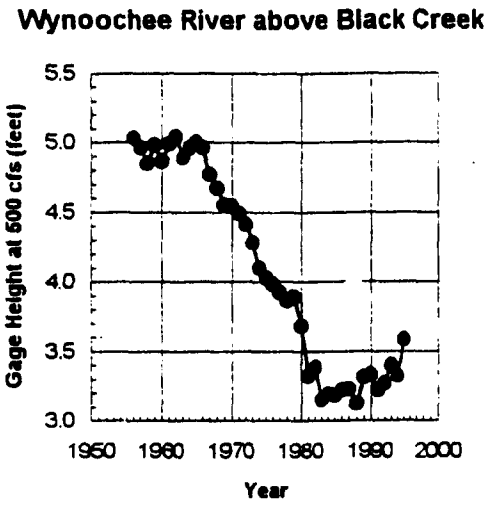


Figure 9. Stream gage on Wynoochee River in southwest Washington (figure modified from Collins and Dunne, 1989).

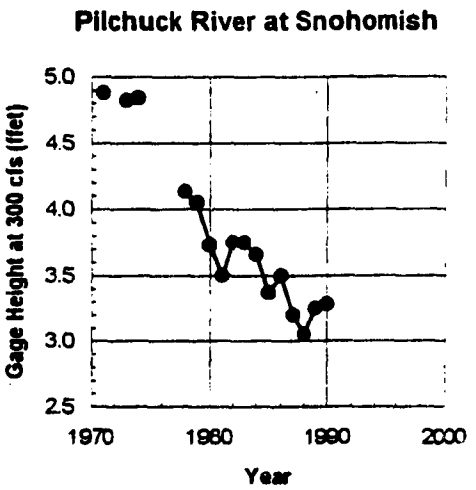


Figure 10. Stream gage on Pilchuck River at Snohomish, Washington. Gage is located ~100 m downstream of gravel mining operation. Figure modified from Collins (1991).

Example of Sediment Budget Used in Planning Application

Gravel has been mined for a number of years in the mainstem of western Washington's Stillaguamish River (example is described in detail by Collins, 1992). At the request of Snohomish County, it was necessary to provide an initial estimate of the rate at which gravel accumulated under natural conditions, for use in regulating the amount of gravel removal, because a county statute requires that removal not exceed the long-term deposition.

The change in storage was measured by locating cross sections surveyed in 1962 or 1972 as part of a FEMA flood study (Figure 11). Cross sections indicated that volumetric change in the downstream reach was +9,000 yd^3/yr between 1962 and 1991, and -28,000 yd^3/yr in the upstream reach in the 1972-1991 period. Offtake was determined from records provided by the state of Washington and by mine operators (Figure 12). An estimated 2.1 million cubic yards of sand and gravel were removed between 1962 and 1991, averaging 70,000 yd^3/yr. From 1962 through 1985 offtake averaged 54,000 yd^3/yr. From 1986 to 1991, offtake averaged about 135,000 yd^3/yr.

Using equation (2), the rate at which sand and gravel would accumulate in the channel under undisturbed conditions can be determined by adding the offtake to the measured change in sediment storage. Thus, in the downstream reach, the natural deposition rate would be 9,000 yd^3/yr + 18,000 yd^3/yr = 27,000 yd^3/yr. In the upstream reach, the rate would be -28,000 yd^3/yr + 65,000 yd^3/yr = 37,000 yd^3/yr. The accuracy of the estimate in the downstream reach is greater than in the upstream reach, because the cross sections were more closely spaced.

Input and output (bedload transport rates) were estimated using bedload transport equations with very limited data, to a low level of confidence, and also by rates of bed material that accumulated on bars in the upstream and downstream ends of the reach. However, this provided a rough check on the estimates provided by measuring the change in storage and offtake. For a second example, see Goodwin and others (1992), on California's Russian River.

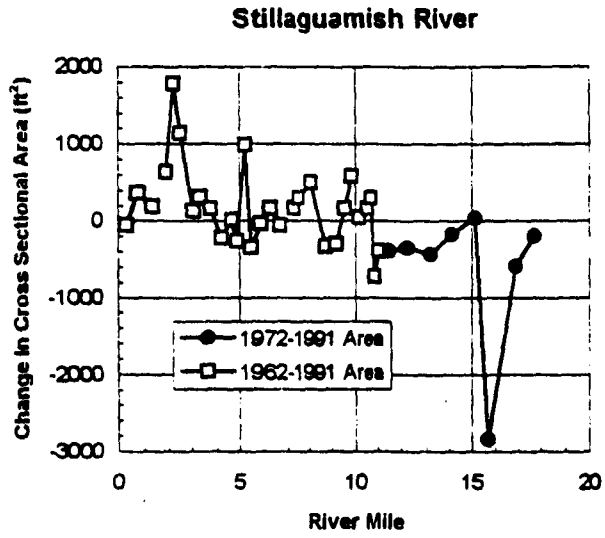


Figure 11. Change in cross sectional area of the mainstem Stillaguamish River channel between 1962-1991 or 1972-1991. Cross sections were originally surveyed as part of FEMA flood study. Figure is from Collins (1992).

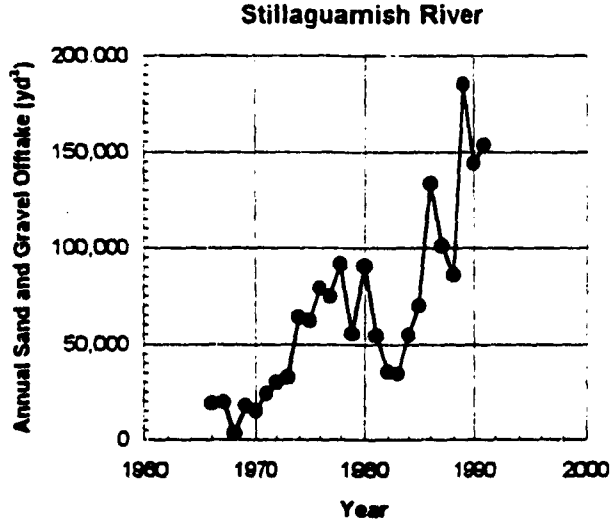


Figure 12. Sand and gravel removed from the mainstem of the Stillaguamish River (from Collins, 1992).

Assessment Methods 2: Assessing Effects on River Morphology and Hydraulics

As previously summarized, removing sand and gravel from a bar can potentially change the local channel morphology and hydraulics. The following specific effects can be assessed.

Channel Avulsion

The risk of gravel-bar mining to cause a channel cutoff can be evaluated by inspecting the past behavior of the river at the bend (e. g. Dunne et al., 1981). Such an assessment will help determine the amount of material that can be removed, and its location on the bar.

Bank Erosion

Also by inspection of a series of aerial photographs, it can be assessed whether reducing the height, or reshaping a bar will either stabilize or destabilize nearby river banks.

Bed Morphology and Hydraulics

The effects of river-gravel mining on channel bed morphology and hydraulics near a mined bar has not been documented in detail. Pauley et al. (1989) provided a preliminary study of the morphologic effects of mining in the Puyallup River drainage. A program of monitoring of mine operations would provide important information, and should be focused around specifically-formulated hypotheses about the possible effects of mining on the river near the bar. Based on the results by Pauley et al. (1989) and geomorphic principles, the following questions are among those appropriate for a monitoring study:

(1) What will be the effect of removing gravel from a bar on the upstream riffle morphology and stability? The riffle's morphology can be documented by use of aerial and oblique photographs and cross sections. The frequency of bed transport can be evaluated by repeated cross sections, painted rocks, and scour chains.

(2) What effect will there be on the overall distribution of pools and riffles? The plan-form channel morphology can be evaluated by aerial photography and topographic surveying.

