# GRANT COUNTY COST ASSESSMENT QUESTIONNAIRE (Draft)

#### PREPARED FOR GRANT COUNTY

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### DEFINITIONS

Throughout this document:

YR.1 shall refer to calendar year 2004.

YR 3 shall refer to calendar year 2006.

YR.6 shall refer to calendar year 2009.

DEPARTMENT OF ECOLOGY EASTERN REGIONAL OFFICE

#### 1. **DEMOGRAPHICS**

#### 1.1 Population

1.1.1 **Total** population of Grant County:

YR.1 78,300 YR.3 80,100 YR.6 82,900

1.1.2 **Planning level** population (Including the Town of Elmer City located in Okanogan County and that portion of the Town of Coulee Dam located in Okanogan County):

YR.1 79,415 YR.3 81,250 YR.6 84,100

#### 1.2 References and Assumptions

Total Grant County population estimate for 2004 from Official April 1 2005 Population Estimates, April 1 Population of Cities, Towns, and Counties, Used for Allocation of Selected State Revenues, State of Washington, State of Washington Office of Financial Management (OFM), Forecasting Division, Olympia, WA, June 28, 2005 – available on the Internet at <a href="https://www.ofm.wa.gov/pop/april1/finalpop2005.xls">www.ofm.wa.gov/pop/april1/finalpop2005.xls</a>. This OFM source also was the basis for the projections of Grant County total population for 2006 and 2009 based on the 1.15% estimated population growth rate for Grant County between 2000 and 2005 exhibited in this source.

Area covered by the CSWMP includes the Towns of Coulee Dam and Elmer City, located in Okanogan County. These towns are members of the Regional Board of Mayors, along with Electric City and Grand Coulee, which are located in Grant County. The RBOM towns use the Delano Landfill located in Grant County. The RBOM arranges for a collection company to serve its members, and each member has an individual contract with the collection company. These towns have elected to be part of the RBOM because they are in close proximity with the other members, are small communities, and benefit from sharing resources and services. Coulee Dam and Elmer City have relatively low populations, 850 for Coulee Dam's portion that lies in Okanogan County and 265 for Elmer City in 2005. There is also a seasonal influx of workers and tourists into Grant County that is reflected in waste generation forecasts used in the Grant County CSWMP.

#### 2. WASTE STREAM GENERATION

#### 2.1 Tonnage Recycled

2.1.1 YR.1 17,288 YR.3 20,500 YR.6 34,200

#### 2.2 Tonnage Disposed

2.2.1 YR.1 75,451 YR.3 80,500 YR.6 83,800

#### 2.3 References and Assumptions

Recycling and disposal tonnage for 2004 from draft CSWMP, Table 3-1. Projections for 2006 and 2009 based on draft CSWMP, Table 3-8.

#### 3. SYSTEM COMPONENT COSTS:

#### 3.1 Waste Reduction Programs

Solid waste prevention/reduction programs which have been implemented and those 3.1.1 which are proposed are listed below:

#### **IMPLEMENTED**

#### PROPOSED

- 1. WR & R Education & Outreach
- 1. Electronics Public Education

- 2. SOG Education
- 3. Mercury Reduction
- Costs, including capital costs and operating costs, for waste reduction/prevention 3.1.2 programs implemented and proposed:

#### **IMPLEMENTED**

YR.1 \$31,541

YR.3 \$48,775 YR.6 \$52,525

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#### **PROPOSED**

YR.1 \$0

YR.3 \$18,507

YR.6 \$19,661

Notes: Sources for waste reduction costs: County actual costs for 2004; County Budget and CSWMP Table 4-5 for 2006; and CSWMP Table 4-5 and assumed 2.5% annual inflation rate for 2006-09 for 2009.

3.13 Funding mechanism(s) that will pay the cost of the programs in 3.1.2. (Note: Tip = landfill and drop box tipping fees; CPG = Department of Ecology Coordinated Prevention Grants.)

#### **IMPLEMENTED**

YR.1 Tip & CPG YR.3 Tip & CPG

YR.6 Tip & CPG

#### **PROPOSED**

YR.1

YR.3 Tip

YR.6 Tip

#### 3.2 Recycling Programs

3.2.1 Proposed or implemented recycling program(s), their costs, and proposed funding mechanisms are listed below. (Note: Tip = landfill and drop box tipping fees, CPG = Department of Ecology Coordinated Prevention Grants, Sales = revenue from selling recycled materials, User = user pay through collection company or drop-off fee.)

