

13-120407



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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March 22, 2012

Mr. Dave Danner
Washington Utilities and Transportation Commission
1300 South Evergreen Park Drive SW
PO Box 47250
Olympia, WA 98504-7250

2012 MAR 23 AM 8:08
STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
COMMUNICATIONS SECTION

Dear Mr. Danner:

Please forward the following to Ms. Penny Ingram:

The Department of Ecology has received copies of the *Grays Harbor County Draft 2012 Solid Waste Management Plan* on March 14, 2012. Pursuant to Section 70.95.096, we are forwarding two copies of this draft local comprehensive solid waste management plan for WUTC review. The Cost Assessment for recommended programs is an attachment.

The county contact person for this plan is:
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Sincerely,

Mike Drumright
Regional Solid Waste Planner
Waste 2 Resources Program

Enclosures





2012 MAR 23 AM 8:09
DRAFT

Draft

Comprehensive Solid Waste Management Plan

2012 Amendment

GRAYS HARBOR COUNTY
COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Solid Waste Advisory Committee

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 **CREATIVE COMMUNITY SOLUTIONS, INC.**

February 2012

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INTRODUCTION

PURPOSE

The Washington Solid Waste Management - Reduction and Recycling Act, Chapter 70.95 RCW, requires Grays Harbor County to prepare a 20-year comprehensive solid waste management plan (CSWMP). The county adopted these state regulations through Ordinance 2004-1, which establish requirements and procedures for solid waste handling and disposal, including the requirement to develop and implement a solid waste comprehensive plan.

Grays Harbor County developed this plan in association with the cities, towns, and other affected groups located in the County. The Washington Department of Ecology publication *Guidelines for the Development of Local Solid Waste Management Plans and Plan Revisions*, December 1999, provides interpretation and insight into the planning requirements of RCW 70.95. In addition, *Beyond Waste: The Washington State Hazardous Waste Management Plan and Solid Waste Management Plan* provides the County a statewide framework for participating in the reduction of waste.

Solid waste management has remained relatively stable in the County since the adoption of the CSWMP in 2001. The cornerstones to solid waste management in the County are:

- The 20-year contract between Grays Harbor County and Harold LeMay Enterprises, Inc., to operate the Central Transfer Station and recycling programs
- The 20-year contract with Regional Disposal Company to export solid waste to the Roosevelt Regional Landfill in Klickitat County
- Providing solid waste education services

This plan is a document for directing the actions of government, haulers, residents, and businesses in the County.

ORGANIZATION OF THE PLAN

The organization of the CSWMP follows the checklist used by the Washington Department of Ecology for reviewing the compliance of local plans with state planning guidelines.

The plan begins by outlining the goals, objectives, and recommendations for solid waste management in Grays Harbor County. The subsequent chapters provide the background foundation for them.

CHAPTER 1

GOALS FOR SOLID WASTE MANAGEMENT

Grays Harbor County has adopted the following goals for comprehensive solid waste management.

Plan Goals reflect the desired outcomes for the waste stream, waste reduction, and recycling to achieve over the next twenty years (2031) with an emphasis on the first five years (2016).

The goals of this plan are to describe the existing system and then lay the foundation for the proper management of solid waste systems in Grays Harbor County now and in the future. The standards by which programs will be developed and implemented are the goals, developed in consultation with affected sections of the community. Each element of the Solid Waste Management Program must address the Plan's comprehensive goals, which are to:

1. Implement an economically sound solid waste management system, conforming to Federal, Washington State, and local statutes and rules.
2. Seek a balance between public health requirements, environmental protection measures, and public expenditures.
3. Apply solid waste management priorities according to the state hierarchy.
4. Identify and implement emerging methods for improved management and handling of all waste.
5. Maintain an efficient and effective system of waste stream measurement and monitoring.
6. Maintain sufficient flexibility to allow adaptation of strategies in accordance with local resources and unanticipated changes, needs, and opportunities.
7. Foster cooperative and coordinated efforts among government agencies, citizens, and the private sector.
8. Ensure education and information elements are an integral part of all programs related to solid waste management and reduction.
9. Maintain a program evaluation schedule through solid waste staff and SWAC.
10. Emphasize the development and implementation of the most efficient technologies for waste reduction, reuse, and recycling.
11. Local government and private enterprise cooperation is the key for creating a viable recycling industry.
12. Waste reduction programs will be a cooperative effort by the County and local municipalities to the greatest extent possible.

CHAPTER 2

PLAN OBJECTIVES AND RECOMMENDATIONS

Grays Harbor County has adopted a series of plan objectives and recommendations that implement its Goals for Solid Waste Management.

Work Plan Objectives are specific accomplishments to achieve over the next two years that show progress in achieving the plan's goals (2012-2014).

Recommendations are specific projects or actions to implement the Work Plan Objectives.

While each Work Plan Objective is important, five of them lead the way: waste reduction, recycling, composting, enforcement, and moderate-risk waste management. County and municipal solid waste management efforts will emphasize these objectives and their recommendations above the rest. As time, resources, and unique opportunities arise, the County will resume implementing the remaining ones. The Work Plan Objective for moderate-risk waste management follows separate in Chapter 6.

Each Work Plan Objective and its recommendations show the responsible party for implementation and the funding source. Implementation of these tasks is an ongoing process, with the Solid Waste Advisory Committee holding an annual review in April to determine progress.

HIGH PRIORITY RECOMMENDATIONS

Waste Reduction

Objective: Explore and support incentives and programs that encourage waste reduction practices among citizens and within local governments, businesses, public institutions, and industry.

Waste Reduction Activities:

1. Request technical assistance from ECY to explore strategies for use by governments, institutions, businesses, and industry that encourage the use and purchase of products containing pre- and post-consumer recycled material, content in the workplace.
 - SWP staff to meet with ECY to determine scope of available technical assistance
 - SWP staff to consult with SWAC in fall to determine scope of interest, topics
 - Set date, market workshop to interested groups, businesses
 - Hold evening workshop

2. Incorporate appropriate waste reduction strategies, including Product Stewardship programs, identified by the Solid Waste Advisory Committee into existing educational outreach efforts.
3. Continue to support [2 Good 2 Toss.com](http://www.Good2Toss.com) to encourage reuse of common household items among citizens.
4. Evolve the Spring Clean-Up into being primarily a recycling event.

Responsibility: County, Solid Waste Division, Municipalities

Funding Source: CPG Grant, Solid Waste Plan Fund #401

Recycling

Objective: Reduce the County waste stream by 5% through an active recycling program.