(3) What effect will morphological changes have on the particular aspects of the local hydraulics of the river, of interest for aquatic habitat or other values? For example, depths and velocities of flow at adjoining riffles may be interest for their use by salmonids.

Assessment Methods 3: Assessing Risk and Consequences of River Capture

Mapping Historic Channel Positions

There are several recent examples of channel-migration studies in western Washington rivers (e. g., Shannon & Wilson, Inc., 1991; Perkins, 1993). The approach is to collect historic maps and aerial photos, which commonly are available beginning in the 1850s or 1860s. Plotting channel positions on a common map and scale reveals historic channel locations. This exercise provides a preliminary indication of the general rates of channel migration, the type of migration (e. g., whether lateral migration, channel cutoffs, or avulsions are more common), and also whether the channel has been in the vicinity of a proposed project within the historic period.

Determining Channel Migration Hazard

Once historic channel positions have been plotted, the risk of channel migration can be quantified. In King County, Washington, channel migration hazard is determined by measuring the average rate of historic channel migration, and assuming that this rate provides the most likely indication of future migration. Relative channel migration hazard is then determined. It is important to document the nature of the channel hazard, with channel avulsions being particularly important for predicting the potential for a river to capture a floodplain pit.

Assessing Consequences of Mine Capture by River Migration

The potential for upstream and downstream channel degradation can be assessed qualitatively by comparing the elevation of the base of the pit to the bed elevation of the river; Chang (1987) provides examples of quantitative modeling applied to prediction of river degradation.

The potential for an avulsion through a pit to create a new river channel, with the potential to erode structures and abandon a significant length of stream channel (e. g., Dunne et al., 1981) can be assessed by inspecting the historic record of channel locations, and current floodplain topography.

The potential for a river capture to create a wider and deeper channel can be assessed by comparing the difference in bed elevation to the elevation of the pit floor, and by comparing the width of the river and the pit width. The rough amount of time required to fill a pit by fluvial sediment transport can be estimated by estimating the sediment transport rate and the probable volume of a breached pit.

Assessment Methods 4: Use of Hydraulic Models to Predict Effects of Gravel Removal on Flooding

As indicated previously, gravel removal can have very different effects on flood heights, depending on the capacity of the channel and floodplain. Where a channel can contain a flood flow with little or none of the flood flow out on the floodplain (for example, an artificially-widened stream confined by high levees), then relatively small changes to the channel itself, such as sediment deposition or dredging, may have a direct influence on local water-surface elevations. On the other hand, if large areas of the floodplain are submerged during a flood, and the volume of water stored in the valley is large relative to the amount conveyed by the channel, flood heights will be little affected by sediment-removal efforts in the channel, because such a small percentage of the total water volume needing conveyance would be affected. In addition, the location of hydraulic control points can also strongly influence the effectiveness of sediment-removal efforts. If flooding is occurring primarily as a result of a downstream constriction in the flow, removal of that constriction will be highly effective. On the other hand, large-scale sediment removal upstream may be completely ineffective.

These differing conditions are represented in a study by King County along the Snoqualmie River (Booth et al., 1991). HEC-2 modeling of the upper channel was made under existing bed conditions and with two sites of simulated dredging: one through North Bend, and one through the town of Snoqualmie (Figure 13). Two to three feet of sediment were presumed to be removed over 3000-foot-long reaches. Through North Bend, water surface levels drop by up to 3 ft for both 2-yr and 100-yr flows, because the discharge is almost entirely confined to the leveed channel and so increasing the channel capacity is effective at reducing flood heights. In contrast, the result of dredging through the town of Snoqualmie is imperceptible, because the vast majority of flow lies on the floodplain and is further impounded by the downstream constriction of Snoqualmie Falls. Increased in-channel storage or conveyance is therefore irrelevant here.

A second example is provided by the lower Quilcene River in the eastern Olympic Mountains of Washington (Collins, 1993; Williams et al., 1995; Fishbain et al., 1995). Concern over flooding in the reach had led to periodic dredging, and consequent disturbance of a critical chum salmon habitat. Sediment accumulation also posed the risk of rapid channel avulsion, which could also endanger the depleted spawning stock. Hydraulic modeling was performed on several scenarios that included sediment removal, levee setbacks, and levee lowering. The results indicated that selective levee modifications would be a more effective approach to reducing flood hazard and restoring habitat than would be continued channel dredging (Figure 14).

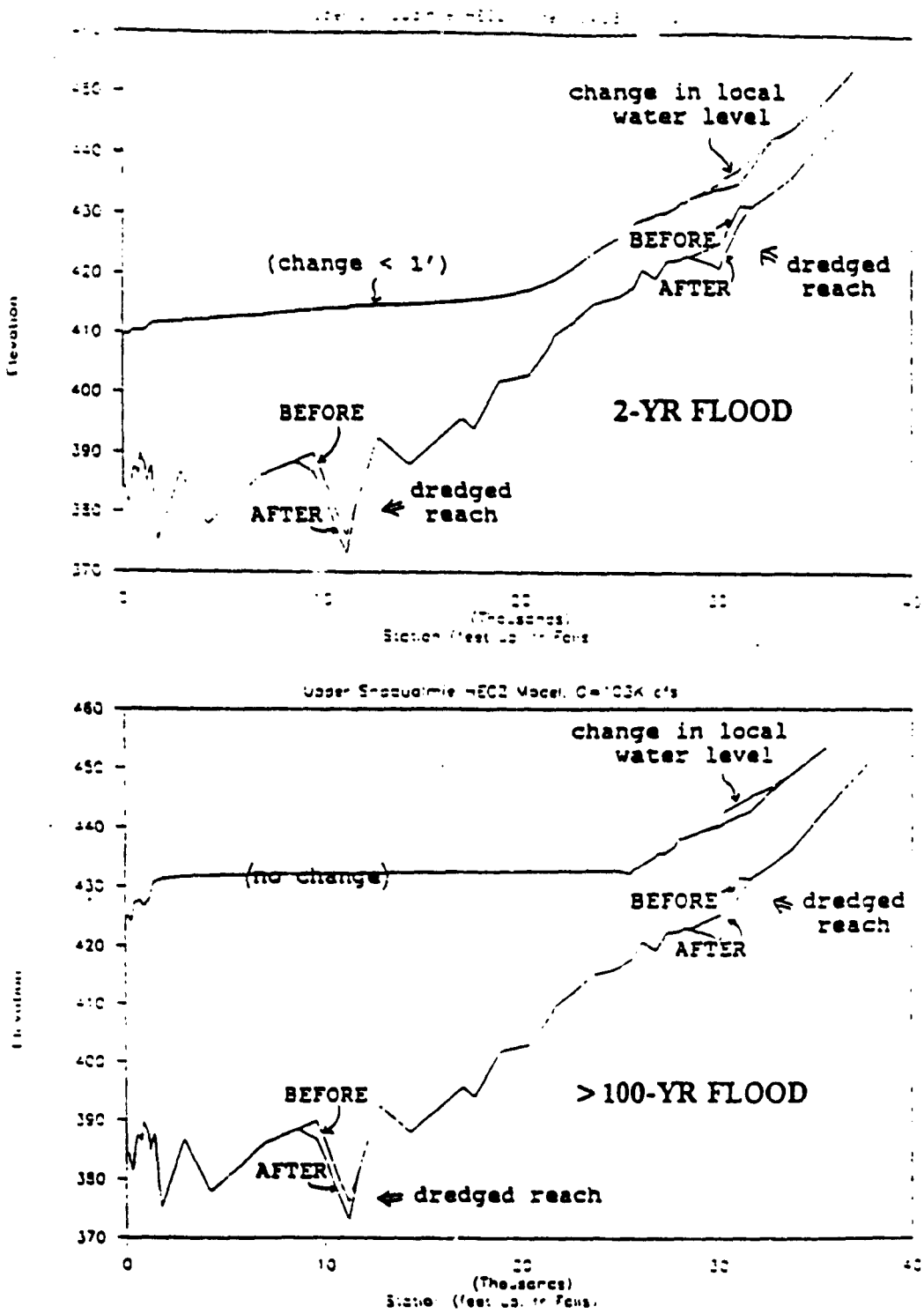
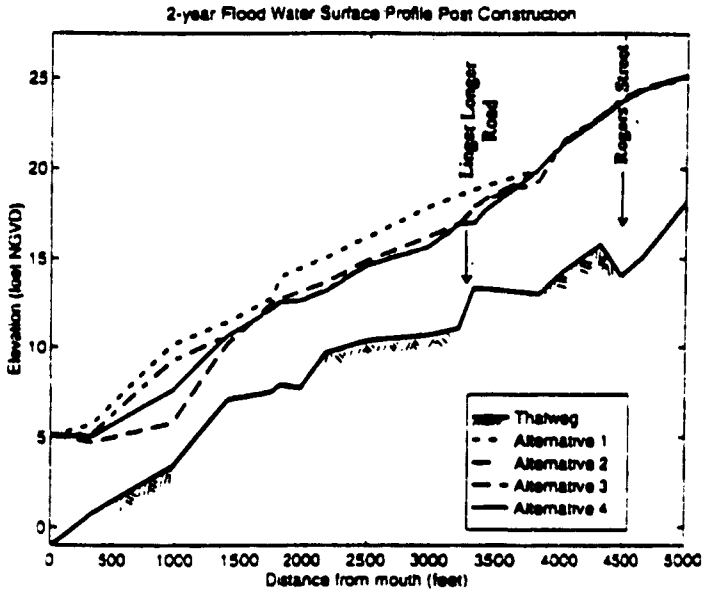


