APPENDIX G: 2007 EIS SUMMARY EXCERPT

SUMMARY

I. What is being proposed?

Clark County and the cities and towns of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, and Yacolt are proposing to revise their Comprehensive Growth Management Plans (the GMA plans) to comply with the requirements of the Growth Management Act (GMA). The revisions focus on changes to the Urban Growth Areas (UGAs[1]) to accommodate projected growth over the next 20 years.

This Draft Environmental Impact Statement (DEIS) evaluates the environmental impacts of different ways of managing the projected population and job growth. Clark County is considering the potential environmental impacts of a No Action Alternative that would not expand the UGAs and two Alternatives with expanded UGAs. The DEIS analysis can be used to help decision makers and the public to choose or develop a Preferred Alternative that will be evaluated in the final EIS (FEIS) and form the basis of a new 2006 Plan.

The County's stated objective for the new 2006 Plan is to accommodate the projected demand for jobs and housing by 2024 based on new growth assumptions, to implement land use patterns that reflect local preferences and values (see pages 24-25 for a summary of principles and values), and to minimize impacts on the environment, schools, and the cost of infrastructure by fine-tuning the location of expansion areas.

In accordance with the regulations of the State Environmental Policy Act (SEPA), the DEIS consists of a summary and an abbreviated discussion of the impacts of the different alternatives. A technical document attached to the DEIS and incorporated by reference provides more information on all the topics found in the summary section and documents the environmental impacts in more depth. For backup or background information to all of the topics presented in the DEIS readers are directed to the Technical Document.

II. What is the Growth Management Act?

The Growth Management Act (GMA) was enacted by the state legislature in 1990. It requires high population counties and fast-growing counties to develop comprehensive plans to balance the needs of housing and jobs with preservation of resource lands (for agriculture, forestry and mining) and critical areas (such as habitat, wetlands and areas subject to flooding). Clark County was required to prepare a plan because it met both the population and growth rate criteria. The county adopted its first comprehensive plan in 1994 and completed its first comprehensive plan update in 2004. The EIS for the Comprehensive Growth Management Plan for Clark County (2003) is incorporated by reference in this DEIS.

III. What is the State Environmental Policy Act?

The State Environmental Policy Act (SEPA) was enacted by the state legislature in 1984. It requires local governments to evaluate the environmental impacts that may result from actions they approve or that they undertake. Projects that are not direct proposals for development, such as the adoption of code language or a new program, are called "non-project actions" and they also require review under SEPA.

Projects or non-project actions that are expected to have significant impacts require the most analysis, typically in the form of an environmental impact statement (EIS). EISs require agencies to compare

[1] What are UGAs? They are areas where urban growth will be encouraged. Counties and cities planning under GMA must cooperatively establish the urban growth areas and cities must be located inside urban growth areas. Growth outside urban growth areas must be rural in character.

impacts from the proposed action against impacts from one or more alternatives, of which one of the alternatives must be the option of not doing the project. The expansion of urban growth boundaries (a non-project action) requires a greater level of analysis, which is why the County has prepared an EIS.

IV. What is a Growth Management Plan?

The Growth Management Act (GMA) was enacted by the state legislature in 1990. It requires high population counties and fast-growing counties to develop comprehensive plans to balance the needs of housing and jobs with preservation of resource lands (for agriculture, forestry and mining) and critical areas (such as habitat, wetlands and areas subject to flooding). Clark County was required to prepare a plan because it met both the population and growth rate criteria. The comprehensive plan and plan map together must provide a land supply adequate to accommodate the projected 20-year demand for jobs and housing as estimated by the Office of Financial Management.

Several amendments to the GMA have occurred in 1990. The DEIS for the Comprehensive Growth Management Plan for Clark County (2003) listed key changes to the GMA between 1995 and 2001. Key changes between 2001 and 2005 are contained in Appendix A at the end of the Technical Document.

V. Why are the Growth Management Plans being revised?

The Board of County Commissioners (Board) adopted the first update to the 1994 comprehensive plan in 2004. This is the plan that is currently in effect. The 2004 plan was challenged on a number of grounds. The Boards subsequently decided to revisit several of the assumptions made in the 2004 plan, resulting in a proposal to again expand the urban growth boundaries to include enough land to accommodate 20 years of projected job and population growth.

Between May 2005 and March 2006, staff and the Board received input from the cities and from the public about how and where to add land to the cities' urban growth areas (UGAs). From this input the BOCC did three things. First, the Board developed a list of principles and values to help guide development in the next 20 years. Some of these relate to where land should develop, and some relate to how land should develop (see pages 24-25 for a summary of principles and values).

Next, the Board developed a set of planning assumptions to be used in analyzing the effects of expanding UGAs for the various alternatives. The planning assumptions have to do with growth rates, population, and jobs per acre, and are listed below. Comments in parentheses indicate similarities or differences with the assumptions of the 2004 Plan.

- A total population of 584,310 by 2024, from an annual growth rate of 2.0 percent, with 2.2 percent assumed in 2004-2010 for capital facilities planning purposes (2004 Plan: annual rate of 1.67 percent)
- Population growth of 192, 635; 90 percent of the population would live in urban areas; 10 percent in rural areas
- A residential market factor of 10 percent; no market factor for commercial, industrial or business park (2004 Plan: 25 percent for business park and commercial; 50 percent for industrial)
- 66,939 new dwelling units needed for households in urban areas and 138,312 new jobs by 2024
- Currently built land would be redeveloped, absorbing five percent of the projected population and job growth (same as 2004 Plan)
- 2.59 persons per household (2004 Plan: 2.69 pph)
- 20 employees per commercial acre; 9 employees per industrial acre; and 20 employees per business park acre (same as 2004 Plan)

- Average residential densities in urban areas would be 8 units per net acre for Vancouver, 4 units per net acre for La Center, 6 units per net acre for Battle Ground, Ridgefield, Camas and Washougal, and no minimum for the town of Yacolt (same as 2004 plan)

- Infrastructure factor of 27.5 percent for residential development and 25 percent for industrial and commercial development.

