

Appendix C

COST ASSESSMENT QUESTIONNAIRE

FOR

**CLARK COUNTY COMPREHENSIVE SOLID WASTE MANAGEMENT AND
MODERATE RISK WASTE MANAGEMENT PLAN**

December 31, 2014

PLAN PREPARED FOR THE COUNTY OF: Clark

PLAN PREPARED FOR THE CITY OF: _____

PREPARED BY: Peter DuBois

CONTACT TELEPHONE: 360-397-6118 ext. 4961 DATE: 12/2014

DEFINITIONS

Please provide these definitions as used in the Solid Waste Management Plan and the Cost Assessment Questionnaire.

Throughout this document:

YR.1 shall refer to 2012.

YR.3 shall refer to 2014.

YR.6 shall refer to 2017.

Year refers to (circle one)

calendar (Jan 01 - Dec 31)

fiscal (Jul 01 - Jun 30)

1. **DEMOGRAPHICS:** To assess the generation, recycling and disposal rates of an area, it is necessary to have population data. This information is available from many sources (e.g., the State Data Book, County Business Patterns, or the State Office of Finance and Management).

1.1 Population

- 1.1.1 What is the **total** population of your County/City?

YR.1 431,165 YR.3 442,800 YR.6 463,026

- 1.1.2 For counties, what is the population of the area **under your jurisdiction?** (Exclude cities choosing to develop their own solid waste management system.)

YR.1 431,165 YR.3 442,800 YR.6 463,026

1.2 References and Assumptions

- a. Population projections based on *Washington State, Office of Financial Management, July 2012; US Census Bureau. 2014 & 2017* estimated based on 1.5% annual increase.
b. Chapter 7 Old SWMP-UP 2012 file.

2. **WASTE STREAM GENERATION:** The following questions ask for total tons recycled and total tons disposed. Total tons disposed are those tons disposed of at a landfill, incinerator, transfer station or any other form of disposal you may be using. If other please identify.

2.1 Tonnage Recycled

- 2.1.1 Please provide the total tonnage **recycled** in the base year, and projections for years three and six.

YR.1 359,169 YR.3 370,754 YR.6 388,837

2.2 Tonnage Disposed

- 2.2.1 Please provide the total tonnage **disposed** in the base year, and projections for years three and six.

YR.1 231,487 YR.3 238,954 YR.6 250,608

2.3 References and Assumptions

- a. *The Solid Waste Data Report – Clark County, WA*, for 2012 tonnages; projected tonnages recycled/discharged increased annually by 1.6%

3. SYSTEM COMPONENT COSTS: This section asks questions specifically related to the types of programs currently in use and those recommended to be started. For each component (i.e., waste reduction, landfill, composting, etc.) please describe the anticipated costs of the program(s), the assumptions used in estimating the costs and the funding mechanisms to be used to pay for it. The heart of deriving a rate impact is to know what programs will be passed through to the collection rates, as opposed to being paid for through grants, bonds, taxes and the like.

3.1 Waste Reduction Programs & 3.2 Recycling Programs

3.1.1 & 3.2.1 Please list the solid waste programs and recycling programs which have been implemented and those programs which are proposed. If these programs are defined in the SWM plan please provide the page number. (Attach additional sheets as necessary.)

IMPLEMENTED

PROPOSED

- ✓ Provide yard debris and chemical reduction programs ch.4 p.3
- ✓ Long-term management options for waste transfer and disposal, beyond the existing agreement that runs through 2016
- ✓ Encourage green building
- ✓ Participate in climate protection programs
- ✓ Continue to fund Master Composter/Recycler
- ✓ Develop a Green Schools Program
- ✓ Enhance web use with on-line recycling A-Z Directory
- ✓ Encourage contracted service providers to maintain ISO 14001 certification
- ✓ Conduct a feasibility study to expand the system to include a fourth transfer station
- ✓ Investigate a biomass plant
- ✓ Add collection sites for controlled substances
- ✓ Construct and operate a permanent HHW collection facility at the Washougal transfer station
- ✓ Expand implementation of the school and commercial food waste recovery programs
- ✓ Expand C&D recycling and reuse at transfer stations
- ✓ Improvements to current (private) transfer facilities