3.2.2 <u>IMPLEMENTED</u>		
PROGRAM	COST	<b>FUNDING</b>
1. County Drop Box and Landfill	Included in	Tip & Sales
Drop-Off Recycling	landfill budget	
2. HHW Collection	YR.1 \$66,093	Tip & CPG
	YR.3 \$79,100	Tip & CPG
	YR.6 \$85,200	Tip & CPG
PROPOSED		
PROGRAM	COST	<b>FUNDING</b>
1. Tire Recycling	YR.1 \$0	
	YR.3 \$12,000	Tip & CPG
	YR.6 \$12,900	Tip & CPG
2. Mercury Collection	YR.1 \$0	
·	YR.3 \$3,850	Tip & CPG
	YR.6 \$4,100	Tip & CPG
3. Expand Drop-Off Recycling	YR.1 \$0	
	YR.3 \$95,000	Tip
	YR.6 \$0	Tip
4. Commercial Paper Collection	YR.1 \$0	
•	YR.3 \$NA	User
	YR.6 \$NA	User
5. Technical Assistance	YR.1 \$0	
	YR.3 \$23,000	Tip
	YR.6 \$24,408	Tip
6. Organics Drop-Off	YR.1 \$0	
	YR.3 \$0	
	YR.6 \$156,801	Tip
7. Commingled C&D Drop-Off	YR.1 \$0	
-	YR.3 \$0	
	YR.6 \$609,070	Tip

8. Organics Composting Facility	YR.1 \$0 YR.3 \$ 0 YR.6 \$30,000	Tip Tip
9. Residential Organics Collection	YR.1 \$0	
	YR.3 \$0 YR.6 \$74,027	User

Notes: Sources for recycling costs: County actual costs for 2004, County Budget and CSWMP Table 4-5 for 2006, and CSWMP Table 4-5 and assumed 2.5% annual inflation rate for 2006-09 for 2009.

#### 3.3 Solid Waste Collection Programs

#### 3.3.1 Regulated Solid Waste Collection Programs

## 1. WUTC Regulated Hauler Name: Consolidated Disposal Service, Inc. G-permit #G-190

	<u>YR. 1</u>	<u>YR. 3</u>	<u>YR. 6</u>
RESIDENTIAL			
- # of Customers	7,400	7,570	7,840
- Tonnage Collected	9,755	9,980	10,335
COMMERCIAL			
- # of Customers	650	654	660
- Tonnage Collected	12,575	12,650	12,770

#### 2. WUTC Regulated Hauler Name: Waste Management, Inc.

G-permit #G-237

	<u>YR. 1</u>	<u>YR. 3</u>	<u>YR. 6</u>
RESIDENTIAL			
- # of Customers	535	550	565
- Tonnage Collected	417	430	440
COMMERCIAL			
- # of Customers	187	188	190
- Tonnage Collected	1,029	1,035	1,045

### 3. WUTC Regulated Hauler Name: Sunrise Disposal G-permit #G-201

G-permit #G-201	<u>YR. 1</u>	<u>YR. 3</u>	<u>YR, 6</u>
RESIDENTIAL			
- # of Customers	75	77	<b>7</b> 9
- Tonnage Collected	97	100	102
COMMERCIAL	e e e e e e e e e e e e e e e e e e e		
- # of Customers	20	20	20
- Tonnage Collected	76	76	76

Notes: Residential customer growth rates based on planning area population growth rates. Commercial customer growth assumed at 25% of residential customer growth. Tonnage projections based on per customer collection tonnage for 2004.

Sunrise Disposal's residential garbage collection tonnage in unincorporated Grant County assumed to equal 1.3 tons collected per residential customer. See notes under non-regulated solid waste collection programs for basis for 1.3 tons estimate.

Sunrise Disposal's commercial garbage collection tonnage based on total regulated and non-regulated customers and 841 tons remaining from 2,496 tons disposed at Delano Landfill by Sunrise after deducting 1,655 tons for 1,273 regulated and non-regulated residential customers at 1.3 garbage collection tons per customer.