Figure 13. Modeled effects of dredging on water levels in the 2-yr and 100-yr flood flows along the South Fork Snoqualmie River. The model predicts that dredging would effect a change in the upper site, near North Bend, but no change in the lower site near Snoqualmie.



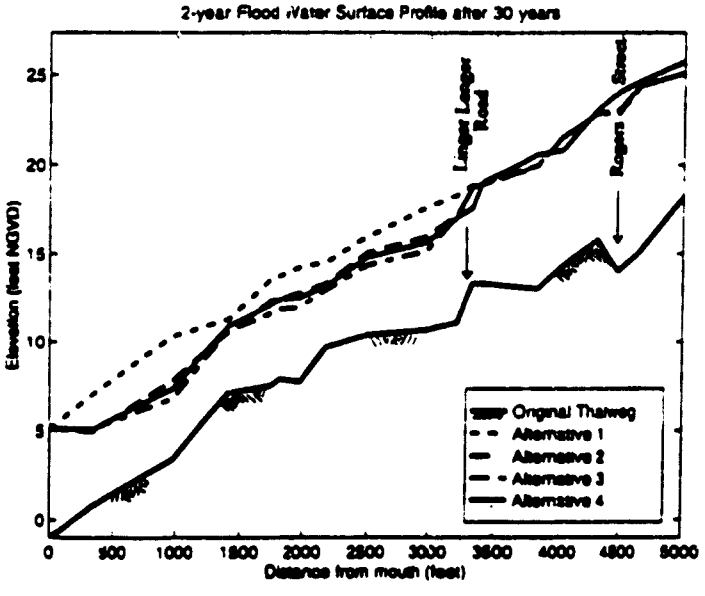


Figure 14. Modeled scenarios on the Big Quilcene River (from Williams et al., 1995). Flood water surface is higher in Alternative 1, which includes gravel removal, compared to Alternatives 2, 3, and 4 which include levee setbacks and no gravel removal.

PLANNING FRAMEWORK

Critical Planning Questions

The following outline summarizes earlier portions of this presentation, by listing planning questions relevant to gravel removal.

All Riverine Mining

(1) What alternatives are there to riverine sources for meeting demand for sand and gravel?

(2) What are the costs and benefits of all sources, compared to riverine mining, including potential costs to structures, and to ecological values and functions?

Floodplain Mining

(1) What existing hydrographic features and ecological functions will be lost by siting a floodplain mine?

(2) What habitat has been lost historically, what is the potential for restoring that habitat, and how will proposed mining affect the potential to restore floodplain habitat?

(3) What hydrographic functions and features will be created by mining? What is the habitat value of those features, and how does it differ from that found in natural floodplains?

(4) What is potential for the channel to capture a pit?

(5) What are the potential consequences of pit capture, including the potential for rapid, upstream and downstream bed scour, and for creating a wide and deep channel?

River Gravel Bars

(1) To what extent will gravel removal change the sediment mass balance?

(2) What are the potential effects, specific to a particular reach of river, of changing the mass balance, including effects on downstream bars, on bed elevations, and effects related to bed elevation change?

(3) What are the likely effects on the morphology of the adjacent banks, riffles, and pools? What would be the accompanying hydraulic effects?

(4) What is the potential to cause river avulsion?

Flood Control (CRITICAL PLANNING QUESTIONS FOR FLOOD CONTROL)

(1) What are the planning objectives for flood hazard management?

(2) What flood heights, for floods of what recurrence, are specific planning targets?

(3) What will the efficacy be of gravel removal on meeting those objectives?

(4) With what frequency must gravel be removed to maintain the planned bed elevation? What is the average annual deposition, and the extreme annual deposition rates? What are the sources of sediment deposition, and are recent rates higher or lower than under future conditions?

(5) What are the potential undesirable effects (see above list for river bars)?

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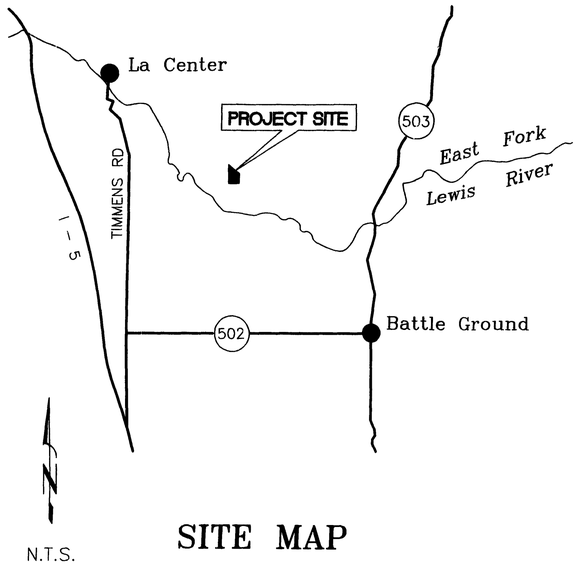
DAYBREAK RESOURCE PROJECT

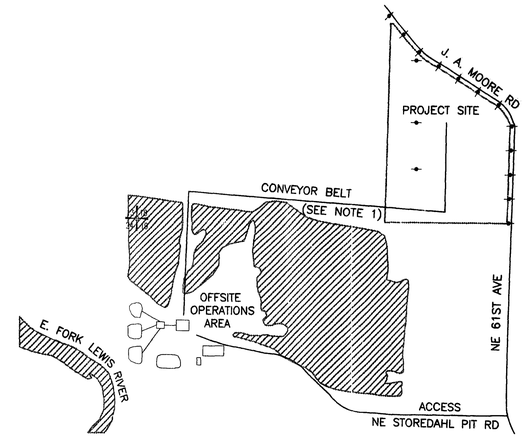
J. L. STOREDAHL AND SONS, INC.

SITE PLAN REVIEW
PROJECT NO. 96092

S.E.1/4, S.W.1/4 SECTION 18 T4N, R2E
CLARK COUNTY, WASHINGTON



SITE MAP



VICINITY MAP

NOTE:
NO TRANSIT STOPS, PEDESTRIAN, OR BICYCLE PATHWAYS.