Recycling Activities:

1. The Solid Waste Program and the solid waste contractor will continue to market countywide the co-mingled container-recycling program.
2. The Solid Waste Program will continue to fund recycling public education and information programs. The program will also explore new partnerships and techniques to deliver programs throughout the County.
3. The Solid Waste Advisory Committee will continue to explore new ways to expand recycling opportunities and programs for the public.

The SWAC will hold a solid waste review every April that will include analysis of recycling activities over the past year and potential improvements.

Funding Source: CPG Grant, Solid Waste Plan Fund #401, Contractor Collection Rates

Responsibility: County, SWAC, Solid Waste Division, Solid Waste Contractor

Organics

Objective: Continue to expand educational outreach and opportunities for organics.

Organics Activities:

1. The County will continue to work in cooperation with the WSU Cooperative Extension, Master Gardener Program to promote backyard composter training, education, and sales to the public and school districts. The SWAC will support an outreach program.
2. The County will explore the possibility of adding a yard waste collection program through the Central Transfer Station.

At annual Solid Waste Review, SWAC will discuss status of public interest and cost to establish yard waste collection program at Central Transfer Station.
3. The SWAC will explore the viability of an energy production program using organics.
4. Solid Waste Division staff will consult with SWAC annually during the Solid Waste Review to determine if there is a need for technical assistance
5. Encourage the use of organics in energy facilities
6. Continue to identify and track existing and past sites; monitor for compliance.

Funding Source: CPG Grant, Solid Waste Plan Fund #401, Solid Waste Enforcement Grant

Responsibility: County, SWAC, Solid Waste Division, Solid Waste Contractor, Environmental Health Division, Master Gardeners, Department of Ecology

Enforcement

Objective: Create a coordinated and effective approach for all enforcement agencies to resolve illegal dumping and reduce littering.

Enforcement Activities:

1. Consider alternative enforcement methods to reduce dumping on public and private property.
2. Grays Harbor County and the municipalities will continue to earmark funding within their annual budget for abatements and illegal dumping enforcement within their jurisdictions.
3. Support volunteer litter control programs.
4. Build public support for addressing illegal dumping by integrating information about the problems of illegal dumping within education and outreach programs.
5. The County may provide assistance for the removal of abandoned vehicles through the Junk Vehicle Verification, Notification, and Affidavit (Hulk Slip) program.
6. Strengthen and review countywide litter control activities.

The SWAC will review and evaluate litter control activities.

Funding Source: Solid Waste Enforcement Grant, Solid Waste Plan Fund #401, CPG Grant

Responsibility: County, SWAC, Environmental Health Division, Solid Waste Division, Municipalities

OTHER RECOMMENDATIONS

Wood Waste

Objective: Support efforts by the private sector to find beneficial uses for wood waste over land-filling.

Wood Waste Activities:

1. The Solid Waste Advisory Committee and the Solid Waste Program will monitor County or regional discussions or proposals regarding the study and/or siting of wood waste landfills.
2. The SWAC may request technical assistance from the Department of Ecology to learn about opportunities for wood waste reduction and reuse.

Solid Waste Division staff will consult with SWAC annually during the Solid Waste Review to determine if there is a need for technical assistance

3. Encourage the use of wood waste in cogeneration facilities.
4. Continue to identify and track existing and past sites; monitor for compliance.

Funding Source: Solid Waste Enforcement Grant, Solid Waste Plan Fund #401

Responsibility: County, SWAC, Solid Waste Division, Environmental Health Division, Dept of Ecology

Bio-Solids

Objective: Encourage wastewater treatment plants in Grays Harbor to find cooperative solutions to managing and disposing of bio-solids.

Bio-Solids Activities:

1. The County currently defers the management of bio-solids to the Department of Ecology.

Funding Source: Department of Ecology

Responsibility: Department of Ecology

White Goods

Objective: Support the continued reuse or recycling of white goods through the Central Transfer Station, rural transfer stations, and private businesses.

White Goods Activities:

1. The County will maintain updated lists on its Solid Waste Program website of private firms that recycle or reuse white goods.
2. The County will continue to encourage the recycling and reuse of white goods through the educational component of the waste reduction and recycling plan.
3. The County will sponsor recycling events that include white goods collection.
4. The County may subsidize a refrigerant collection program.

Funding Source: CPG Grant, Solid Waste Plan Fund #401

Responsibility: County, Solid Waste Division

Construction Demolition and Land-Clearing (CDL) Waste

Objective: Support private sector efforts that emphasize the reuse of construction demolition and land-clearing wastes over land-filling

Construction Demolition and Land Clearing Waste Activities:

1. The County will maintain updated lists on its Solid Waste Program website of private firms that manage, reuse, and, or dispose of CDL wastes.
2. The County will continue to encourage the reuse, co-generation, and proper disposal of CDL waste through educational component of waste reduction and recycling plan.
3. The Solid Waste Program and the Environmental Health Division will continue to monitor private CDL waste disposal sites regarding their long-term capacity.
4. The County may request technical assistance from local interested parties, the construction industry, and the Washington State Department of Ecology to learn about practices for CDL waste reduction and reuse.

Funding Source: CPG Grant, Solid Waste Enforcement Grant, Solid Waste Plan Fund #401

Responsibility: County, Solid Waste Division, Environmental Health Divisions, Department of Ecology

Asbestos Contaminated Wastes

Objective: Ensure asbestos wastes are disposed in accordance with best management practices.

Asbestos Contaminated Wastes Activities:

1. Continue accepting asbestos wastes at the Central Transfer Station in accordance with state regulations.

Funding Source: Contractor Disposal Fees

Responsibility: County, Solid Waste Contractor

Medical Wastes

Objective: Require the proper collection and disposal of personal medical wastes.

Medical Wastes Activities:

1. Support private haulers of medical waste collection by maintaining updated lists of firms on its Solid Waste Program website.
2. The SWAC will support an outreach program aimed at educating the public about proper disposal of prescription medications.

Funding Source: CPG Grant, Solid Waste Plan Fund #401

Responsibility: County, Solid Waste Division, Environmental Health Division

Waste Tires

Objective: Continue efforts that emphasize proper disposal methods for waste tires.

Waste Tires Activities:

1. The County will incorporate proper waste tire handling into the waste reduction and recycling educational program.
2. The County encourages the use of the Waste Tire Removal Account for sites that contain more than 800 waste tires.
3. The County will allow the piling of waste tires only under permit. The County may require financial assurances to ensure post-closure clean up.