- No expansion of Yacolt or Woodland UGAs.

- No more than 75 percent of any product type of detached/attached housing.

Lastly, the Board developed the alternatives that are the focus of the DEIS process. There are three alternatives evaluated in the DEIS. SEPA requires that there be a No Action Alternative. In the DEIS, Alternative 1 is the No Action Alternative, which means the UGAs would remain as they are now. Alternative 2 includes UGA expansions to accommodate job and population growth projected over the next 20 years. Alternative 3 includes additional expansion areas beyond Alternative 2 but only as options for adjusting the boundaries in Alternative 2. More detail about the Alternatives can be found on pages 19-22 of this DEIS.

The purpose of the SEPA process is to disclose potential impacts. By disclosing the potential impacts of three alternatives and by soliciting public and agency input through the DEIS process, Clark County and its cities expect to develop a Preferred Alternative that will be the subject of an FEIS, and that will ultimately be consistent with the GMA.

VI. What are the differences between the alternatives and their impacts?

All of the alternatives assume the same 2 percent rate of growth of population and employment. In the next 20 years it is expected that about 192,000 more people would live in Clark County (for a total population of about 584,000). It is assumed that 90 percent of these (about 173,000) would settle in urban areas, with the remaining 10 percent moving to rural areas. This would require about 67,000 new dwelling units in urban areas and the need for about 138,000 new jobs. (For current urban and rural county zoning, refer to Figure 41, Clark County 2004 Zoning Map.)

The difference between the alternatives is in where the growth would occur.

Alternative 1 is the No Action Alternative, as previously stated. Under Alternative 1, urban growth areas would not be expanded (see Figure 2). This means that an expected 173,000 new residents would need to be accommodated in the current UGAs. Without increasing the planned densities in some areas, or changing the growth assumptions, the urban areas as planned would not have sufficient land to accommodate approximately 54,000 people, or approximately 21,000 households. Keeping the current boundary would require upzoning or increasing densities of dwelling units and jobs in existing UGAs. Increasing densities would make more efficient use of current infrastructure (for roads, schools, wastewater and water supply) and land. Subsequent upzoning would also create additional impacts not anticipated by the current zoning, primarily with respect to increased impervious surface, lower levels of service for parks and recreation, and a higher proportion of travelers using alternative transportation modes.

It is expected that under this alternative the result would be a lower number of congested lane miles, vehicle hours of delay and vehicle miles traveled; and a somewhat higher share of transit and non-motorized modes, as compared to Alternative 2. The I-5 and I-205 bridges would be operating at or near failing levels of service at a.m. peak times, which would affect the flow of traffic at interchanges and connecting streets. Maintaining acceptable levels of service is estimated to cost between $576 million and $609 million (2006-2024). Proposed projects to mitigate this alternative would be between $98.5 and $124.5 million.

Alternative 2 is the principal Action Alternative proposed by the county (see Figure 3). Under Alternative 2, the 2005 Discussion Map alternative), the urban growth areas would be expanded about 10,850 acres, a little less than 17 square miles. This means that the expected 173,000 people in urban areas would be accommodated both in the current UGAs and in the expanded UGAs. The other 19,000 people would be accommodated in rural areas. Given the planning assumptions for growth rate and jobs/acre, the 10,850 acres represents the amount of land needed to accommodate the population and job growth projected in the next 20 years. Impacts on the environment consist primarily in bringing urban levels of development to land that is currently rural.

Building urban types of development in expanded UGAs would result in new impacts to the environment in those (currently rural) areas, but would not require upzoning in the existing UGAs and so would avoid those impacts cited under Alternative 1. Development would occur on land currently known to contain prime agricultural and forest soils. Forty-two (42) stream miles of surface water and 213 acres flood hazard areas would be added to UGAs. Given proposed land uses, there is a potential increase of about 5,700 acres of impervious surface. The county's critical areas ordinances, all of which have recently been revised, would be used to mitigate any site-specific impacts.

This alternative would result in a higher number of congested lane miles, vehicle hours of delay and vehicle miles traveled; and a somewhat lower share of transit and non-motorized modes, all as compared to Alternative 1. The I-5 and I-205 bridges would be operating at or near failing levels of service at a.m. peak times, which would affect the flow of traffic at interchanges and connecting streets. Maintaining acceptable levels of service is estimated to cost between $576 million and $609 million (2006-2024). Proposed projects to mitigate this alternative would be between $117.4 and $147.9 million. The additional costs are represented by one mitigation project estimated to cost $18.9 to $23.4 million.

Alternative 3 is different from the other two alternatives (see Figure 4). Alternative 3 looks at smaller individual subareas of potential expansion of the UGAs (Figures 4 through 11). Alternative 3 is intended to provide options for adjusting the UGA expansions proposed by Alternative 2. The subareas could be added to the UGAs while a same-sized area with environmental impacts could be removed from the expansion. The main reason for adjusting the boundaries in Alternative 2 would to avoid or reduce identified significant environmental impacts.