N

500' 0' 500' 1000'
SCALE: 1" = 500'

NOTES

Existing Conditions Plan

1. Pit-run material will be conveyed offsite. The conveyor corridor is not a part of this site plan approval. Crushing and further production at the offsite location is a longstanding use. See: In the matter of J. L. Storedahl and Sons Inc., Notice and Order, February 27, 1996.

2. 1.3 acres of mixed woodland exists in the east-northeast portion of the site bordering along N. E. J. A. Moore Rd. and and N. E. 61st. Ave. This mixed woodland is dominated by an overstory of Douglas fir, big-leaf maple, and Oregon Ash. The shrub layer includes thickets of hazel, vine maple, serviceberry, and Oregon grape. The conifers can reach a height of 60 ft. and the deciduous trees can reach a height of 40 ft.

This woodland does not fit any of the criteria defining a Clark County "Critical Area" as defined by Chapter 13.50 of the Clark County Code.

Most of this woodland will be removed as part of land clearing in preparation for mining of Phase 4 (See Site Plan). Approximately .2 acre of this woodland will remain within the 20 ft. wide setback area along the roads. This setback will be flagged and individual, large coniferous or deciduous trees will be saved, if possible, even though they may inset into the planned mining excavation.

Site Plan

3. Abutting properties to the north and east are zoned Rural Estate and tax lot parcel numbers are shown.. These parcels are separated by County roads, of which lands are owned by Clark County.

4. Public roads and easements are shown. No public access is to be allowed onto the site. No direct access onto the site from any public road will be developed. Access will be from N. E. Storedahl Pit Rd. which is off N. E. 61st Ave.

5. The only "service area" on this site will be a dirt road alongside the field conveyor to be used for access and maintainance.

6. No existing structures will be retained on the site. A 4 ft. high, 3-strand barbed wire fence will be erected around the perimeter of the site, except at the conveyor corridor.

7. The only type of outdoor lighting that will be utilized on this site will consist of 1) downward-facing, service lighting on the conveyor belt spaced approximately every 150 ft., and lighting on the hydraulic shovel for evening operation. Equipment will be 8 to 10 ft. below grade, so that glare will not occur.

Landscape Plan

8.The existing "landscape material" on the site is described under Note 2. No material is to be retained for use in final landscaping from the mixed woodland where mining will occur. Trees and shrubs remaining in the setback area will be a part of the final landscape plan.

9. Per State Dept. of Natural Resources regulations, the mining/reclamation permit for this site will have to meet the revegetation standards of RCW 78.44. The reclamation plan submitted for this site contains the following elements for successful revegetation:
- All underwater slopes will be a maximum 1.5:1. Shoreline areas adjacent to the mined pond will have 3:1 slopes and will be topsoiled to a minimum depth of 6 in. and an average depth of 10 in.
- Reed canary grass and birdsfoot trefoil will be drill-seeded in the Fall at rates of 8 lbs./acre and 15 lbs./acre, respectively, on the 3:1 slopes adjacent to the pond edges. On the higher ground in the remaining setback areas, intermediate wheatgrass and annual ryegrass (10 lbs./acre and 3 lbs./acre) will be added to the mix, while reed canary grass will be removed.
- Willow slash bundles (consisting of 10 to 15 stakes) will be planted in groups of 2 to 3 approximately 3 ft. apart every 150 ft. near the waters edge in the zone of partial saturation (transition zone). Individual cuttings of dogwood will be mixed with the willow at approximately 10 per grouping. Cottonwood and alder will be planted in 2 in. containers and propagated from cuttings in the higher ground of the setback areas. These plantings will be in groups of 5 to 6 with 3 ft. spacing approximately every 150 ft. and staggered with the willow/dogwood groupings of the transition zone.
- Cattails and rushes will naturally invade the shallow pond edges from nearby mining ponds that have been previously reclaimed. Manual transplanting could be accomplished at a later time, if natural invasion does not occur in a timely manner.
- Grasses and legumes will be drill-seeded in the Fall subsequent to topsoil placement and trees and shrubs will be planted/propagated in the early Spring.
- See typical "Revegetation Section" on the Landscape Plan.

10. The final site configuration after mining is completed on the Daybreak Resource Project will consist of approximately 13.7 acres of open water (pond) and 4.3 acres of shoreline.

11. A 4 ft. high fence consisting of 3-strand barbed wire will enclose the site except for the conveyor corridor.

12. A temporary berm 6 ft. high and approximately 32 ft. wide with 2:1 slopes will be placed along the southern and western boundaries of the project site in an approximate 45 ft. wide setback area. The berm will consist of overburden stripped from the project site in preparation for mining and will be drill-seeded with the grass and legume mixture described above, minus the reed canary grass. This berm will be removed during the final stages of mining and the topsoil will be re-distributed on the 3:1 mining slopes in preparation for seeding and planting. See "Berm Detail" on the Landscape Plan.

INDEX TO SHEETS

1A. COVER SHEET, VICINITY MAP AND NOTES
1B. TAX LOT AND PROJECT BOUNDARY LOCATIONS
2A. EXISTING CONDITIONS PLAN (SOUTH HALF)
2B. EXISTING CONDITIONS PLAN (NORTH HALF)
3A. SITE PLAN (SOUTH HALF)
3B. SITE PLAN (NORTH HALF)
4A. LANDSCAPE PLAN (SOUTH HALF)
4B. LANDSCAPE PLAN (NORTH HALF)

SPR 96-092

NO.	DATE	BY	REVISIONS

DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 228-7718 FAX (503) 228-7781

DESIGNED BY:	RBL
DRAWN BY:	RE
CHECKED BY:	RBL
DATE: OCTOBER, 1996	
SCALE: NOTED	
PLOT FILE: DNA-256.PCP	

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
COVER SHEET

PROJECT NO: 361-115
FILE: G:\361\115\COVER.DWG

SHEET 1A

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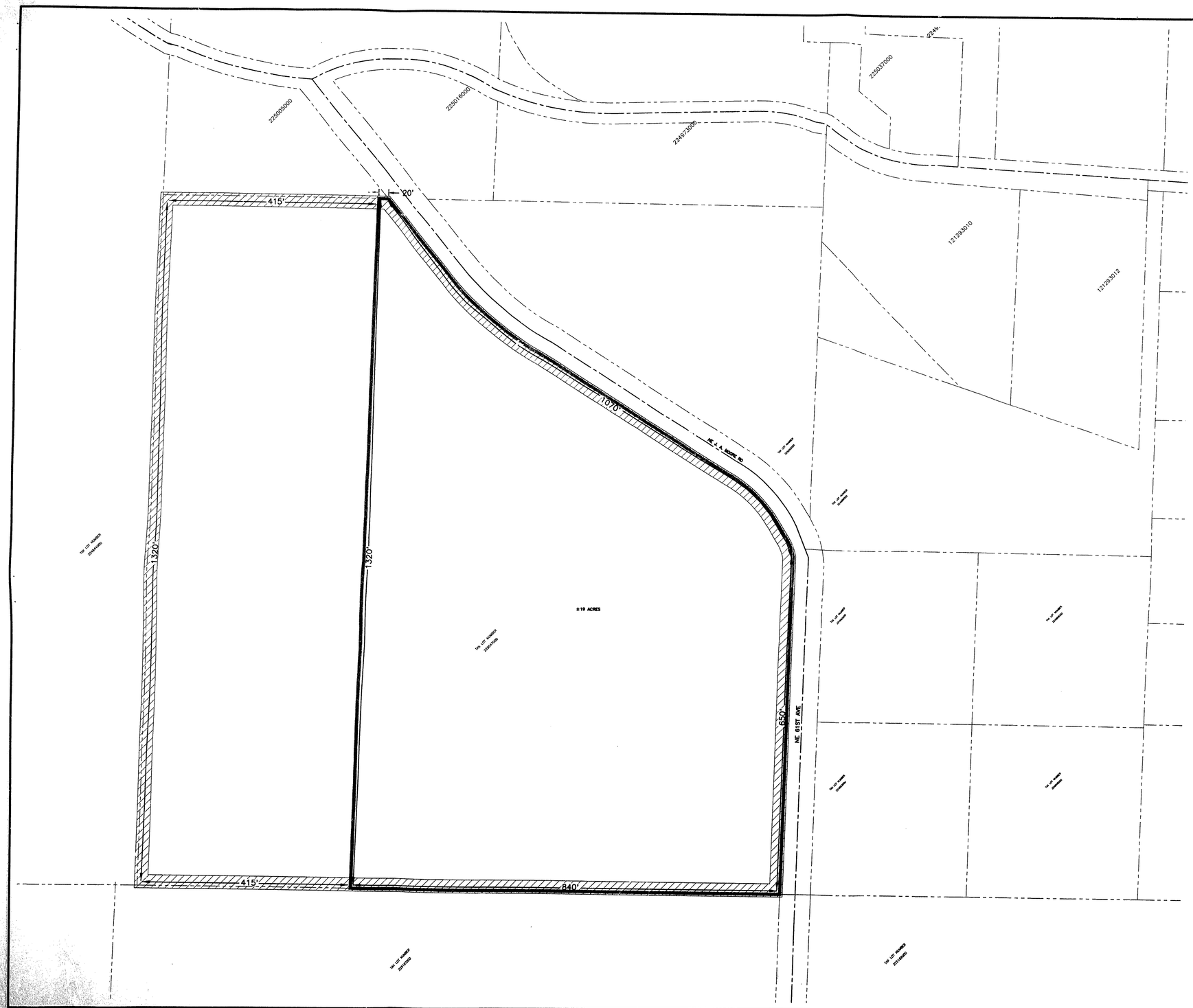