Funding Source: CPG Grant, Solid Waste Enforcement Grant, Solid Waste Plan Fund #401

Responsibility: County, Solid Waste Division, Environmental Health Division

Disaster Waste

Objective: Establish and maintain an emergency management plan for handling wastes during and after disaster situations.

Disaster Waste Activities:

1. LeMay is contractually obligated to provide a backup system for transfer and disposal should there be a disaster, i.e., earthquake or flood. In the past, if a disaster has caused waste that could be classified as a health hazard, the BOCC may pass a resolution on a case-by-case basis, waving the tipping fees at the Central Transfer Station.
2. The County may make free disposal options available to the public during periods of declared emergency to ensure public health.

Funding Source: Solid Waste Plan Fund #401, FEMA

Responsibility: County, Solid Waste Division, Solid Waste Contractors, Environmental Health Division, SWAC

Contracted Collection

Objective: The County and its service provider will maintain effective and efficient collection service that considers fairness, convenience, and accessibility of service for all County citizens.

Contracted Collection Activities:

1. The County will monitor collection programs in the County to evaluate success in meeting the objective.

Funding Source: Solid Waste Plan Fund #401

Responsibility: County, SWAC, Solid Waste Division, Solid Waste Contractors

Municipal Solid Waste Landfill Disposal

Objective: Participate in any future discussions that evaluate the need for a municipal solid waste landfill within Grays Harbor County or a regional facility.

Municipal Solid Waste Landfill Disposal Activities:

1. The SWAC and the Solid Waste Program will monitor County or regional discussions or proposals regarding the study and, or siting of municipal solid waste landfills.

Funding Source: Solid Waste Plan Fund #401

Responsibility: County, SWAC, Solid Waste Division, Environmental Health Division

Waste to Energy Facility

Objective: Participate in any future discussions that evaluate the need for a waste-to-energy facility for municipal solid waste within Grays Harbor County or in the regional.

Waste to Energy Facility Activities:

1. The SWAC and the Solid Waste Program will monitor County or regional discussions or proposals regarding the study and, or siting of a waste-to-energy facility for municipal solid waste.

Funding Source: Solid Waste Plan Fund #401

Responsibility: County, SWAC, Solid Waste Division

Central Transfer Station and Rural Transfer Stations

Objective: Maintain and operate a Central Transfer Station and a system of satellite rural transfer stations that provides cost and operational efficiency, convenience to the public, and opportunities for recycling.

Central Transfer Station and Rural Transfer Stations Activities:

1. The staff will conduct an annual operational review of the Central Transfer Station and its satellite system to evaluate whether the system continues to meet set objectives.
2. The Solid Waste Program and the contracted service provider will monitor the long-term transfer capacity of the system.
3. Add recycled materials drop off areas to the Rural Transfer Stations as soon as capital funds are available.
4. Operate the transfer stations as self-supporting enterprises in accordance with 173-350 WAC. Continue to structure user fees at the existing transfer stations to cover all costs.
5. Complete the leachate collection line from the Central Transfer Station to the City of Aberdeen wastewater collection system.

Funding Source: Solid Waste Plan Fund #401, Contractor Disposal Rates

Responsibility: County, Solid Waste Division, Solid Waste Contractor

Administration and Management

Objective: Continue the present administrative and management structure to solid waste collection, transfer, and disposal.

Administration and Management Activities:

1. Maintain staffing for the Solid Waste Program through the Department of Public Services to plan, administer contracts, and manage the solid waste and recycling system.

2. The SWAC and the Solid Waste Program will explore and implement partnerships with other local agencies and organizations for delivering of outreach and education programs.
3. Continue to monitor the contractual and management provisions in existing operating agreements and permits with all solid waste handling facility operators in the County.
4. The SWAC and the Solid Waste Program annually will evaluate its compliance with planning requirements under state law.
5. The municipalities shall monitor their solid waste programs to ensure compliance with the Solid Waste Management Plan
6. Recruit membership to the Solid Waste Advisory Committee from the municipalities, the Quinault Indian Nation, and commercial accounts.
7. Review and amend if necessary the Solid Waste Advisory Committee by-laws.

Funding Source: CPG Grant, Solid Waste Plan Fund #401, Municipal Budgets

Responsibility: County, SWAC, Solid Waste Division

Table 1: Grays Harbor County Solid Waste Plan Budget (401-000-100)

ACT	EL	OB	SU	Description	2012 Budget
REVENUES					
308	00	00	00	Beginning Cash & Investments	913,553
334	03	14	00	WSDOE CPG Amendment	60,000
334	03	16	00	WSDOE Litter Grant	30,000
343	70	01	00	Tipping Fee – Export	2,600,000
343	70	02	00	Tipping Fee - Operations	650,000
361	11	00	00	Investment Interest	1,500
366	90	00	00	Interfund Miscellaneous Rev	500,000
369	90	00	00	Other Miscellaneous Revenue	1,000
385	00	00	00	Collections of Receivables	0
DEPARTMENT REVENUE TOTAL					4,756,053

ACT	EL	OB	SU	Description	2012 Budget
EXPENDITURES					
508	00	00	00	Ending Cash & Investment	361,938
508	**	**	**	Ending Cash & Investment	361,938
537	00	00	00	Garbage & Solid Waste	
	60	00	00	Operations – Contracted	
		49	00	Miscellaneous Export Services	2,600,000
		40	**	SUPPLIES	2,600,000
	60	**	**	Operations-Contracted	2,600,000
	80	00	00	Operations-General	
		12	00	Salaries & Wages	600,798
		13	00	Extra Help	20,000
		14	00	Overtime	25,000
		10	**	SALARIES & WAGES	645,798
		20	00	Personnel Benefits	261,590
		20	**	Personnel Benefits	261,590
		31	00	Supplies	30,000
		31	01	Supplies I/F	1,000
		32	00	Fuel Consumed	1,000
		35	00	Small Tools & Minor Equipment	10,000
		30	**	SUPPLIES	41,000
		41	00	Professional Services	50,000
		41	01	Professional Services I/F	125,000
		41	02	I/F CS Computer Services	66,450
		41	03	I/F CS Communications	3,240
		42	00	Communication	10,000
		42	01	Communication I/F	2,000
		43	00	Travel	6,000
		44	00	Advertising	5,000
		45	00	Rentals	10,000
		45	01	Rentals I/F	125,000
		46	00	Insurance Services I/F	28,037
537	80	46	01	Insurance Premiums I/F	0
		47	00	Utilities Services	60,000
		48	00	Repairs & Maintenance	30,000
		49	00	Miscellaneous	25,000
		49	01	Abatement Expenses	100,000
		49	02	Household Hazardous Waste Facility	175,000
		49	07	Miscellaneous Clean-Ups	25,000
		40	**	OTHER SERVICES & CHARGES	845,727
	80	**	**	Operations-General	1,794,115
537	**	**	**	Garbage & Solid Waste	4,394,115