All of the Alternative 3 subareas could not be adopted as a whole alternative or as additive to Alternative 2 because sufficient infrastructure could not be provided to all of the land in the subareas in Alternative 3, which would be inconsistent with that GMA requirement. (See discussion of concurrency in the Public Facilities and Transportation elements.)

VII. How do all of the environmental impacts under the alternatives compare?

SEPA requires every DEIS to summarize the impacts and mitigation for each alternative. The summaries are presented in Tables 1 and 2, beginning on page 5.

VIII. How well do the alternatives meet the principles and values of the Board?

In September 2005 the BOCC identified numerous principles and values that should be reflected in the new plan and in determining the new UGA boundaries. The consistency of the alternatives with the BOCC's principles and values were evaluated and are rated in Table 3, beginning on page 14. The principles and values established by the BOCC are shown in the left-hand column of Table 3.

Table 1. *Summary of Impacts*

Earth, Air

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
Size of Subarea			41 acres	120 acres	1,243 acres	125 acres	534 acres	793 acres	614 acres	227 acres	362 acres
EARTH											
Soils and Geology: (acres)											
Acres of land with soils with severe limitations to foundations	22,109 acres	22,109 acres + 3,490 acres	18 acres	8 acres	419 acres	16 acres	375 acres	413 acres	391 acres	79 acres	159 acres
Land with prime agricultural soil converted to urban uses	51,856 acres	51,856 acres + 6,385 acres	1 acre	-	825 acres	81 acres	285 acres	398 acres	355 acres	129 acres	163 acres
Land with prime forest soil converted to urban uses	38,604 acres	38,604 acres + 7,184 acres	33 acres	112 acres	390 acres	117 acres	295 acres	480 acres	260 acres	150 acres	249 acres
Topography:											
Earthquake zone D: 2nd highest hazard zone[2]	18,703 acres	18,703 acres + 1,823 acres	1 acre	-	-	-	134 acres	26 acres	-	-	14 acres
Steep slopes over 40% slope	947 acres	947 acres + 96 acres	6 acres	-	3 acres	-	44 acres	12 acres	2 acres	-	-
Landslide hazard areas	3,631 acres	3,631 acres + 674 acres	9 acres	-	4 acres	-	99 acres	106 acres	55 acres	2 acres	40 acres
Erosion hazard areas	3,900 acres	3,900 acres + 824 acres	9 acres	-	34 acres	-	141 acres	113 acres	61 acres	-	32 acres
AIR	All alternatives have the potential to affect the air quality and climate. Impacts can be related to the balance between emissions from automobile use (vehicle miles traveled or VMT), emissions from unregulated private sources (e.g. gas lawnmowers), federal regulations through the Clean Air Act, and conversion of rural and resource land to urban land with less vegetative cover. For differences in VMT (full build-out capacity, not planned growth) see Transportation Impacts. For conversion of rural to urban land see the Rural and Resource land impacts.										

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
Size of Subarea	1,006 acres	875 acres	402 acres	908 acres	635 acres	219 acres	668 acres	809 acres	122 acres	21 acres
EARTH										
Soils and Geology: (acres)										
Acres of land with soils with severe limitations to foundations	182 acres	266 acres	75 acres	150 acres	31 acres	47 acres	527 acres	775 acres	122 acres	21 acres
Land with prime agricultural soil converted to urban uses	648 acres	538 acres	294 acres	710 acres	575 acres	172 acres	341 acres	250 acres	45 acres	21 acres
Land with prime forest soil converted to urban uses	923 acres	645 acres	310 acres	683 acres	635 acres	4 acres	47 acres	722 acres	122 acres	-
Topography:										
Earthquake zone D: 2nd highest hazard zone	804 acres	538 acres	-	41 acres	635 acres	-	-	16 acres	-	21 acres
Steep slopes over 40% slope	9 acres	-	-	5 acres	-	-	-	65 acres	-	-
Landslide hazard areas	108 acres	32 acres	23 acres	30 acres	-	-	-	160 acres	3 acres	10 acres
Erosion hazard areas	115 acres	2 acres	24 acres	5 acres	-	-	-	188 acres	12 acres	-
AIR										
Climate and air quality	All alternatives have the potential to affect the air quality and climate. Impacts can be related to the balance between emissions from automobile use (vehicle miles traveled or VMT), emissions from unregulated private sources (e.g. gas lawnmowers), federal regulations through the Clean Air Act, and conversion of rural and resource land to urban land with less vegetative cover. For differences in VMT (full build-out capacity, not planned growth) see Transportation Impacts. For conversion of rural to urban land see the Rural and Resource land impacts.									

[2] *None of the land proposed for UGAs in Alternative 2 contains Zone A land*

Water, Plants and Animals

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
Size of Subarea			41 acres	120 acres	1,243 acres	125 acres	534 acres	793 acres	614 acres	227 acres	362 acres
WATER											
Surface waters: miles of streams added to UGAs	185 miles	185 miles + 42.5 miles	0.2	-	7	-	6	6	6	1	3
Stormwater: Acres of new impervious surface	17,166 acres	17,166 acres + 5,722 acres	27	54	603	56	169	479	294	50	218
Shorelines: Acres of environment affected	6,414 acres	6,414 acres + 145 acres	-	-	209	-	67	-	-	-	-
Flood hazard areas: Acres in new UGAs	14,525 acres	14,525 acres + 213 acres	-	-	422	-	223	2	-	-	-
Groundwater:											
Acres of Category 1 Critical Aquifer Recharge Areas in new UGAs	4,010 acres	4,010 acres + 386 acres	-	-	70	-	4	71	-	3	-
Acres in 1-Yr Zones of Contribution in new UGAs	4,373 acres	4,373 acres + 8.9 acres	-	-	-	-	5	-	-	-	-
PLANTS AND ANIMALS											
Acres with Priority Species in new UGAs	7,384 acres	7,384 acres + 109.5 acres	-	-	46.7	-	225.5	-	-	9.7	55.1
Acres of Non-Riparian Priority Habitat Conservation Area	2,256 acres	2,256 acres +190.1 acres	-	-	3.7	-	-	-	5	-	-
Acres of Riparian Priority Habitat Conservation Area	7,314 acres	7,314 acres +1,321.5 acres	-	-	311.3	-	235	175.7	149.6	38.9	84
Wetlands in new UGAs	16,150 acres	16,150 acres + 1,406 acres	-	-	630	14	200	75	206	18	102