#### 3.3.2 Other (non-regulated) Solid Waste Collection Programs

1.	Hauler	Name:	City of	of Soan	Lake
		7 400 4 4 4	~	v. ~~~p	

	<u>YR. 1</u>	<u>YR. 3</u>	<u>YR. 6</u>
RESIDENTIAL/COMMERCIAL			
- # of Customers	689	705	730
- Tonnage Collected	714	730	755

#### 2. Hauler Name: Consolidated Disposal Service Inc. - CDSI (contracts for Ephrata, Mattawa, Quincy, Royal City, and Warden)

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	<u>ÝR. 1</u>	<u>YR. 3</u>	<u>YR. 6</u>
RESIDENTIAL - # of Customers - Tonnage Collected	5,400	5,525	5,720
	7,075	7,240	7,495
COMMERCIAL	1,013	7,240	1 <b>,133</b>
- # of Customers - Tonnage Collected	445	448	452
	8,195	8,250	8,325

#### 3. Hauler Name: Lakeside Disposal (contract for Moses Lake)

-	<u>YR. 1</u>	$\underline{YR}$ . $\underline{3}$	<u>YR. 6</u>
RESIDENTIAL			
-# of Customers	4,461	4,565	4,725
- Tonnage Collected	5,799	4,565 5,935	6,140
COMMERCIAL	:		
- # of Customers	676	680	685
- Tonnage Collected	9,200	9,255	9,320

#### 4. Hauler Name: Sunrise Disposal (contract with Regional Board of Mayors for Coulee Dam, Electric City, Elmer City, and Grand Coulee)

· ·	<u>YR. 1</u>	<u>YR. 3</u>	<u>YR. 6</u>
RESIDENTIAL - # of Customers	1,198	1,225	1,270
- Tonnage Collected	1,558	1,595	1,650
COMMERCIAL			÷
-# of Customers	199	200	202
- Tonnage Collected	1,025	1,030	1,040

Notes: See notes for regulated haulers for customer and tonnage projection assumptions for 2006 and 2009.

Lakeside Disposal tonnage split for 2004 between residential and commercial based on 1.3 tons per residential customer, with remainder of 14,999 tons collected in Moses Lake and disposed at Grant County landfill allocated to commercial. The 1.3 tons per residential customer is the average garbage collection quantity reported CDSI for its regulated collection area in Grant County for 2005.

#### 3.4 Energy Recovery & Incineration (ER&I) Programs

No ER&I facilities used or proposed in Grant County.

#### 3.5 Land Disposal Program

3.5.1 Landfill Name: Ephrata Landfill

Owner: Grant County
Operator: Grant County

3.5.2 Approximate tonnage disposed at the landfill by WUTC regulated haulers.

Note: Estimates given here are based on hauler interview data and customer growth rates as laid out in 3.3.1 above.

YR.1 23,776 YR.3 24,095 YR.6 24,590

3.5.3 Approximate tonnage disposed at the landfill by other contributors.

Note: Estimates given here are derived from total tonnage projections given in 2.2.1, less regulated hauler disposal tonnage given in 3.5.2, and also less Delano Landfill tonnage in 2004 and 2006.

YR.1 48,592 YR.3 53,140 YR.6 59,210

3.5.4 Estimated cost of operating (including capital acquisitions) the Ephrata Landfill.

YR.1 \$1,237,207 YR.3 \$4,402,787 YR.3 \$4,741,320

3.5.5 Funding mechanisms that will defray the cost of this component.

Drop box sites and landfill tip fees plus reserve fund investment interest fund landfill operations costs in 2004. Same plus landfill closure reserves fund landfill operations and old cell closure/post-closure costs in 2006 and 2009. 2009 costs based on 2006 costs inflated at 2.5% per year.

3.5.1 Landfill Name: Delano Landfill

Owner:
Operator:

Regional Board of Mayors Regional Board of Mayors

3.5.2 Approximate tonnage disposed at the landfill by WUTC regulated haulers.

Note: Estimates given here are based on hauler interview data and customer growth rates as laid out in 3.3.1 above.

YR.1 173 YR.3 176 YR.6 0

3.5.3 Approximate tonnage disposed at the landfill by other contributors.

Note: Estimates given here are derived from tonnage actuals and projections given in 2.2.1 and 3.3.1, less regulated hauler disposal tonnage given in 3.5.2 and less Ehprata Landfill disposal tonnage.

YR.1 2,910 YR.3 3,124 YR.6 0

3.5.4 Estimated cost of operating (including capital acquisitions) the Delano Landfill.

YR.1 \$440,375 YR.3 \$322,995 YR.3 \$0

3.5.6 Funding mechanisms that will defray the cost of this component.

Landfill tip fees and three reserve funds (Closure Fund, Post Closure Fund, and Landfill Fund) fund landfill operations and closure/post-closure costs in 2004 and 2006. Delano Landfill plans to close after 2006.