ACT	EL	OB	SU	Description	2012 Budget
585	00	00	00	Disbursement of Accrued Expenditures	
		00	00	Disbursement of Accrued Expenditures	0
585	**	**	**	Disbursement of Accrued Expenditures	0
594	00	00	00	Capital Outlay	
	37	00	00	Garbage/Solid Waste	
		64	00	Machinery & Equipment	50,000
		60	**	CAPITAL OUTLAYS	50,000
	37	**	**	Garbage/Solid Waste	50,000
594	**	**	**	Capital Outlay	50,000
DEPARTMENT EXPENDITURE TOTAL					4,756,053

CHAPTER 3

SOLID WASTE HANDLING METHODS & SYSTEMS

INVENTORY OF EXISTING FACILITIES, TRANSFER STATIONS & CLOSED LANDFILLS

Central Transfer Station

The purpose of the Grays Harbor County Central Transfer Station is to provide for the collection and transfer of wastes to out-of-county facilities. LeMay Enterprises, Inc. built the station in 1994 at the former Aberdeen Landfill location.

Grays Harbor Central Transfer Station

4201 Olympic Highway
Aberdeen
(360) 538-7080
Monday-Friday, 8:00 AM to 5:00 PM
Saturday, 8:00 to 4:00 PM
Closed Sundays and Holidays

The station is a full-service facility accepting deliveries from private businesses, commercial collection route vehicles, commercial drop box vehicles, County rural transfer stations, and the self-hauling public. The station is a covered facility, with a tipping floor for direct refuse unloading. A wheel-loader breaks down and places wastes into top-loading, 100-cubic-yard intermodal containers. A waste compaction, or tamping, arm compacts wastes to an average density of about 550 pounds per cubic yard once in the containers. 100-cubic-yard transfer trailers typically weigh about 27.5 tons. The facility has a single transfer trailer and container loading position, with multiple delivery vehicle unloading stalls. The tipping floor area provides some in-station waste storage.

LeMay Enterprises, Inc., owns and operates the Central Transfer Station through a long-term operations agreement with the county. The agreement designates the privately owned facility as the main transfer point for the county. In return, the county retains rate control authority, agrees to operate the facility for a minimum of 20 years, and guarantees access to the self-haul public, private businesses, and commercial haulers, and the loading of wastes for long-haul transport.

The design and operation of the facility complies with the State of Washington Minimum Functional Standards for Solid Waste Handling (WAC 173-304).

Rural Transfer Stations

The existing rural waste transfer system includes three drop-box stations constructed by the County in 1978. While the County owns the rural stations, LeMay Enterprises operate them for the public. The rural sites accept most materials accepted at the Central Transfer Station; however, there are no recycling drop boxes available at this time.

All three rural stations are similar in design and operation. Each consists of a covered single bay steel building and uses a single Marathon Ram-Jet hydraulic compactor unit for densifying wastes and loading them into 40-cubic-yard-capacity containers for transfer to the Central Transfer Station. The tipping floor is located above the compactor unit,

Rural Transfer Stations

Elma Transfer Station

46 South Union Road, Elma
Open Saturdays 9:00 AM to 4:30 PM

Hogan's Corner Transfer Station

2174 State Hwy. 109, Ocean Shores
Open Sundays & Tuesday, 9:00 AM to 4:30 PM

Ocosta (Westport) Transfer Station

2179 State Hwy 105, Westport
Open Sundays 9:00 AM to 4:30 PM

providing for direct unloading into the hopper. The tipping area contains a single-vehicle unloading stall and an attendant's facility.

Closed Landfills

The Aberdeen and Hoquiam landfills are closed.

Household Hazardous Waste Facility

See discussion under Chapter 5, Moderate Risk Waste Management.

Surveillance and Control

LeMay Enterprises, Inc. (LeMay) and its employees operate all transfer stations within the County. The Environmental Health Division (EHD) monitors the closed landfill for surface and groundwater contamination.

Leachate from the facility continues to be collected in a piping system that surrounds the landfill cap and gravity-feeds to a collection tank. Currently the tank is pumped as necessary and trucked to the Aberdeen Sewage Treatment Plant. The County projects that by 2014 the leachate line will be routed under the Wishkah River and connect directly to the sewage treatment plant.

SERVICE LEVELS

The Central Transfer Station is a full-service facility accepting deliveries from private businesses, commercial collection route vehicles, commercial drop box vehicles, rural transfer stations and self-hauling public.

Collection Systems – Franchises, Self-Haul, Municipal

LeMay, Inc. collects solid waste in eight Grays Harbor County municipalities: Aberdeen, Cosmopolis, Elma, McCleary, Montesano, Oakville, Ocean Shores, and Westport. Hometown Sanitation, LLC. collects solid waste within the City of Hoquiam. Solid waste in unincorporated Grays Harbor County west of the Wynoochee River is collected by LeMay, Inc. d.b.a. Harbor Disposal; east of the Wynoochee River collection is by LeMay d.b.a. EGH Disposal.

Solid waste curbside collection is mandatory within all municipalities of the County: Aberdeen, Cosmopolis, Elma, Hoquiam, McCleary, Montesano, Oakville (to begin December 2007), Ocean Shores and Westport. Collection is not mandatory within unincorporated Grays Harbor County.

All transfer stations within the County accept self-hauled municipal solid waste.

Construction Demolition and Landclearing Debris (CDL)

Construction Demolition and Landclearing debris (CDL) consists primarily of materials from building demolition or construction projects. Landclearing debris, also called wastes of development projects is currently recycled or disposed of at the Central Transfer Station and/or the Stafford Creek Woodwaste facility. CDL waste is also disposed of onsite or on other properties.

Import/Export

Grays Harbor County does not operate a municipal solid waste landfill. All municipal solid waste generated in the county is processed at an on-site transfer station. Once processed, solid waste is trucked to Centralia and boards a train to Klickitat County in Eastern Washington. The garbage is then buried at the Roosevelt Regional Landfill, owned by Allied Waste Systems Inc.

The State of Washington Parks and Recreation Commission collects solid waste from state parks located within Grays Harbor County. For more than 25 years, the Grays Harbor County Commissioners have supported Operation Shore Patrol by covering fees for dump boxes and debris disposal.