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
Size of Subarea	1,006 acres	875 acres	402 acres	908 acres	635 acres	219 acres	668 acres	809 acres	122 acres	21 acres
WATER										
Surface waters: miles of streams added to UGAs	4.8	4.7	2.2	2.6	-	.5	3.9	6	.6	.1
Stormwater: Acres of new impervious surface	427	597	184	400	409	88	563	399	60	18
Shorelines: Acres of environment affected	79	-	-	77	-	1	107	74	-	-
Flood hazard areas: Acres added to UGAs	91	-	25	83	-	1	578	33	0	21
Groundwater:										
Acres of Category 1 CARAs	2	-	18	-	-	-	27	1	-	-
Acres in 1-Yr Zones of Contribution	-	-	-	22	-	-	-	0.7	-	-
PLANTS AND ANIMALS										
Acres with Priority Species	16	-	8		-	-	308	-	-	16
Acres of Non-Riparian Priority Habitat Conservation Area	23	-	-			-	20		-	-
Acres of Riparian Priority Habitat Conservation Area	208	164	95	170		4	24	277	21	5
Wetlands	121	159	57	211	113	47	155	29	-	-

Energy Conservation, Environmental Health

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
Size of Subarea			41 acres	120 acres	1,243 acres	125 acres	534 acres	793 acres	614 acres	227 acres	362 acres
ENERGY CONSERVATION	Impacts on energy and natural resource conservation are not quantitatively comparable. Total energy impacts are more determined by overall growth and consumption by type of use, less so from patterns of expansion. Planned growth is the same for both Alternative 1 and Alternative 2. Impacts from growth based on potential land capacity (as opposed to planned growth) would likely result in greater impacts than planned, though that impact has not been measured in this DEIS. Growth based on capacity would be greatest under Alternative 2, because the land added to UGAs would accommodate more than the planned population. Impacts from VMT on energy (petroleum) use based on capacity for growth (full build-out) can be found in Transportation Impacts.										
ENVIRONMENTAL HEALTH											
Scenic Resources Only Alternative 2 would convert rural and resource land to urban uses, affecting scenic values adjacent to the new UGAs.	Pressure to increase density for planned population may impact scenic areas at the Columbia River shoreline and Vancouver Lake Lowlands	Conversion of about 11,000 acres to urban use would result in the loss of agricultural , forest, and rural lands that have scenic and visual values	Rural residential scenic values affected by extension of employment and residential zones	Potential impacts from extending low-density residential areas to the north	Employment and low-density residential zones abutting scenic areas near Lacamas Lake & creek		Low-density residential and industrial areas would replace agricultural scenic views	Extending industrial and medium density residential zones south would replace agricultural views	Residential low-density expanded on ag land designated as urban reserve	Residential & industrial expanded on rural land to east; potential merge w/ La Center	Medium density residential & industrial expanded on rural land; potential merge w/ Vancouver UGA
Noise	Impacts from noise not quantitatively compared. Higher noise impacts expected from increased traffic (see Transportation), from expansion of diverse urban uses into formerly rural areas (see Land Use, and Rural and Resource land comparisons).										

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
Size of Subarea	1,006 acres	875 acres	402 acres	908 acres	635 acres	219 acres	668 acres	809 acres	122 acres	21 acres
ENERGY CONSERVATION	Same impacts as described for the other subareas.									
ENVIRONMENTAL HEALTH										
Scenic Resources	Agricultural and rural residential land would be converted to urban low-density development.							Most change consists of conversion of farmland, rural residential to residential & industrial uses north of city limits		
Noise	Impacts from noise not quantitatively compared. Higher noise impacts expected from increased traffic (see Transportation), from expansion of diverse urban uses into formerly rural areas (see Land Use, and Rural and Resource land comparisons).									