- Proposed changes in the draft *Clark County Comprehensive Solid Waste and Moderate Risk Waste Management Plan*:
- Establish a regional solid waste steering committee ch.2
 - Product stewardship ch.3
 - Increase the visibility of the Green Business Program and commercial assistance programs ch.4
 - Financial incentives to encourage waste reduction among ratepayers ch.4
 - Marketing strategies and public involvement and outreach plans ch.5
 - Promote three core programs: Green Schools, Green Business; Green Neighbors ch.5
 - Enhance presence on the internet ch.5
 - Adopt a county service level ordinance ch.7
 - Registering recycling haulers ch.7
 - Develop rate structures that encourage waste reduction and recycling ch.7.
 - Improvements to Central Transfer Station (private) transfer facility to address traffic concerns ch.8
 - Explore the option to purchase the transfer station ch.8
 - Evaluate formation of a disposal district ch.17
 - Prohibit the disposal of all moderate risk waste through the municipal solid waste collection and disposal system ch.11
 - Evaluation of organics processing capacity ch.13
 - Consider a landfill ban on yard debris ch.13
 - Develop a system plan for handling disaster debris ch. 14
 - Plan for proper disposal of animal carcasses ch. 14

3.1.2 & 3.2.1 What are the costs, capital costs and operating costs for waste reduction programs implemented and proposed?

Combined Message Programs
Green Neighbors
Master Composter/Recyclers
In house Waste Reduction/Recycling
School Education
Organics Recycling
Community and Event based Education
School Grants
Save Organic Scraps (School Food Waste Recycling)
WA Green Schools
Construction & Demolition Debris
Business Recognition Program
Recycled Arts Festival
Public Information Recycling Programs
Single Family Recycling Collection
Multi-family Recycling Collection
Yard Waste Collection
Moderate Risk Waste
Recycle Day Collection Events
Special Collection Events

Waste Reduction Programs
Pacific Park Demo Sites
DIY Fair
Waste Busters

The Solid Waste and Environmental Education Division operates with an estimated \$3M annual budget. It is anticipated that the Division will operate with the same budget through year six (2017) with adjustments for inflation (CPI).

Note: None of the proposed programs will have a significant impact to the County's costs of the solid waste system.

3.1.3 & 3.2.1 Please describe the funding mechanism(s) that will pay the cost of the programs in 3.1.2 and 3.2.1.

IMPLEMENTED

Funding for Waste Reduction and Recycling Programs comes from several sources. The County currently contracts with Columbia Resources Company (CRC) for transfer, transport and disposal of solid waste and for recycling processing and marketing. This contract provides the County with an annual administrative fee. The amount of the fee is set by contract (in lieu of a per ton rate) and increases annually by 82% of the CPI. CRC performs processing of recyclable materials under this same contract. CRC pays the County, the City of Vancouver and the municipal recycling haulers a portion of the revenue received from marketing curbside recyclable materials. The recycling collection and yard debris collection service is performed by Waste Connections of Washington (WCW) under contract with Clark County. Each of these collection contracts provides the County with a per-household fee. The County receives grant funds from the Department of Ecology's Coordinated Prevention Grants. The County also receives interest earned on the solid waste fund.

None of the proposed programs will have a significant impact to the County's customer's rates.

- The current recycling curbside collection contract expires December 31, 2018 and will be competitively bid; any changes to the recycling program will undergo a cost/benefit analysis as part of this procurement process.
- Transfer facility improvements and/or construction of a new transfer facility will be studied in 2015/2016. Funding options will be examined during this process including: incorporating costs into a contract extension with Waste Connections, transfer facility tipping or transaction fees, and Solid Waste Enterprise Fund.
- Remaining proposed programs will have minimal cost impact to the County's budget for solid waste programs.