The Quinault Tribe operates a solid waste collection service on the Quinault Reservation in the northwest portion of the County and in Taholah.

PERMITS REQUIRED AND ADMINISTRATION METHODS

Washington Utilities and Transportation Commission (WUTC) Chapter 81.77 RCW delegates the regulation of solid waste collection. Regulation is provided through the issuance of Certificates of Convenience and Necessity, commonly referred to as G-permits. These permits entitle a hauler to provide solid waste collection services within a specified geographic area. Collection services may include garbage, refuse, recyclable materials, and demolition debris.

Grays Harbor County Environmental Health Division (EHD), through a permit and approval process, regulates the construction and operation of all solid waste facilities in Grays Harbor County.

COSTS OF OPERATION AND MAINTENANCE

The County sets user fees at the Central Transfer Station and rural stations. These rates recover the full costs of operating the stations and the disposal program.

FACILITIES SITING REVIEW (70.95.165)

There is no need for a siting review process because there are no plans to construct a new municipal solid waste disposal facility in the county over the next twenty years.

CHAPTER 4

WASTE REDUCTION, REUSE & RECYCLING

WASTE REDUCTION

Waste Reduction is the State's highest priority in the hierarchy of solid waste management. The best way to manage solid waste is to not generate waste materials. Waste or source-reduction programs may be as broad and diverse as manufacturing earth-friendly products or encouraging selective purchasing and reuse patterns among consumers. Effective waste reduction programs result in broad-ranging benefits, such as natural resource conservation, reduced energy consumption, and reduced air, water, and land pollution.

Waste reduction programs are currently focused on classroom education and technical assistance to businesses and industry. The education program is directed to the primary and secondary school levels within the County. Waste reduction concepts are incorporated into existing curricula whenever possible. There is also a reuse program at the Moderate Risk Waste Facility, which reduces disposal volumes.

The effects of waste reduction can only be inferred by lower tonnages appearing in the system. At this level, an effective approach is to make the cost of waste production high, offering a carrot and stick approach.

Waste Reduction Alternatives

Citizens should be educated on waste reduction alternatives:

- Encourage citizens and businesses to minimize excessive purchasing.
- Reuse materials such as clothing, furniture, building materials, industrial by-products, etc. Second-hand and thrift stores, commercial and industrial materials exchange organizations and yard sales are all examples of supporting the conservation of resources by maximizing their use. The County is an active participant in the www.2good2toss.com website, a free service for residents to exchange reusable items that would otherwise end up in our landfill.
- Implement programs to businesses and industry to provide information on proper disposition of waste materials and waste reduction strategies. Educate during waste audits.
- Provide financial incentive through variable rates application: higher rates for higher volumes / lower rates for active participation in waste reduction.
- Provide educational programs at schools, youth organizations, and volunteer organizations.
- Expand the Comprehensive Education, Information, and Promotion Program by the County, municipalities, recycling industry, and service providers; create Public/Private programs and Interdepartmental coordination to demonstrate the relationship between the environment and our impacts.

- Adopt and implement procurement policies specific to reuse and selection of materials that contain recycled products.

Recycling

Recycling of solid waste is the state's second highest priority for solid waste management. Source separation has been considered the most economical way of achieving higher rates, although commingling of recyclable materials and pick lines are often the most suitable means in certain areas. Recycling options include drop-off depots, buy-back centers, curbside collection programs, apartment collection programs, commercial collection programs, and composting.

It is difficult to assess a County's recycling rate for a number of reasons, including the fact that some recyclable materials that are collected qualify as waste stream diversion but are never reported to the County or State. Grays Harbor County provides a curbside recycle program, glass collection sites, transfer stations, and re-use programs. Grays Harbor County will establish a baseline recycling rate for the pre co-mingled program.

Recycling Services

Central Transfer Station

The Central Transfer Station provides recycling drop-off of the following materials:

Table 2: Services and Fees for the Central Transfer Station (Effective January 1, 2006)

Recycling Services:	Charge
Yard Waste (clean branches, leaves and grass)	\$35.00
Clean Wood (no garbage, plastic, metal, etc)	\$35.00
Cardboard (no wax, food, oil, etc.)	No charge
Newspaper (inserts ok, no magazines, or other paper)	No charge
Mixed Paper (catalogs, magazines, cereal boxes, etc.)	No charge
Tin Cans (clean and labels removed)	No charge
Aluminum Cans (call for current price for buy back)	No charge
Glass (green, brown, clear, rinse and remove caps)	No charge
Plastic Bottles	No charge

The rural transfer stations have not been able to provide full recycling drop-off service but do accept some items.¹ Limited drop-box facilities are provided in several locations throughout the County. Materials collected are newspaper, glass, plastics, cardboard, tin and aluminum cans. Oil is recycled at the Moderate Risk Waste (MRW) facility, as well as throughout the County at various locations. The MRW ships about 2,000 pounds of used oil per quarter for re-refining or reuse as fuel.

¹ http://www.co.grays-harbor.wa.us/info/pub_svcs/Recycle/DisposalMiscItems.htm

Buy-back centers purchase recyclable materials from the public, private haulers, and commercial sources. Items commonly purchased are aluminum cans, ferrous metals, corrugated containers, and large volumes of paper products. Collected materials are compacted, baled, or densified for shipment to end markets. The general public and commercial operations may either deliver recyclables to the buy-back center during business hours or use drop boxes provided after normal working hours. At this time it is problematic to determine the amounts that are moving through these centers.

Re-Use Centers

- **White goods:** Previously owned major household appliances such as washers, dryers, and refrigerators are currently accepted at the County's rural transfer stations and at the Central Transfer Station for a fee. White goods are accepted during the County's Spring Clean-ups. Scrap metal yards throughout the County also accept ferrous and non-ferrous metals.
- **Construction and demolition materials:** Second Use Building Materials, Inc. diverts reusable building materials from landfills. They carry used and discounted lumber, beams, cabinets, doors, windows, plumbing, electrical, hardwood flooring, architectural antiques and more. They offer free pick up of serviceable material and will pay cash for higher value items. There is a store located in Olympia.
- **Asphalt, concrete, brick, and fill material:** MJR Ltd. located in North Beach and C & A Recycling located at Charlie Creek Road ½ mile south of Aberdeen.
- **Disposal of industrial by-products, surplus materials and wastes:** Industrial Materials Exchange (IMEX), sponsored by the Seattle-King County Health Department, is a free information exchange designed to help businesses and organizations find alternatives to disposal or industrial by-products, surplus materials and wastes. IMEX's goal is to conserve energy, resources and landfill space.
- **Reusable Building Materials Exchange:** WA State Department of Ecology: Coordinates an interactive web page, the Reusable Building Materials Exchange for contractors, home remodelers and other interested persons to exchange small or large quantities of used or surplus building materials.
- **Used furniture, toys, clothes, and house wares:** Hold a garage sale, donate these materials to a local charity organization or second hand store in your area, or advertise for give-away or resell on www.2good2toss.com.
- **Batteries:** Grays Harbor Moderate Risk Waste Facility.