EXPLANATION

ROAD CENTERLINE

TAX LOT BOUNDARY

PROJECT BOUNDARY

LEGAL LOT PROPERTY LINE

100' 0' 100' 200'
SCALE: 1" = 100'

N

SPR 96-092

NO.	DATE	BY	REVISIONS

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CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 228-7718 FAX (503) 228-7781

DESIGNED BY:	RBL
DRAWN BY:	RE
CHECKED BY:	RBL
DATE: OCTOBER, 1996	
SCALE: 1" = 100'	
PLOT FILE: DNA-256.PCP	

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
TAX LOT AND PROJECT BOUNDARY LOCATIONS

PROJECT NO: 361-115
FILE: G:\361\115\LEGAL.DWG

SHEET 1B

SPR 96-092

NO.	DATE	BY	REVISIONS

DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 228-7718 FAX (503) 228-7781

DESIGNED BY:	RBL
DRAWN BY:	RE
CHECKED BY:	RBL
DATE: OCTOBER, 1996	
SCALE: 1" = 50'	

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
EXISTING CONDITIONS PLAN (SOUTH HALF)

PROJECT NO: 361-115

SHEET 2A

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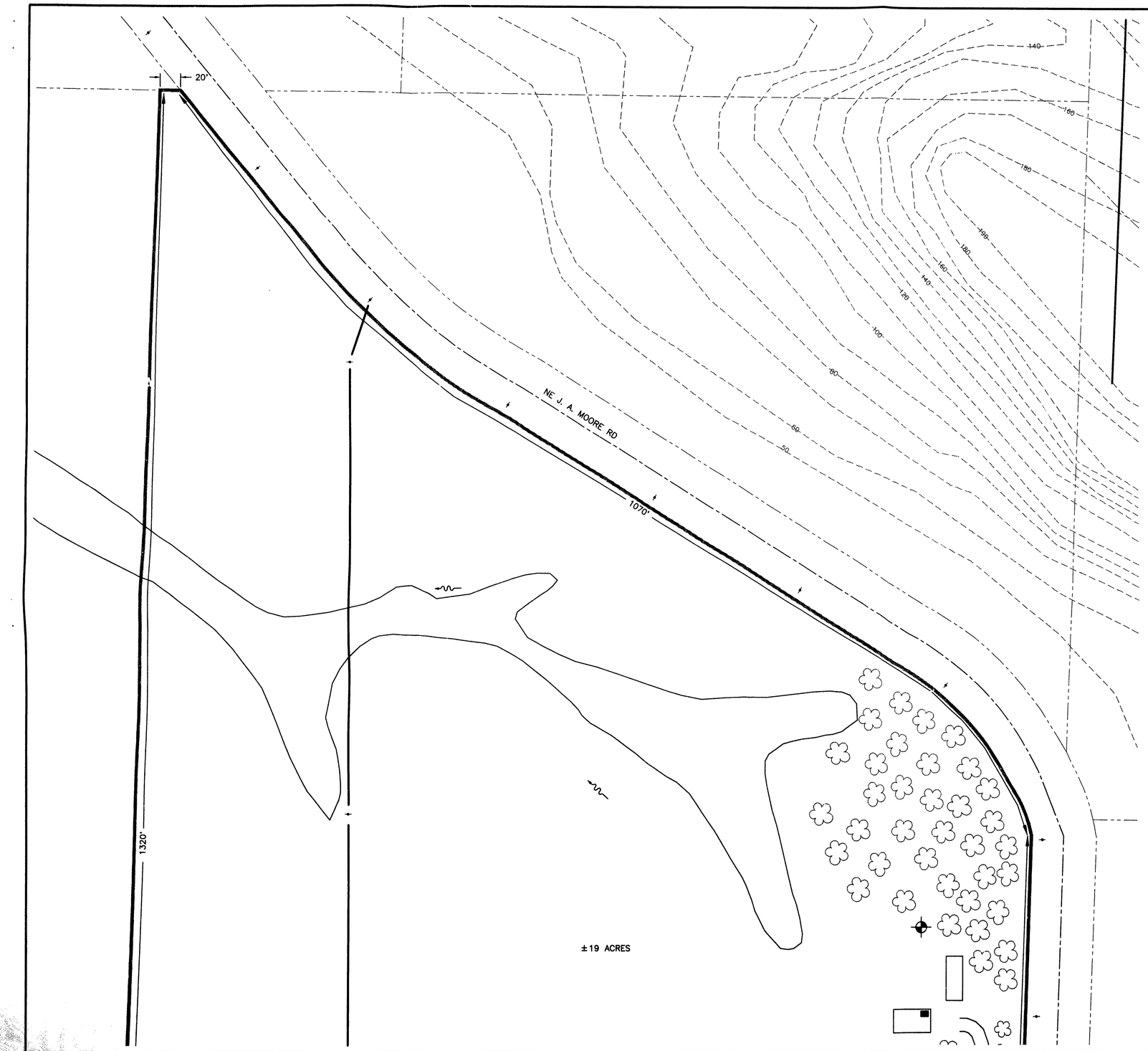

EXPLANATION

- MIXED WOODLAND AREA (SEE NOTE 2)
- CLARK CO. COMPUTED 100 – YR. FLOODPLAIN
- TAX LOT BOUNDARY
- 10' TOPO CONTOURS
- ROAD CENTERLINE
- UTILITY POLE
- PROJECT BOUNDARY
- EASEMENTS
- MOBILE HOME
- WATER WELL
- SEPTIC TANK & LEACHFIELD
- LOCAL SURFACE FLOW DIRECTION

50' 0' 50' 100'
SCALE: 1" = 50'

N

SPR 96-092

NO.	DATE	BY	REVISIONS

DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 228-7718 FAX (503) 228-7781

DESIGNED BY:	RBL
DRAWN BY:	RE
CHECKED BY:	RBL
DATE:	OCTOBER, 1996
SCALE:	1" = 50'
PLOT FILE:	DNA-256.PCP

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
EXISTING CONDITIONS PLAN (NORTH HALF)