3.3 Solid Waste Collection Programs

3.3.1 Regulated Solid Waste Collection Programs

Fill in the table below for each **WUTC regulated** solid waste collection entity in your jurisdiction. (Make additional copies of this section as necessary to record all such entities in your jurisdiction.)

WUTC Regulated Hauler Name Waste Connections of Washington (WCW)
G-permit # 253

	<u>YR. 1</u>	<u>YR. 3</u>	<u>YR. 6</u>
RESIDENTIAL			
# of Customers	59,599	62,616	67,431
Tonnage Collected	44,844	48,503	54,560
COMMERCIAL			
# of Customers	3,823	4,017	4,325
Tonnage Collected	34,717	37,550	42,239

a. YR. 1 information provided by Waste Connections, Inc. YR 3 & YR 6 estimated with a 2.5% annual increase in customers and a 4% annual increase in tonnages.

WUTC Regulated Hauler Name Basin Disposal
G-permit # 118

Valid certificate but no operations at this time.

	<u>YR. 1</u>	<u>YR. 3</u>	<u>YR. 6</u>
RESIDENTIAL			
# of Customers	n/a	n/a	n/a
Tonnage Collected	n/a	n/a	n/a
COMMERCIAL			
# of Customers	n/a	n/a	n/a
Tonnage Collected	n/a	n/a	n/a

3.3.2 Other (non-regulated) Solid Waste Collection Programs Fill in the table below for other solid waste collection entities in your jurisdiction. (Make additional copies of this section as necessary to record all such entities in your jurisdiction.)

Hauler Name Waste Connections of Washington (WCW)

	<u>YR. 1</u>	<u>YR. 3</u>	<u>YR. 6</u>
RESIDENTIAL			
# of Customers	53,410	56,114	60,429
Tonnage Collected	31,119	33,658	37,861
COMMERCIAL			
# of Customers	2,803	2,945	3,171
Tonnage Collected	72,044	77,923	87,653

a. YR. 1 information provided by WCW YR 3 & YR 6 estimated with a 2.5% annual increase in customers and a 4% annual increase in tonnages.

3.4 Energy Recovery & Incineration (ER&I) Programs

(If you have more than one facility of this type, please copy this section to report them.)

3.4.1 Complete the following for each facility:

Name: n/a
Location: n/a
Owner: n/a
Operator: n/a

3.4.2 What is the permitted capacity (tons/day) for the facility? n/a

3.4.3 If the facility is not operating at capacity, what is the average daily throughput?

YR.1 n/a YR.3 n/a YR.6 n/a

3.4.4 What quantity is estimated to be land filled which is either ash or cannot be processed.

YR.1 n/a YR.3 n/a YR.6 n/a

3.4.5 What are the expected capital costs and operating costs, for ER&I programs (not including ash disposal expense)?

YR.1 n/a YR.3 n/a YR.6 n/a

3.4.6 What are the expected costs of ash disposal?

YR.1 n/a YR.3 n/a YR.6 n/a

3.4.7 Is ash disposal to be: n/a on-site?
 n/a in county?
 n/a long-haul?

3.4.8 Please describe the funding mechanism(s) that will fund the costs of this component.

3.5 Land Disposal Program

(If you have more than one facility of this type, please copy this section to report them.)

3.5.1 Provide the following information for each **land disposal facility** in your jurisdiction which receives garbage or refuse generated in the county.

Landfill Name: n/a
Owner: n/a
Operator: n/a

3.5.2 Estimate the **approximate tonnage** disposed at the landfill by **WUTC regulated haulers**. If you do not have a scale and are unable to estimate tonnages, estimate using cubic yards, and indicate whether they are compacted or loose.¹

YR.1 n/a YR.3 n/a YR.6 n/a

3.5.3 Using the same conversion factors applied in 3.5.2, please estimate the **approximate tonnage** disposed at the landfill by other contributors.