Curbside Collection

Curbside collection is considered the most effective method for recovering recyclable material from the residential sector. In 2006 the County Commissioners approved the implementation of single cart recycling. All participating cities in Grays Harbor approved the initial rate increase and 95-gallon carts began delivery in January 2007. Residents are provided with a 95-gallon cart for co-mingled collection of paper, plastic bottles, cardboard, tin and aluminum cans. This collection service is

offered every-other-week throughout Grays Harbor. Glass is not accepted at the curb, but glass containers have been strategically placed throughout the County.

Glass Collection Stations

Glass is no longer collected at the curb in Grays Harbor; however, residents may recycle glass at one of the County's conveniently located recycle stations. Glass must be separated by color and deposited in the appropriate slot:

Business/Commercial Collection

LeMay is the primary commercial operator in Grays Harbor County, offering collection of corrugated containers, and co-mingled recyclables. Current demographics do not support the development of a comprehensive non-residential recycling program, and there is no need to monitor the collection of source separated waste at these sites.

A pick-line sorts waste through select loads (approximately 80% of self-hauled loads) at the Central Transfer Station. Recyclables are removed by three full-time employees and one part-time employee.

A cornerstone of the recycling efforts in Grays Harbor County is the Recycling Outreach Coordinator. This individual is responsible for ensuring that the people of the community, businesses, agencies, departments, and school systems are aware of the goals of this plan and for providing assistance in accessing the services available. The Coordinator's focus is largely on K-12 education, from classroom presentations to assisting the teachers with development of Waste Education strategies that can be incorporated into interdisciplinary approaches.

Composting

Composting is a form of recycling, transforming waste materials into usable or marketable materials for use other than landfill disposal or incineration RCW 70.95.030(10). Composting can be an effective tool in managing certain waste materials, because it offers a means to generate a useful product while diverting significant amounts of organic materials away from landfills. Composting programs can be designed to handle yard wastes or the organic portion of municipal solid wastes, such as food and wood waste, or even paper.

Backyard or home composting is a common practice in rural areas and is increasing in suburban areas through promotional and instructive programs offered by waste reduction and cooperative groups.

Large-scale composting programs are effective in certain areas, although civil actions against decomposition odors have repressed the development of more operations. Any consideration of new composting facilities must evaluate potential impacts to nearby residential development and the environment to avoid future lawsuits and forced closure. This is an area where legislation

concerning the rights of established property owners could impact solid waste management issues favorably.

Composting operations in Grays Harbor County are limited. There is some composting of cranberries and residents have responded to backyard composting assistance, but there are no large enterprises in operation or in the planning stages at this time. The Ocean Shores and Westport Sewage Treatment Plants compost their biosolids.

The recycling of yard waste (clean branches, leaves and grass) is currently available at the Central Transfer Station for a fee of \$35.00. Collected materials go to the Silver Springs Organics, a composting facility located in Thurston County.

Markets for composting are scarce in a County dominated by rural areas. Only large-scale compost operations would be able to develop a distribution system that exceeded the County boundaries. It is unlikely that Grays Harbor County could efficiently handle enough feedstock to support a large-scale operation that would result in a balanced formula for marketable compost.

The County is currently contracting with Washington State University Master Gardeners to provide training and demonstrations related to composition and yard waste reduction. The Master Gardiners also sell composting bins to the public at a reduced rate subsidized by the County.

Wood-Waste Hog Fuel

Wood-waste processors accept untreated, unpainted woody debris from construction and land-clearing operations, remove contaminants such as rocks and nails, and shred it into coarse chips that are sold as Hog Fuel (presumably named after the grinding machine, known as a hog), for use in mud-control and other applications.

Sierra Pacific Industries

Sierra Pacific recently installed a 105-foot boiler assembly designed to provide steam to the plant that would produce 30 megawatts of power. It is fired with 40-50 tons of hog fuel (wood waste) per hour².

Stafford Creek Wood Waste

Stafford Creek Wood Waste operates a limited purpose landfill that accepts wood waste debris.

² www.lni.wa.gov/TradesLicensing/Boilers/SpecNotice/Newsletter/07winter.asp

CHAPTER 5 MODERATE RISK WASTE MANAGEMENT

OVERVIEW

Moderate risk waste includes two categories of wastes that have hazardous characteristics but are exempt from regulation under Chapter 70.105 RCW, Hazardous Waste Management.

The first category consists of household hazardous wastes (HHW). These are materials used in the home identified that the Department of Ecology (ECY) as flammable, corrosive, toxic, or reactive when discarded. Most homes in Grays Harbor County contain one or more types of HHW.

Table 3: Hazardous Household Material Groups

Group Name	Examples
Repair and Remodeling	Adhesives, oil-based paint, thinner, epoxy, paint stripper
Cleaning Agents	Oven cleaners, deck cleaners, degreasers, toilet cleaners
Pesticides & Fertilizers	Wood preservatives, mole killer, herbicides, pesticides
Auto, Boat & Equip.	Batteries, paint, gasoline, oil, antifreeze, solvents
Hobby and Recreation	Photo and pool chemicals, glaze, paint, white gas
Miscellaneous	Ammunition, fireworks, asbestos

The second category of moderate risk wastes are those produced by small quantity generators (SQG). These are non-residential wastes produced at a rate of less than 220 pounds per month or per batch (or 2.2 pounds per month or per batch of extremely hazardous waste) and accumulate less than 2,200 pounds of hazardous waste onsite (or 22 pounds of extremely hazardous waste). There are approximately 250 possible SQG in Grays Harbor County registered with ECY. These businesses pay a Hazardous Waste Generation Fee.

Moderate risk wastes created through households and SQG are conditionally exempt from state and federal regulation if generators manage and dispose of them properly.

Grays Harbor County prepared its first *Moderate Risk Waste Management Plan* in 1991. The 2001 *Comprehensive Solid Waste Management Plan* updated information about existing conditions and recommended three actions: continue operation of the Household Hazardous Waste Facility, improve services to meet county demands, and update the 1991 plan.