Land Use, Economy, Historic and Cultural Resources

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
LAND USE											
Urban residential land capacity Difference between number of planned households and number of households at build-out; actual land capacity Planned new urban population: 173,372 (190,709 with 10% market factor) Planned households: 66,939 (73,633 with 10% market factor)	118,969 new residents in 45,934 dwelling units could be accommodated = capacity deficit of 21,005 dwelling units Has actual capacity for 69% of planned growth	177,385 new residents (68,488 housing units) could be accommodated = surplus capacity of 1,549 dwelling units Has actual capacity for 102% of planned growth	Urban residential land capacity was not calculated for Alternative 3 subareas								
Rural residential land capacity (Difference between number of planned households and number of households at build-out; actual land capacity) Planned new rural population: 19,263 Planned new rural households: 7,437	29,422 new residents in 11,360 dwelling units could be accommodated = surplus capacity of 3,923 dwelling units Has actual capacity of 152% of planned rural growth	27,790 new residents in 10,730 dwelling units could be accommodated = surplus capacity of 3,292 dwelling units Has actual capacity of 144% of planned rural growth	Rural residential land capacity was not calculated for Alternative 3 subareas								
Rural Lands: Acres of rural land into new UGAs	-	3,004	41	120	794	98	223	279	316	32	76
Resource Lands: Acres into new UGAs											
Agricultural land	-	4,054	-	-	407	27	306	405	298	23	286
Forest land	-	154	-	-	-	-	-	-	-	-	-
Mineral land	-	229	-	-	-	-	-	-	-	-	-
ECONOMY											
Planned jobs to population ratio: Planned new jobs: 138,312 jobs Actual capacity for jobs to actual capacity for population	1:1.39 1:1.10 (114,026 jobs capacity to 118,969 population capacity)	1:1.39 (1:1.24 (136,382 jobs capacity to 177,385 population capacity)	Jobs to population ratio was not calculated for Alternative 3 subareas								
New industrial land	-	1,907	-	-	-	-	86	239	-	49	-
New Employment Center/Employment Campus	-	498	22	-	590	-	-	-	-	-	122
New commercial land	-	227	-	-	-	-	-	-	-	-	-
Employment capacity (% of land used for planned jobs)	**Has actual capacity for 82% of planned employment growth**	**Has actual capacity for 99% of planned employment growth**	Employment capacity was not calculated for Alternative 3 subareas								
HISTORIC AND CULTURAL RESOURCES	Would not add new urban development to high probability areas. Existing UGAs have 34,000 acres with moderate to high probability for cultural resources and 289 identified historic sites.	Much of the county has been identified as having a high probability for archaeological resources, in part because of the area's rich history and its importance as a settlement location. Many of the high probability areas are located along streams, rivers, and other water bodies. (See stream miles, above.) All subareas would include areas identified as having a high probability for archaeological resources. New UGAs have 7, 700 acres with moderate to high probability and 8 historic sites; Alternative 3 subareas have 10 historic sites.									

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
LAND USE										
Urban residential land capacity (Difference between number of planned households and number of households at build-out; actual land capacity)	Urban residential land capacity was not calculated for Alternative 3 subareas									
Rural residential land capacity (Difference between the number of planned households and number of households at build-out; actual land capacity)	Rural residential land capacity was not calculated for Alternative 3 subareas									
Rural Lands: Acres of rural land into new UGAs	70	68	-	-	248	-	*55*	654	107	-
Resource Lands: Acres into new UGAs										
Agricultural land	-	197	-	-	387	-	613	46	15	-
Forest land	-	-	-	-	-	-	-	-	-	-
Mineral land	-	-	-	-	-	-	-	46	29	-
ECONOMY										
Average jobs to population ratio: Planned jobs to population Actual capacity for jobs to actual capacity for population	Jobs to population ratio was not calculated for Alternative 3 subareas									
New industrial land	-	-	-	-	495	-	668	-	41	
New Office/Bus. Park land	-	875	-	-	-	-	-	-	-	-
New commercial land	-	-	-	-	-	-	-	31		
Employment capacity (% of land used for planned jobs)	Employment capacity was not calculated for Alternative 3 subareas									
HISTORIC AND CULTURAL RESOURCES	Much of the county has been identified as having a high probability for archaeological resources, in part because of the area's rich history and its importance as a settlement location. Many of the high probability areas are located along streams, rivers, and other water bodies. (See stream miles, above.) All subareas would include areas identified as having a high probability for archaeological resources.									