YR.1 n/a YR.3 n/a YR.6 n/a

3.5.4 Provide the cost of operating (including capital acquisitions) each landfill in your jurisdiction. For any facility that is privately owned and operated, skip these questions.

YR.1 n/a YR.3 n/a YR.6 n/a

3.5.5 Please describe the funding mechanism(s) that will defray the cost of this component.

3.6 Administration Program

3.6.1 What is the budgeted cost for administering the solid waste and recycling programs and what are the major funding sources.

Budgeted Cost

The estimated budgeted cost for administering the solid waste and recycling programs is an estimated ten percent. It is anticipated that the Division will operate with the same budget through year six (2017) with adjustments for inflation (CPA).

Funding Source

Funding for all solid waste system costs (including Administration Costs) comes from several sources as detailed in 3.1.3.

3.6.2 Which cost components are included in these estimates?

All Administration Costs (direct costs in the Solid Waste Program and indirect costs in Clark County Government) are captured in the Clark County Solid Waste Enterprise Fund.

3.6.3 Please describe the funding mechanism(s) that will recover the cost of each component.

Funding for all solid waste system costs (including Administration Costs) comes from several sources as detailed in 3.1.3.

3.7 Other Programs

For each program in effect or planned which does not readily fall into one of the previously described categories please answer the following questions. (Make additional copies of this section as necessary.)

3.7.1 Describe the program, or provide a page number reference to the plan.
n/a

3.7.2 Owner/Operator: _____
n/a

3.7.3 Is WUTC Regulation Involved? If so, please explain the extent of involvement in section 3.8.
n/a

3.7.4 Please estimate the anticipated costs for this program, including capital and operating expenses.

YR.1 n/a YR.3 n/a YR.6 n/a

3.7.5 Please describe the funding mechanism(s) that will recover the cost of this component.
n/a

3.8 References and Assumptions (attach additional sheets as necessary)
n/a

4. FUNDING MECHANISMS: This section relates specifically to the funding mechanisms currently in use and the ones which will be implemented to incorporate the recommended programs in the draft plan. Because the way a program is funded directly relates to the costs a resident or commercial customer will have to pay, this section is crucial to the cost assessment process. Please fill in each of the following tables as completely as possible.

Proposed changes in the draft *Clark County Comprehensive Solid Waste and Moderate Risk Waste Management Plan*:

- Improvements to Central Transfer Station (private) transfer facility to address traffic concerns
- Transfer facility ban on accepting moderate risk waste
- Policy limiting construction of landfills in Clark County
- Evaluate formation of a disposal district

Table 4.1.1 Facility Inventory

Facility Name	Type of Facility	Tip Fee per Ton	Transfer Cost**	Transfer Station Location	Final Disposal Location	Total Tons Disposed	Total Revenue Generated (Tip Fee x Tons)
<p>All transfer stations and the materials recovery facility are privately owned and operated by Waste Connections (d/b/a Columbia Resource Company) under a long-term transfer, transport and disposal contract with Clark County. Tipping fees are paid by the users of the facilities. Tipping fees are set contractually (see table 4.1.4). Tipping fees increase or decrease annually at 82% of the CPI. MRF fees are paid by the county and cities (users of the facility) – these fees are set contractually and increase or decrease at 82% of the CPI.</p>							

Table 4.1.2 Tip Fee Components

Tip Fee by Facility	Surcharge	City Tax	County Tax	Transportation Cost	Operational Cost	Administration Cost	Closure Costs
Transfer facilities are privately owned and operated – tipping fees are set contractually and are not identified by components.							