The intent of this chapter is to meet the planning requirements mandated by RCW 70.105.220. This section requires each county to develop a plan or program to manage moderate risk waste generated within its jurisdiction. In addition to providing background data, the county must develop objectives and recommended actions for ongoing household collection, public education and

involvement, small business technical assistance, small business collection assistance, and enforcement. RCW 70.951.020 outlines requirements for managing a used motor oil collection element in its planning document.

OBJECTIVES/RECOMMENDATIONS FOR MODERATE RISK WASTE

Grays Harbor County ranks moderate risk waste management as being one of the top five priorities of this plan.

Objective: Encourage the proper handling and disposal of household hazardous waste, including the recycling of grease and oil.

Moderate Risk Waste Activities:

1. Grays Harbor County will continue to operate and improve the Household Hazardous Waste Facility at the Central Transfer Station for county residential customers and small quantity generators.
2. The County will continue to provide public education and small business collection technical assistance through the Grays Harbor County website at: http://www.co.grays-harbor.wa.us/info/pub_svcs/Recycle/HouseHazWaste.htm
3. The SWAC and the County will explore and support environmentally preferable purchasing (EPP) programs that encourage procurement of goods and services that cause less harm to humans and the environment. EPP efforts may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of a product or service.
4. The SWAC and the County will explore and support product stewardship programs involved in the design, production, sale, and use of products that impact human health in the natural environment.
5. The SWAC will annually evaluate the Household Hazardous Waste Facility program to decide if it continues to meet County demands. The SWAC may make recommendations to the Solid Waste Division regarding potential facility and program changes.

During annual Solid Waste Review, the SWAC will review moderate risk waste management collection activities and evaluate need to improve the program.

Funding Source: CPG Grant, Solid Waste Plan Fund #401

Responsibility: SWAC, Solid Waste Division, Solid Waste Contractor

CHARACTERISTICS OF THE MODERATE RISK WASTE STREAM

Moderate Risk Waste Programs

Household and Small Business Collection

The County and LeMay Enterprises jointly operate the Household Hazardous Waste Facility at the Central Transfer Station to collect moderate risk waste from households and SQG. This facility, operating since 1998, collects moderate risk wastes free of charge from county residents every Wednesday and the first Saturday of each month. Residents may drop-off up to 15 gallons each visit. There were an estimated 1,800 such drop-off visits in 2010. The facility also accepts wastes from SQG for a fee and by appointment only when it is not open to residential collection. Approximately 50 business drop-offs occurred at the facility in 2010.

Household Hazardous Waste Facility
4201 Olympic Highway
Aberdeen
(360) 538-7080
9 AM to 3:30 PM Wednesdays & 1st Saturday
of each month

The physical layout of the facility currently consists of an open-aired building over a concrete surface. The County has received an ECY Coordinated Prevention Grant to make improvements to the facility in late 2011 that will install walls, roll-up doors, and a ventilation system.

Materials accepted at the facility include paints (oil and latex), thinners, strippers, solvents, fuels, herbicides, pesticides, fungicides, fertilizers, oil, antifreeze, brake fluid, grease, de-greasers, polishes and cleaners, and household cleaners. The county currently contracts with PSC Environmental Services to dispose of these collected wastes.

Table 2 summarizes quantities of moderate risk waste collected at the Household Hazardous Waste Facility from 2008 through 2010. The increase in quantities from one year to the next demonstrates a growing community use of the facility. However, a substantial unknown quantity of HHW probably continues to enter the municipal solid waste stream.

Table 2: Moderate Risk Quantities Collected through the Household Hazardous Waste Facility

Waste Type	2008				2009				2010			
	SQG		HHW		SQG		HHW		SQG		HHW	
	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.
Antifreeze	R	468	R	2126	R	144	R	2,934	R	68	R	3,011
Oil non-contaminated	R	309	R	3,539	R	564	R	4,734	R	133	R	2,309
Aerosols	E	3,521	E	5,462	E	1,479	E	5,664	E	1,197	E	5,540
Acids	T	100	T	1,145	T	120	T	753	T	245	T	947
Bases	T	695	T	1,465	T	698	T	916	T	223	T	1,139
Batteries (Auto Lead Acid)	R	420	R	18,480	R	840	R	12,075	R	805	R	4,027
Batteries (Nicad/NIMH/Litium)	R	76	R	134	R	372	R	85	R	387	R	130

Waste Type	2008				2009				2010			
	SQG		HHW		SQG		HHW		SQG		HHW	
	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.
Batteries (Household Dry Cell)	H	139	H	572	H	403	H	2,073	H	126	H	1,118
Flammable Solids					O	3					O	19
Flammable Liquids	E	4,050	E	9,983	E	4,111	E	11,763	E	1,743	E	11,059
Flammable Liquid – Poison			O	216	O	20					O	427
Flammable Liquid – (aerosol cans)	O	28	O	289			O	285				
Mercury – Fluorescent Tubes/CFLs	R	56	R	1,126	R	9	R	1,260				
Mercury Thermometers, Thermostats											R	117
Non-Regulated Liquids												
Oil with PCBs (Ballasts)	H	101			T	13			H	231	H	721
Organic Peroxides	O	5			O	1	O	38	O	28	O	18
Oxidizers	T	18	T	222	T	1,044	T	110	T	64	T	436
Paint – latex	T	3,915	T	31,799	T	3,326	T	39,332	T	3,604	T	41,485
Paint – oil based	E	9,586	E	30,095	E	3,869	E	28,988	E	3,738	E	28,648
Pesticide/Poison Liquid	O	130	O	1,550	O	2	O	1,655	O	207	O	2,633
Pesticide/Poison Solids	O	196	O	1,954	O	61	O	1,493	O	303	O	1,025
Photo/Silver Fixer	R	698	R	276	R	458	R	63	T	160	T	223
Reactives	T	6					T	133	T	5	T	14
Materials Recycled (propane tanks)	R	6	R	125	R	1	R	227				
Petroleum soaked pads and brooms	T	900			T	423					T	194

Differences in totals from 2009 to 2010 reflect changes required by ECY in the reporting format

Disposal Method Key: U – Reused R – Recycled E – Energy Recovery
T – Treated / Solid Waste landfill W – Wastewater O – Other Methods: Incineration
S – Solid waste landfill untreated H – Hazardous waste facility

Used Oil Collection Facilities

The Household Hazardous Waste Facility also coordinates the self-service used motor oil collection tanks. Residents can find these tanks located throughout the county for easy collection opportunities. The tanks are accessible 24 hours a day and at no cost to the public. There are businesses in the county that collect used motor oil as well. Table 3 below lists County supported collection sites.