PROJECT NO: 361-115
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SHEET 2B

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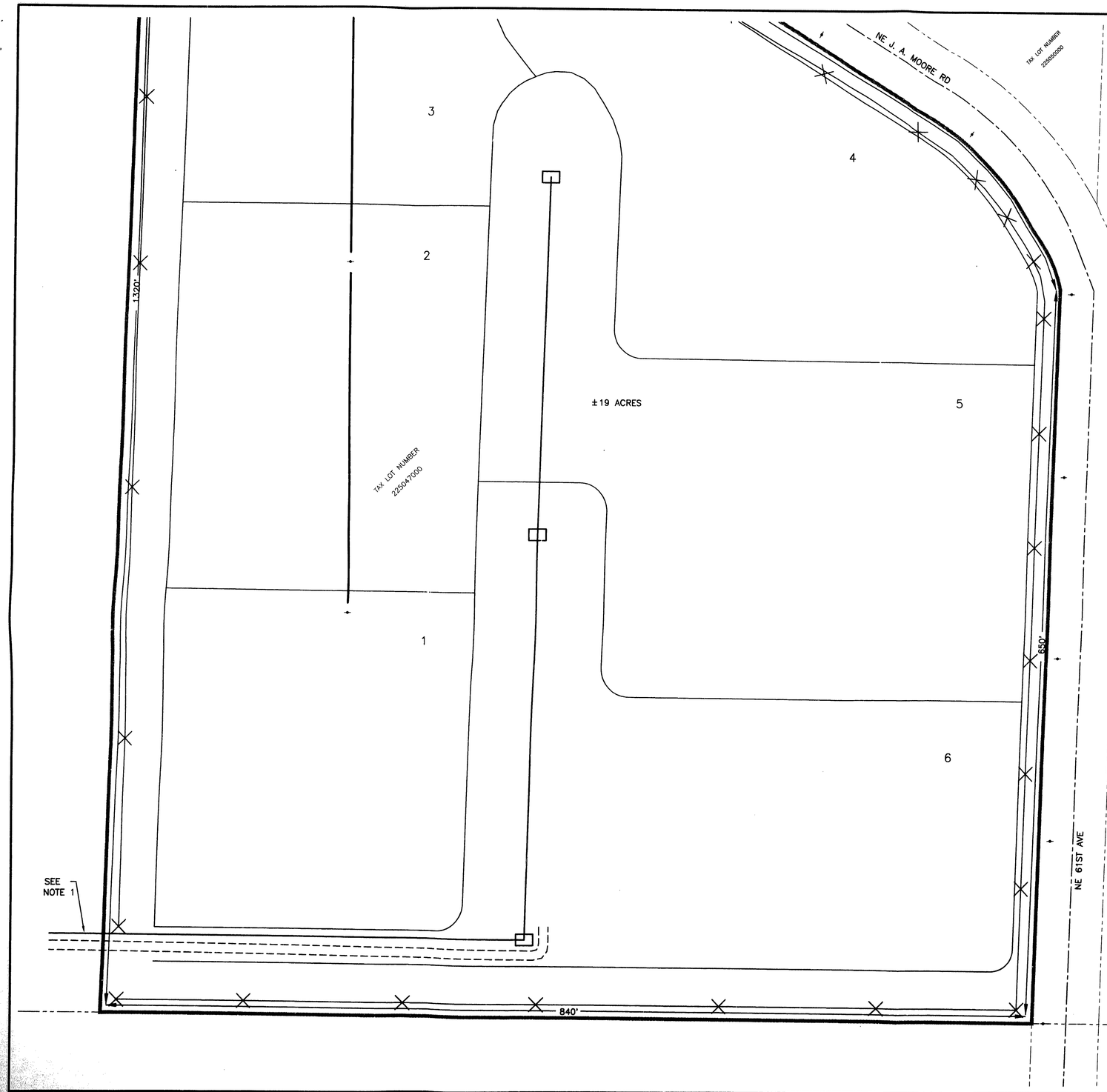


SITE PLAN REVIEWED

SPR # 96092 DATE REC'D 10-14-96

NEW X REVISION #

By Date Planning

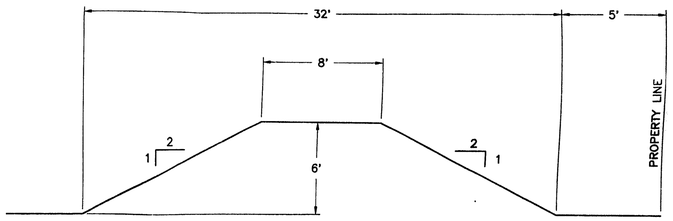
By Date Transportation

By Date Drainage

By Date Fire

EXPLANATION

- PROPOSED 4' HIGH, 3-STRAND BARBED WIRE FENCE
- PHASING: EACH PHASE IS APPROX. 3 ACRES AND 1 YEAR IN DURATION
- TAX LOT BOUNDARY
- ROAD CENTERLINE
- UTILITY POLE
- PROJECT BOUNDARY
- EASEMENTS
- 8' WIDE MAINT. ROAD
- CONVEYOR BELT AND APPROX. HOPPER LOCATIONS
- SINGLE FAMILY HOME



BERM DETAIL

SCALE: 1" = 5'

50' 0' 50' 100'

SCALE: 1" = 50'

N

SPR 96-092

NO.	DATE	BY	REVISIONS

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DATE: OCTOBER, 1996	
SCALE: 1" = 50'	
PLOT FILE: DNA-256.PCP	

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
SITE PLAN (SOUTH HALF)