Transportation and Public Facilities

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
TRANSPORTATION											
Projected Vehicle hours of delay [Not calculated for Subareas]	3,379	4,518	Need new local access to SR 503; expect increased delays at SR 503 and 244th	Substantial trip generation; significant impacts to SR 503 and 244th would increase delays	Underserved by local network; two major corridors serving area projected to fail during peak hours	Insignificant increase beyond local network	Area south of river would substantially increase congestion at Paradise Park and La Center roads and interchange	Residential area would add to failing level of service at NW 11th and NW Spencer Road	Inadequate arterial & collector system for north of Pioneer Street	Impacts to I-5 interchange could be mitigated by improvements underway	Would need extension of new arterial west from I-5/219th interchange
Projected Vehicle Miles Traveled [Not calculated for Subareas]	1,070,911	1,076,081									
Projected Lane miles at LOS E/F [Not calculated for Subareas]	159	175									
Transportation costs to maintain LOS D [Not calculated for Subareas]	Capital projects and programs: $576-$609 million (m) Additional planned projects $200-233m Mitigation projects: $98.5-124.5m	Same as Alt 1, but with one additional mitigation project of $19 to 23 m. Total costs: 117.4 to 147.9 m									
PUBLIC FACILITIES & UTILITIES											
Fire Protection	CCFD #5 response time would increase (& currently do not meet LOS)	CCFDs #3, #5, and #11 affected; new training facilities needed, $2 million (CCFD #11) and $350,000 (CCFD #3)	Growth impacts associated with specific fire districts for each expansion area. Specific impacts if different than Alternative 2would be addressed in FEIS.								
Police Protection	Additional staff & vehicles needed; increased response times likely due to traffic congestion. Additional sworn officers needed: 457	Additional staff and facilities for County Sheriff; new county jail est. cost $90-100 million; possible increased response times Additional sworn officers needed: 535 (79 more than Alternative 1). Alternative 3: one additional sworn officers above those in Alternative 2.									
Public Schools	New facilities: 16 elementary, 6 middle, 2 high, 85 portables Costs: $594 million	New facilities: 23 elementary, 10 middle, 3 high, 83 portables Costs: $880 million	Depends on subareas chosen, location of boundary and relative dispersal of residential areas, but more than under Alternatives 1 and 2.								
Parks and Recreational Facilities	Need for new park and recreation facilities for population growth; most efficient use of existing facilities	Need for new park and recreation facilities for population growth; no park land allocated to low-density residential expansion areas; Vancouver-Clark and all cities would face increased demand									
Libraries	More efficient use of existing facilities; New library facilities needed for growth	New library facilities needed for projected growth									
General government	Demand mostly driven by overall projected growth, not location of growth. No new office space for Clark County needed for next 10 years. La Center expects to construct a new city hall. Vancouver may need additional facilities over next years. Battle Ground expects to need additional space for projected growth. Camas expects to remodel city hall. Washougal may have to expand city hall to provide facilities										
Solid waste	Facilities have capacity to handle waste stream for projected population beyond the 20-year plan period.										
Public water supplies: Additional water demand at capacity build-out Cost to build facilities to meet demand	Some additional transmission lines and water capacity (wells) may be required due to increased densities. Demand of 17.5 million gallons per day.	6.67 million gallons per day more than Alternative 1(demand based on new UGA capacity growth only)	Alternative 3 options are assumed to result in a similar land use profile as Alternative 2. Therefore, demand would be similar. Network extensions (main lines, etc.) would be different and location and cost would depend upon the option chosen.								
Sewer	No expansion beyond existing sewer plans. Some additional pipes and capacity may be required due to increased densities. Demand of 15.6 million gallons per day.	5.79 million gallons per day more than Alternative 1 (demand based on new UGA capacity)	Alternative 3 options are assumed to result in a similar land use profile as Alternative 2. Therefore, demand would be similar. Network extensions (main lines, etc.) would be different and location and cost would depend upon the option chosen.								
Electricity	Electrical service is entirely a "pay as you go" service. Electrical system upgrades are paid for by new development directly (in the form of system connection fees) and by utility rates paid by Clark Public Utilities (CPU) customers. Rates are adjusted to reflect changing costs of purchasing or generating power. CPU expects to be able to expand the electrical system to serve development for either alternative. Availability of electricity is not expected to be a limiting factor for new development.										

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
TRANSPORTATION										
Vehicle hours of delay [Not calculated for Subareas]	Potential needed road system constrained; significantly impact I-5/ Salmon Creek interchange	179th corridor could have failing level of service	Residential development likely to cause congestion and delays at I-5/179th St interchange even after planned improvements	Urban development would increase traffic on Salmon Creek Ave., 50th Ave and 72nd Ave; improvements constrained by environmental factors	Extension of NE 94th St north of NE 119th needed	Residential land would add traffic to NE 99th St, NE 172 Ave, and Ward Rd; impacts not significant if 172nd and Ward Rd improved as planned	Road network limited in this area; traffic impacts to Fourth Plain, SR 500 and NE 162nd Ave	Development west of Washougal river would add traffic to Woodburn and Washougal rds; primary access to east of river is via 32nd St/Stiles/34th St	Access to industrial portion would be via local streets 49th & J sts. Industrial area on south side of 20th St would have poor accessibility	No public street access to single parcel
Lane miles at LOS E/F [Not calculated for Subareas]										
Total project mitigation costs to maintain LOS D [Not calculated for Subareas]										
PUBLIC FACILITIES & UTILITIES										
Fire Protection	Increasing call volume likely an impact and would require additional resources, including a new station with fire and EMS equipment; service in new UGAs would come at the expense of a reduced LOS overall in east county							No additional facilities would be needed; CFP schedule includes construction of a new station and purchase of a new pumper in 2000 and replacement of another in 2011		
Police Protection	Additional staff and facilities for County Sheriff; new county jail est. cost $90-100 million; possible increased response times									
Public Schools	Depends on subareas chosen, location of boundary and relative dispersal of residential areas..									
Parks and Recreational Facilities	Need for new park and recreation facilities for population growth; no park land allocated to low-density residential expansion areas; Vancouver-Clark and all cities would face increased demand									
Libraries	New library facilities needed for projected growth									
General government	Demand mostly driven by overall projected growth, not location of growth. No new office space for Clark County needed for next 10 years. Vancouver may need additional facilities over next years. Battle Ground expects to need additional space for projected growth. Camas expects to remodel city hall. Washougal may have to expand city hall to provide facilities									
Solid waste	Facilities have capacity to handle waste stream for projected population beyond the 20-year plan period.									
Sewer: Additional capacity at build-out Cost to upgrade facilities	Alternative 3 options are assumed to result in a similar land use profile as Alternative 2. Therefore, demand would be similar. Network extensions (main lines, etc.) would be different and location and cost would depend upon the option chosen.									
Public water supplies: Additional water demand at capacity build-out Cost to build facilities to meet demand	Alternative 3 options are assumed to result in a similar land use profile as Alternative 2. Therefore, demand would be similar. Network extensions (main lines, etc.) would be different and location and cost would depend upon the option chosen.									
Electricity	Electrical service is entirely a "pay as you go" service. Electrical system upgrades are paid for by new development directly (in the form of system connection fees) and by utility rates paid by CPU customers. Rates are adjusted to reflect changing costs of purchasing or generating power. CPU expects to be able to expand the electrical system to serve development for either alternative. Availability of electricity is not expected to be a limiting factor for new development.									