3.6 Administration Program

3.6.1 Budgeted cost for administering solid waste and recycling programs and major funding sources are given below.

### Budgeted Cost

YR 1 \$126,190 YR 3 \$1,698,500 YrR 6 \$1,829,100

**Funding Sources** 

For 2004 funding is through Ecology CPG grant & Ephrata Landfill disposal fees. Same for 2006 and 2009 plus Ecology Remediation Planning Grant to cover remediation planning that year.

3.6.2 Administration cost components included in these estimates.

Wages, benefits, supplies, professional services, advertising, taxes, miscellaneous.

- 3.6.3 Specific proposed programs, costs and funding sources are:
  No proposed new programs.
- 3.7 Other Programs: None
- 3.8 References and Assumptions: See notes provided in each section above or below.
- 4. **FUNDING MECHANISMS**:

			Table 4.1.1		Facility Inventory		
Facility Name	Type of	Tip Fee	Transfer	Transfer	Final Disposal	Total Tons	Total Revenue
Facility per Ton	Facility	per Ton	Cost	Station	Location	Disposed	Generated (Tip Fee x
				Location			Tons)
1. Drop Boxes	transfer	\$56		13 sites	Ephrata Landfill	3,843	\$215,086
		esti-		throughout			
		mate		the county			
		pased					
	:	6					
		yardage		,			
	7.	charges					
2. Ephrata Landfill	disposal					68,525	\$1,738,203
3. Delano Landfill	disposal \$52.00/	\$52.00/				3,083	\$175,000
		\$57.20					
	,						

÷			<b>F</b>	able 4.	1.2 Tip Fe	able 4.1.2 Tip Fee Components	ts	
Tip Fee by	/ Facility	Tip Fee by Facility Surcharge	City	County	County Debt/Capital Tax Costs	Operational Cost Administration Cost	Administration Cost	Closure Costs
1. Drop Boxes \$56	95\$ sax				2.9%	75.7%	4.6%	16.8%
2. Ephrata \$25.80	\$25.80				9.9	48.4	7.3	37.7
3. Delano	\$52.00	NA	NA	NA	NA	NA	NA	NA
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								-

		Table 4.1.	8	Fundin	Funding Mechanism	ism				
Name of Program Funding Mechanism will defray costs	Bond Name	Total Bond Debt	Bond	Bond Due Date	Grant Name	Grant	Tip Fee	Taxes	Other	Surcharge
Administration							×		Interest	
Collection									Rates	
Disposal							×		Interest	
WRR					SHO	\$76,911	×		Sales	

		Table 4.1.4	e 4.1.4 Tip Fee Forecast	ecast		
Tip Fee per Ton by Facility	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
qtiil	\$25.80	\$25.80	\$27.54	\$28.23	\$28.93	\$43.00
Drop Boxes	\$56.00	\$56.00	\$60.00	\$61.25	\$62.80	\$93.50
Delano Landfill	\$52.00	\$52.00	\$52.00	closed	closed	Closed

# 4.2 Funding Mechanisms summary by percentage:

Table 4.2.1 Funding Mechanism by Percentage							
	i	Year O	ne		•	•	
Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total	
Waste Reduction & Recycling	t l	75%				100%	
Collection					100.0%	100%	
Drop Sites	100.0%					100%	
Land Disposal						100%	
Administration	100.0%					100%	

Table	4.2.2	Funding Mechanism by Percentage						
		Year Th	ree					
Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total		
Waste Reduction	72%	28%				100%		
& Recycling								
Collection					100.0%	100%		
Drop Sites	100.0%					100%		
Land Disposal	100.0%					100%		
Administration	34%	66%				100%		

Table	4.2.3	Funding	y Mecha	anism by Pe	rcentag	е
		Year Si	X			
Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total
Waste Reduction & Recycling	i e	7%				100%
Collection					100.0%	100%
Drop Sites	100.0%					100%
Land Disposal	100.0%					100%
Administration	34%	66%				100%

#### 4.3 References and Assumptions:

Grant County Public Works 401 – Solid Waste 2006 Budget Report provides 2004 actual and 2006 budgeted revenues and expenditures. 2006 budgeted expenditures increased for proposed waste reduction and recycling programs per CSWMP Table 4-5. Tip fee forecast for cost assessment Year 6 based on increases shown in Table 4-5 for Year 4. Year 1 in Table 4-5 is 2006; for the cost assessment Year 1 is 2004.