PROJECT NO: 361-115

FILE: G:\361\115\PHASE-1.DWG

SHEET 3A

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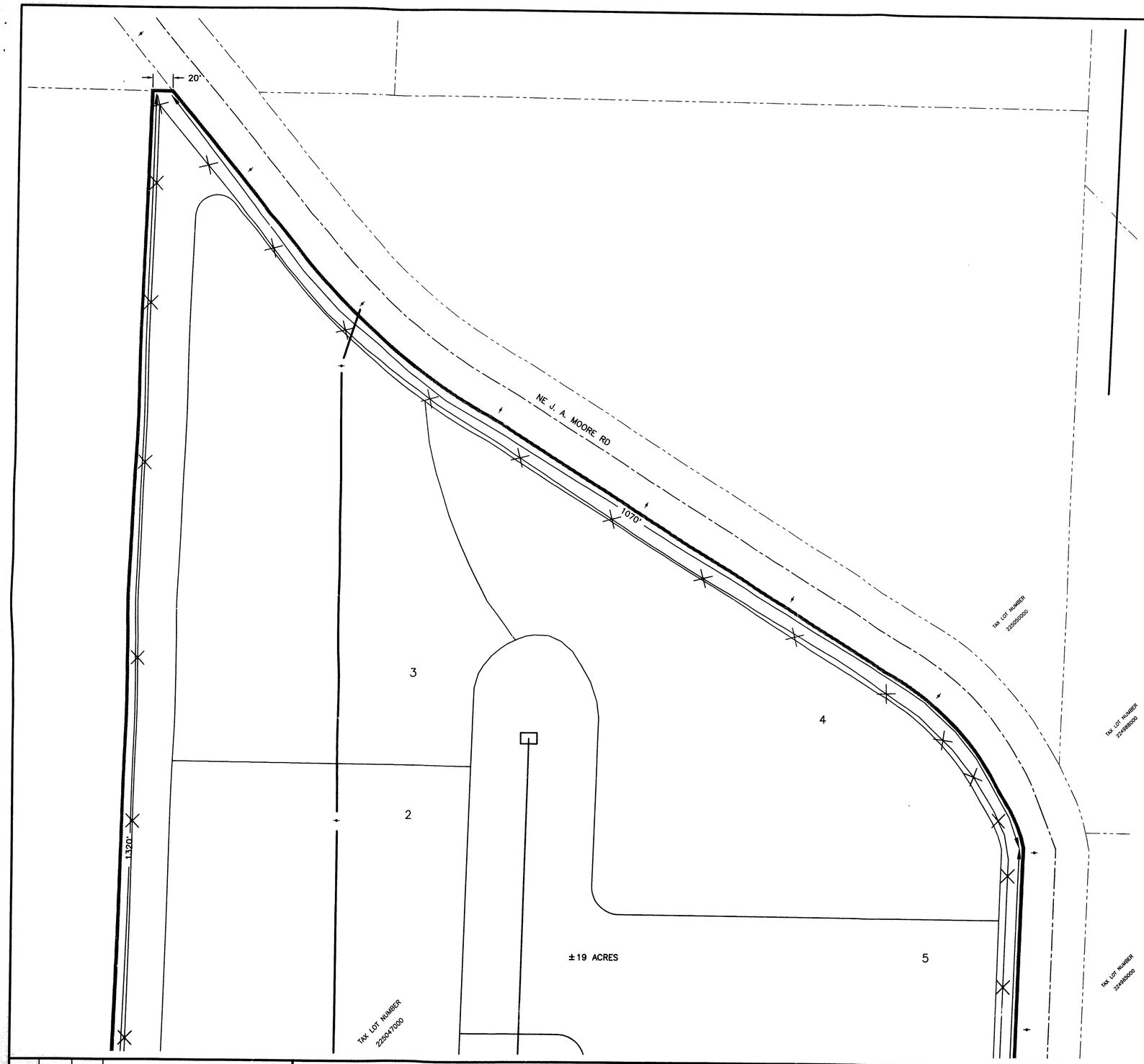
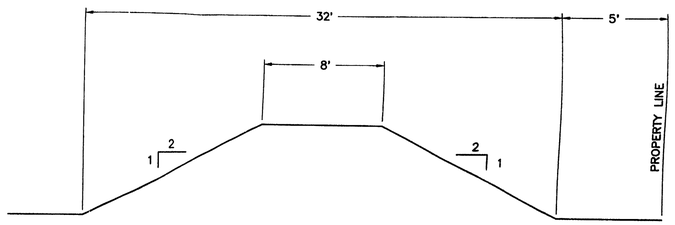


EXPLANATION

- PROPOSED 4' HIGH, 3-STRAND BARBED WIRE FENCE
- PHASING: EACH PHASE IS APPROX. 3 ACRES AND 1 YEAR IN DURATION
- TAX LOT BOUNDARY
- ROAD CENTERLINE
- UTILITY POLE
- PROJECT BOUNDARY
- EASEMENTS
- 8' WIDE MAINT. ROAD
- CONVEYOR BELT AND APPROX. HOPPER LOCATIONS
- SINGLE FAMILY HOME



BERM DETAIL

SCALE: 1" = 5'

50' 0' 50' 100'

SCALE: 1" = 50'

N

SPR 96-092

NO.	DATE	BY	REVISIONS

DAVID J. NEWTON ASSOCIATES, INC.
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PORTLAND, OREGON 97205
(503) 228-7718 FAX (503) 226-7781

DESIGNED BY:	RBL
DRAWN BY:	RE
CHECKED BY:	RBL
DATE: OCTOBER, 1996	
SCALE: 1" = 50'	
PLOT FILE: DNA-256.PCP	

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
SITE PLAN (NORTH HALF)

PROJECT NO: 361-115

FILE: G:\361\115\PHASE-2.DWG

SHEET 3B

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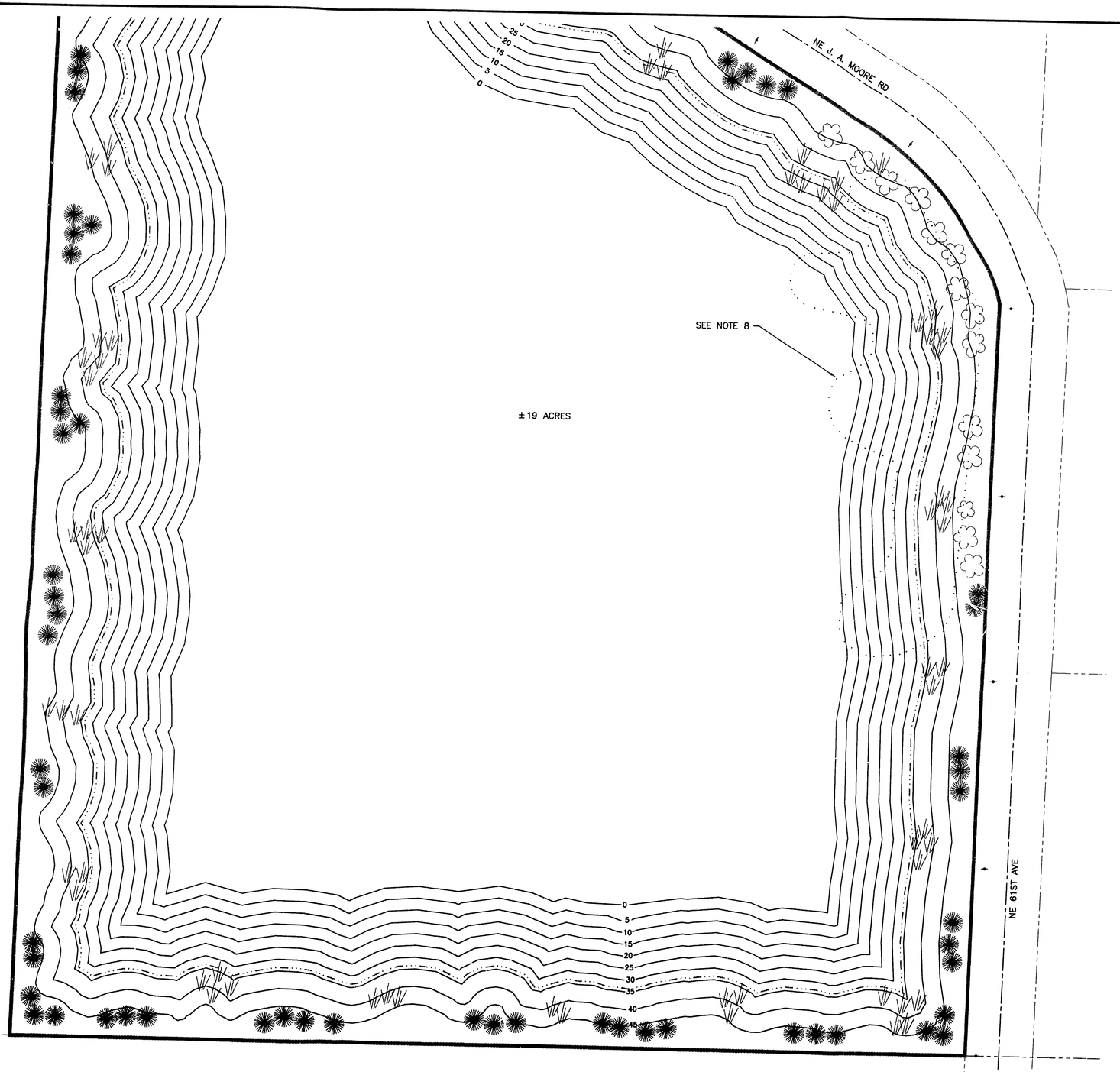
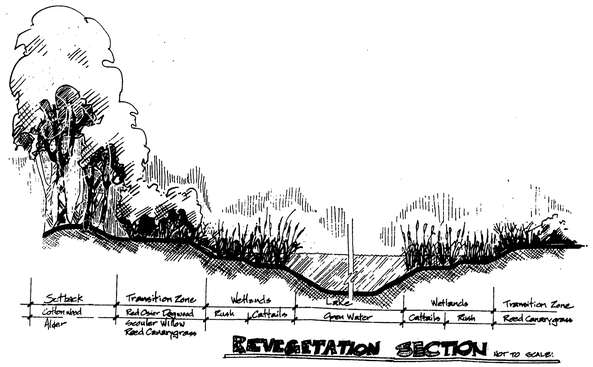
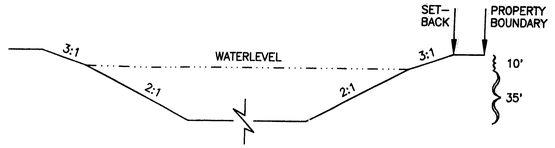