Table 4.1.3 Funding Mechanism

Name of Program Funding Mechanism will defray costs	Bond Name	Total Bond Debt	Bond Rate	Bond Due Date	Grant Name	Grant Amount	Tip Fee	Taxes	Other	Surcharge
<p>Proposed changes in the draft <i>Clark County Comprehensive Solid Waste and Moderate Risk Waste Management Plan</i>:</p> <ul style="list-style-type: none"> ➤ Improvements to Central Transfer Station (private) transfer facility to address traffic concerns – cost impact for any capital improvements or acquisitions will be evaluated with any decision to move forward on a project. Funding options may include: Extending the contract term with CRC to allow additional time to recoup capital and, if applicable, operating costs; System-wide increases to the tipping fees and/or transaction fees; Facility specific increases to transaction fees ➤ Transfer facility ban on accepting moderate risk waste - cost impact of implementing this policy will be incremental to the County and these costs will be absorbed in the current County Solid Waste budget; small quantity generators who are currently using the transfer facilities to dispose of their hazardous waste will incur additional cost for hazardous waste disposal ➤ Policy limiting construction of landfills in Clark County - cost impact of implementing this policy will be incremental and any associated costs will be absorbed in the current County Solid Waste budget ➤ Evaluate formation of a disposal district – cost impact of implementing this will be incremental and any associated costs will be absorbed in the current County Solid Waste budget 										

Table 4.1.4 Tip Fee Forecast

Tip Fee per Ton by Facility	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Non-Drop Box Loads	\$82.78	\$84.28	\$85.61	\$87.32	\$89.07	\$90.85
Drop Box Loads	\$73.29	\$74.62	\$75.81	\$77.33	\$78.87	\$80.45
Transaction Fee	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
Assumption: 2% increase in tipping fees per year; transaction fee remains unchanged						

4.2 **Funding Mechanisms** summary by percentage: In the following tables, please summarize the way programs will be funded in the key years. For each component, provide the expected percentage of the total cost met by each funding mechanism. (E.g. Waste Reduction may rely on tip fees, grants, and collection rates for funding). You would provide the estimated responsibility in the table as follows: Tip fees=10%; Grants=50%; Collection Rates=40%. The mechanisms must total 100%. If components can be classified as “other,” please note the programs and their appropriate mechanisms. Provide attachments as necessary.

Table 4.2.1 Funding Mechanism by Percentage

Year One

Component	Interest %	Miscellaneous Revenue %	Grant %	Program Rev %	Program Reserve %	Total Reserve %	Total
WR/Recycling (Combined)				5%		95%	100%
Recycling				100%			100%
Waste Reduction				100%			100%
Solid Waste System					100%		100%
Enforcement					100%		100%
Planning					100%		100%
Administration					100%		100%
Other Capital Transfer	34%		7%		5%	54%	100%

Table 4.2.2 Funding Mechanism by Percentage

Year Three

Component	Interest %	Miscellaneous Revenue %	Grant %	Program Rev %	Program Reserve %	Total Reserve %	Total
WR/Recycling (Combined)				14%	86%	0%	100%
Recycling	0%	0%		75%	25%		100%
Waste Reduction				100%	0%		100%
Solid Waste System	0%				100%		100%
Enforcement					100%		100%
Planning					100%		100%
Administration	59%	12%			29%		100%

Table 4.2.3 Funding Mechanism by Percentage

Year Six

Component	Interest %	Miscellaneous Revenue %	Grant %	Program Rev %	Program Reserve %	Total Reserve %	Total
WR/Recycling (Combined)				9%	91%		100%
Recycling				84%	16%		100%
Waste Reduction				100%	0%		100%
Solid Waste System					100%		100%
Enforcement					100%		100%
Planning					100%		100%
Administration	59%	12%			29%		100%

4.3 References and Assumptions

Please provide any support for the information you have provided. An annual budget or similar document would be helpful.

Data Report

Budget Report for 2015/16

4.4 Surplus Funds

Please provide information about any surplus or saved funds that may support your operations.

Carry forward in the solid waste fund may be appropriated through the next budget cycle for capital and one time project expenses. In the event of a “disaster” or “event” such funds may be used to help fund debris cleanup operations.

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