Table 2. *Summary of Mitigation*

Element	Mitigation Measures
Soils	Comprehensive plan policies and ordinances of Clark County and the cities protect resource land soils and restrict development where there are soil limitations.
Geology and Topography	Comprehensive plans of Clark County and the cities have policies for regulating development within geologically hazardous areas, which are implemented through local geological hazard ordinances.
Climate	Climate change is indirectly addressed and mitigated through federal and state air quality. Choosing an alternative that converts the least amount of undeveloped vegetated areas to impervious surfaces and reduces vehicle emissions through more efficient development are available forms of mitigation to avoid impacts to climate.
Air Quality	Protection of air quality occurs through federal and state regulations on automobiles, fireplaces, and wood stoves. All of the comprehensive plans recognize the importance of maintaining good air quality. Some have policies in their Transportation, Economic Development, and/or Environmental Element to mitigate impacts to air quality from vehicle and industrial emissions.
Surface Water	Comprehensive plan policies and development regulations provide for the protection of surface water quality throughout the county. Generally, mitigation consists of the identification and protection of critical areas and floodplains through local ordinances, protection of shorelines through Shoreline Master Programs, and through stormwater management and erosion control ordinances.
Groundwater and Aquifer Recharge Areas	As required by the GMA, the county and each city have identified critical environmental areas, including critical aquifer recharge areas. Protection of groundwater resources is addressed in critical areas ordinances (CAOs) that regulate development within recharge areas. The County regulates septic systems through its public health department.
Fish and Wildlife Habitat	The protection of fish and wildlife habitat conservation areas is addressed in comprehensive plan policies and implemented through local ordinances. The county and each city have identified critical environmental areas, which include fish and wildlife habitat conservation areas. CAOs, stormwater management programs and regulations, erosion control regulations, and tree protection ordinances are the mechanisms for mitigating adverse impacts to these areas.
Sensitive, Threatened, and Endangered (STE) Species	Mitigation of impacts to STE species is the same as for fish and wildlife habitat, above. All local jurisdictions have updated or are in the process of updating their CAOs, in part to provide greater protection for ESA-listed salmon and steelhead.
Migratory Species/Migration Routes	Mitigation for impacts to migratory species and habitat is the same as for fish and wildlife habitat, above.
Wetlands	The protection of wetlands is accomplished primarily by federal Clean Water Act, Section 404 regulations. State regulations that provide for the mitigation of impacts to wetlands include the Shoreline Management Act, Hydraulic Project Approval, State Environmental Policy Act, and the Floodplain Management Program. The county and the cities have adopted wetland protection ordinances, incorporated into their CAOs.
Renewable and Non-Renewable Energy Sources	The primary energy conservation measure available to local jurisdictions is to adopt a compact urban form that supports alternative, energy efficient transportation. The Battle Ground, Camas, and Vancouver comprehensive plans directly address energy conservation.
Scenic Resources	Clark County has designated 2 scenic routes and implements the provisions of the Columbia River Gorge National Scenic Area Act in its code requirements. Battle Ground has adopted interim policies to protect and promote significant views. Camas' municipal code also allows for the protection of scenic resources. Other local codes do not directly address scenic resources.
Noise	Federal and state regulations that limit noise exposure in different classes of land use provide for some mitigation of noise impacts. Noise impacts are also considered in SEPA environmental review. Vancouver proposes to adopt a modification of the state noise ordinance.
Land Use, Population, and Housing	Mitigation for the lack of sufficient land for the 20-year growth projection is to change growth or redevelopment assumptions or upzone land within existing UGAs.
Rural Lands	Clark County's comprehensive plan has policies that protect rural lands. Development on rural lands is also regulated by the county's zoning code, which establishes rural districts and permitted uses.

Element	Mitigation Measures
Resource Lands	Clark County's comprehensive plan policies protect resource lands from incompatible uses and from conversion to urban land. The zoning code regulates the intensity and nature of development that can occur on and adjacent to resource lands. City comprehensive plans contain policies that direct development away from productive forest and farm land.
Historic and Cultural Resources	Clark County and the cities have policies and/or ordinances that require these jurisdictions to identify and protect historic and cultural resources.
Transportation	Both Alternative 1 and Alternative 2 would require significant transportation improvements to reduce congestion and achieve a system-wide level-of-service D. Other mitigation could consist of : Seeking out local option transportation funding and increased funding through the state legislature or referenda. Lowering the LOS standards on corridors where appropriate funding levels are not available or where multimodal transportation use is to be encouraged. Reducing the amount of UGA expansion or the intensity of growth in outlying urban growth areas, or at a minimum, developing a mechanism to delay growth in certain areas until funding is available. Amending the County's comprehensive plan to allow rural major collectors to become multi-lane, non-state highways on specific routes that connect urban areas. Implementing a regional traffic impact fee structure whereby rural and outlying urban area development contributes toward the cost of rural corridor capacity improvements.
Emergency Services and Fire Protection	Battle Ground would require a new training facility. Increasing call volume, particularly in east county, would require additional resources for CCFD No. 5 to serve the Vancouver UGA, including a new station with fire and EMS equipment.
Police Protection	New facilities would be needed to mitigate the impacts of projected demands for services in most new UGAs. A new jail facility would be necessary within the next 6 years for the Clark County Sheriff. A new La Center facility could be required to serve development concentrated at the I-5 Junction; a new city hall would house expanded police department in the next 5-10 years. Ridgefield anticipates a need for a new public safety facility (combining fire and police protection) to serve proposed development in the Ridgefield Junction area. Funding this mitigation would be difficult. An additional mitigation measure would be developing a mechanism to delay growth in certain areas until funding is available.
Public Schools	Several new schools in each local jurisdictions have adopted school impact fees on new development. Local comprehensive plan policies address the siting of new school facilities. Balancing land uses within school districts helps to ensure adequate tax base for schools. Battle Ground would need to expand existing school facilities and add at a minimum of 12 new schools and 2 to 13 portlables. Camas would add 2 or 3 new schools and 3 to 4 portables. Evergreen would need at least 9 new schools, and 27 to 32 portables. Green Mountain would add either 4 portables or 1 school. Hockinson would expand its high school and add from 2 to 6 portables, plus 1 elementary school. La Center has plans for 2 new schools and an expanded high school. Ridgefield would add 5 to 7 new schools and 8 portables. Vancouver add 4 to 5 new schools and 24 to 32 portables. Washougal would add 1 to 4 new schools and 2 to 4 portables. An additional mitigation measure would be developing a mechanism to delay growth in certain areas until funding is available.
Parks and Recreation	Clark County and its cities have established policies for the provision of parks and open space to accommodate new development and enhance the quality of life in urban areas. Mitigation in the form of additional parks would be needed to maintain levels of service in Battle Ground, Camas, Ridgefield, Vancouver, .and Washougal. Funding this mitigation would be difficult. An additional mitigation measure would be developing a mechanism to delay growth in certain areas until funding is available.
Libraries	Fort Vancouver Regional Library District provides this service. Mitigation measures to meet additional demand for library services consists of upgrading old or establishing new facilities where needed, purchase of materials, and increasing staff and other services. Local jurisdictions can provide mitigation for impacts from growth in form of assistance in locating facilities, assistance with entitlements, and coordination with programs and planning.
General Government	New and expanded facilities for several jurisdictions, as noted in the Summary of Impacts table, would need to be funded to maintain services for the new population.
Solid Waste	No mitigation needed.
Sanitary Sewer	Concurrency requirements extend to sanitary sewer provision. Each jurisdiction has established policies for providing sanitary sewer service concurrent with new development.