EXPLANATION

- MIXED WOODLAND AREA
- COTTONWOOD/ ALDER
- WILLOW/ DOGWOOD
- TAX LOT BOUNDARY
- PROPOSED 5' CONTOURS
- ROAD CENTERLINE
- UTILITY POLE
- PROJECT BOUNDARY





TYPICAL CROSS-SECTION THROUGH POND

SCALE: 1" = 50'

LANDSCAPE PLAN REVIEWED
CLARK COUNTY PLANNING
Date_____ By_____

50' 0' 50' 100'
SCALE: 1" = 50'

SPR 96-092

NO.	DATE	BY	REVISIONS

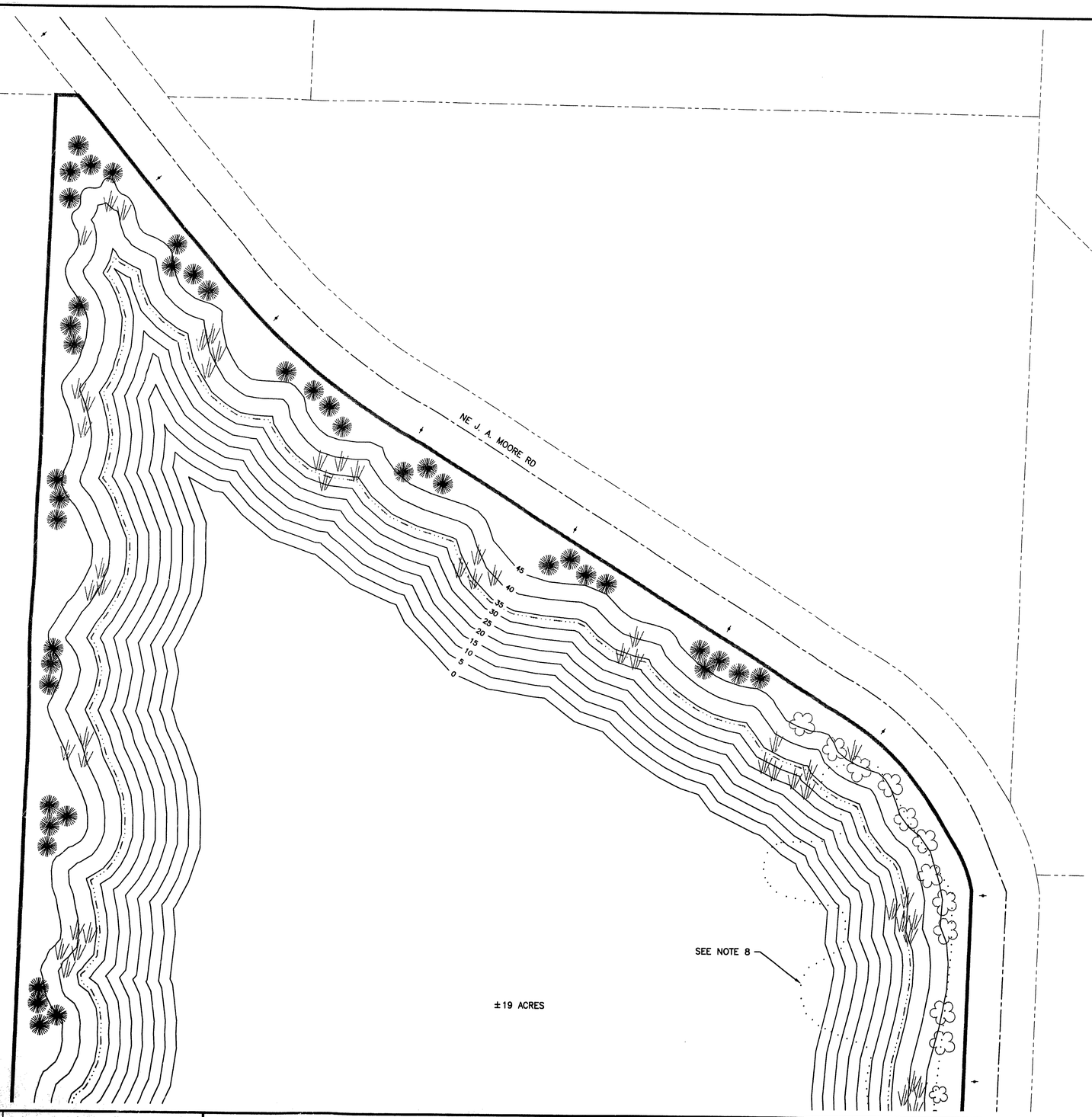
DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 228-7718 FAX (503) 228-7781

DESIGNED BY:	RBL
DRAWN BY:	RE
CHECKED BY:	RBL
DATE: OCTOBER, 1996	
SCALE: 1" = 50'	
PLOT FILE: DNA-256.PCP	

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
LANDSCAPE PLAN (SOUTH HALF)

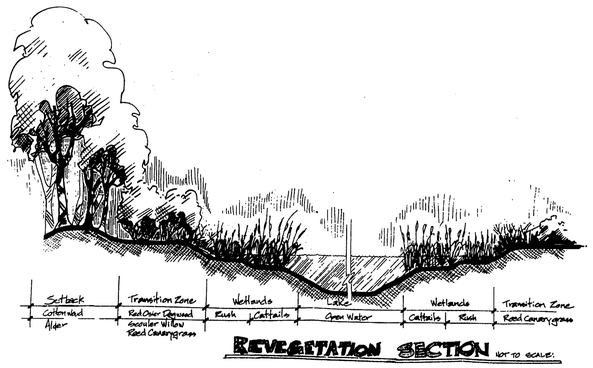
PROJECT NO: 361-115
FILE: G:\361\115\LANDSC-1.DWG

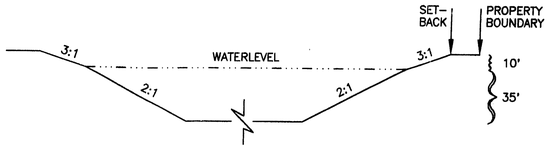
SHEET 4A



EXPLANATION

- MIXED WOODLAND AREA
- COTTONWOOD/ ALDER
- WILLOW/ DOGWOOD
- TAX LOT BOUNDARY
- PROPOSED 5' CONTOURS
- ROAD CENTERLINE
- UTILITY POLE
- PROJECT BOUNDARY





TYPICAL CROSS-SECTION THROUGH POND

SCALE: 1" = 50'

SPR 96-092

50' 0' 50' 100'

SCALE: 1" = 50'

NO.	DATE	BY	REVISIONS

DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400
PORTLAND, OREGON 97205
(503) 228-7718 FAX (503) 228-7781

DESIGNED BY:	RBL
DRAWN BY:	RE
CHECKED BY:	RBL
DATE: OCTOBER, 1996	
SCALE: 1" = 50'	
PLOT FILE: DNA-256.PCP	

DAYBREAK RESOURCE PROJECT
SITE PLAN REVIEW: SPR 96092
LANDSCAPE PLAN (NORTH HALF)

PROJECT NO: 361-115
FILE: G:\361\115\LANDSC-2.DWG

SHEET 4B

G:\115\LANDSC-2 Wed Oct 9 14:21:40 1996