Element	Mitigation Measures
Public Water Systems	Concurrency requirements extend to water provision. Each jurisdiction has established policies for the provision of public water concurrent with new development.

Comprehensive Growth Management Plan
Clark County Draft EIS
Alternative #1 ("No Action")

Key

- Alternative 1 - Adopted 2004 UGA Boundary
- School District Boundary
- City Limits
- Urban Reserve
- Industrial Urban Reserve
- Industrial urban reserve overlay
- Urban reserve overlay

At a work session on December 13, the commissioners approved plans for three maps to receive detailed study prior to any further action. These "draft environmental impact statement" maps include:

- Alternative 1: A "No Action" alternative reflecting the growth plan adopted in September 2004.
- Alternative 2: The "2005 Discussion Map" as of December 13, which encompasses values, principles, planning assumptions, and growth projections identified by the Board of County Commissioners to guide additional work.
- Alternative 3: A "Geographic Flexibility Map" to examine lands that could be used to adjust or refine Alternative 2, to create a more formal proposal for new boundaries.

DRAFT

Green Mountain

Woodland

La Center

Ridgefield

Battle Ground

Hockinson

Camas

Vancouver

Evergreen

Washougal

COLUMBIA

December 13, 2005

proud past, promising future

CLARK COUNTY WASHINGTON Department of Assessment and GIS

NOTE: Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

Plotted: December 21, 2005

Scale 1:150000

Comprehensive Growth Management Plan
Clark County Draft EIS
Alternative #2 ("2005 Discussion Map")

Key

- Alternative 2 UGA boundary
- Adopted 2004 UGA boundary
- School District Boundary
- City Limits
- Urban low density residential
- Urban medium density residential
- Urban high density residential
- Mixed use
- Mixed use/residential-Battle Ground
- Mixed use/employment-Battle Ground
- Campus employment-Battle Ground
- Commercial
- Employment center / Business Park
- Industrial
- Public facilities
- Parks/open space
- Airport
- Urban Reserve
- Industrial urban reserve overlay
- Urban reserve overlay
- New industrial urban reserve overlay
- New urban reserve overlay
- Potential area to delete

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DRAFT

Green Mountain

Woodland

La Center

Ridgefield

Battle Ground

Hockinson

Camas

Vancouver

Evergreen

Washougal

Mount Pleasant

COLUMBIA

December 13, 2005

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CLARK COUNTY WASHINGTON Department of Assessment and GIS

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Scale 1:150000

Comprehensive Growth Management Plan
Clark County Draft EIS
Alternative #3 (Geographic Flexibility Map)

Key

- Alternative 3 UGA boundary
- Adopted 2004 UGA boundary
- School District Boundary
- City Limits
- Urban low density residential
- Urban medium density residential
- Urban high density residential
- Mixed use
- Mixed use/residential-Battle Ground
- Mixed use/employment-Battle Ground
- Campus employment-Battle Ground
- Commercial
- Employment center / Business Park
- Industrial
- Public facilities
- Parks/open space
- Airport
- Urban Reserve

At a work session on December 13, the commissioners approved plans for three maps to receive detailed study prior to any further action. These "draft environmental impact statement" maps include:

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- Alternative 3: A "Geographic Flexibility Map" to examine lands that could be used to adjust or refine Alternative 2, to create a more formal proposal for new boundaries.

DRAFT

Green Mountain
Woodland
La Center
Ridgefield
Battle Ground
Hockinson
Camas
Vancouver
Evergreen
COLUMBIA
Washougal
Lacamas Lake
Prune Hill
Mount Pleasant

February 9, 2006

proud past, promising future

CLARK COUNTY WASHINGTON Department of Assessment and GIS

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Scale 1:150000