Table 3: County-owned motor oil collection facilities

Location	Address
Aberdeen	Household Hazardous Waste Facility – Central Transfer Station, 4201 Olympic Highway East
Elma	216 E. Martin Street – Behind Cut-Rate Auto Parts in alley
Hoquiam	600 Simpson Avenue – Mahoney's Chevron
Montesano	222 E. Wynoochee Avenue – Behind bowling alley in parking lot
Oakville	303 E. Pine Street – Next to City Barn
Ocean Shores	710 Point Brown Avenue NE – Municipal Court, next to RV dump
Pacific Beach	3194 Ocean Beach Road – Sewer Treatment Plan
Westport	326 E. Lamb Street – Port of Grays Harbor Office

As with household hazardous waste, community support for used motor oil recycling efforts continues to grow. Used motor oil recycling increased by 37,599 pounds between 2009 and 2010, an increase of 21.5%. This does not include used motor oil collected at non-county supported sites.

Table 4: Used Motor Oil Collection, 2009 and 2010

2009 – TOTAL 175,040 lbs		2010 – TOTAL 212,639 lbs	
Collection Point	Quantity Collected in Pounds	Collection Point	Quantity Collected in Pounds
Central Transfer Station	34,743	Central Transfer Station	48,201
Montesano Park & Ride	28,305	Montesano Park & Ride	36,297
Elma	23,701	Elma	45,473
Mikes Market	17,286	Mikes Market	7585
Oakville City Barn	9213	Oakville City Barn	12,210
Hoquiam	15,037	Hoquiam	17,834
Port of Grays Harbor	34,610	Port of Grays Harbor	39,849
Municipal Court	1,850	Municipal Court	3700
Treatment Plant	1,295	Treatment Plant	1480

Public Education and Small Business Technical Assistance

Grays Harbor County maintains a website that provides the public and small businesses with general information about moderate risk waste, its disposal programs, and product alternatives.

Other Moderate Risk Waste Programs

Electronics Disposal

There are four collection points in the Aberdeen area currently available to the public for safely disposing of used electronic equipments such as computers, monitors, and televisions: Staples, the Salvation Army, Tek EaZe, and LeMay Enterprises, Inc. at the Central Transfer Station.

Materials-Exchange Program

The materials-exchange program is a reuse center for residents of the county. Many items that enter the HHW Facility are in good condition. The facility staff designates these items for reuse and stocks them in the material exchange locker. Residents may browse the locker and take these items at no charge. Facility staff checks items before placed in the locker. Residents may browse the locker and take items at no charge; however, residents must sign a release form for the items taken. The materials-exchange locker is open to residents on collection days. Latex paint, pesticides, fertilizers, and cleansers are the most commonly reused items.

Training, Health, and Safety

According to OSHA 29 CFR 1910.120(e), all employees working with hazardous waste shall have a minimum of 40 hours training in hazardous waste operations and emergency response.

Furthermore, employees need to attend an annual eight-hour refresher course. All technician-level positions require additional training for packaging and shipping in accordance with US Department of Transportation standards.

Health and safety training and equipment are available to all employees that work in the HHW Facility. The county requires respirator testing semi-annually and logged according the facility operations plan. All technician-level employees receive medical monitoring. The employer provides all health and safety training and protective equipment.

HAZARDOUS WASTE INVENTORY

Counties are required to include an inventory provided by ECY of generators of dangerous waste generators and facilities, remedial action sites, list of hazardous waste transporters which service businesses within the jurisdiction, and zones designated for hazardous waste treatments, storage, and disposal (TSD).

Dangerous Waste Generators

Dangerous waste generators are businesses in the County that have an EPA/State identification number issued under Chapter 173-303 WAC.

ECY records show that the following numbers of businesses and institutions in Grays Harbor County are registered as hazardous waste generators as of November 2008:

- 5 Large Quantity Generators (LQG) in Cosmopolis, Elma, Grayland, Hoquiam, and Westport
- 5 Medium Quantity Generators (MQG) in Aberdeen, Elma, and Hoquiam
- 21 Small Quantity Generators (SQG) in Aberdeen, Elma, Hoquiam, McCleary, Montesano, and Westport
- 13 businesses and institutions with EPA or state identification numbers but that did not generate waste in the most recent year

None of these facilities had on-site treatment, storage, or disposal permits or received hazardous wastes from off-site sources.

Remedial Action Sites

ECY conducts Site Hazard Assessments for suspected contaminated properties and includes those confirmed as a potential threat on its Hazardous Sites List. This list also ranks each property in relation to the level of threat present at other sites in the state. A rank of one represents the highest

level of concern and a rank of five the lowest. Currently there are fifteen such sites within Grays Harbor County on the Hazardous Sites List.

Hazardous Waste Transporters and Facilities

There are no Grays Harbor County-based companies registered with ECY that transport or recycle, treat, store, and/or dispose of hazardous wastes.

MODERATE RISK WASTE REGULATORY FRAMEWORK

Federal and state regulations create a large regulatory framework governing the handling and disposal of hazardous wastes within the county. Fewer regulations, however, focus on moderate risk wastes.

The primary legislation governing moderate risk waste is Chapter 70.105 RCW, Hazardous Wastes Management. Under RCW 70.105.220, the state places the responsibility for managing moderate risk wastes on local governments. In Grays Harbor County, the cities rely on the county to meet this provision through the Solid Waste Management Plan.

RCW 70.105.225 also requires local governments to designate zones for the siting of hazardous waste facilities in accordance with criteria developed by ECY. Jurisdictions adopting such regulations within the county include Aberdeen, Cosmopolis, Elma, Hoquiam, McCleary, Montesano, Oakville, Ocean Shores, and Westport. Grays Harbor County has not adopted an ordinance as of 2011.

Section 8.28.040 of the Grays Harbor County Code designates specific disposal sites in the county for solid waste. All solid waste with certain exceptions generated in the county must be disposed at these sites; hazardous waste is one such excluded waste. Section 8.28.050 governs the unlawful disposal of solid waste.

CHAPTER 6 CHARACTERIZATION OF THE WASTE STREAM

MUNICIPAL SOLID WASTE

WAC 173-350-100 defines municipal solid waste (MSW) as a subset of solid waste that includes unsegregated garbage, refuse, and similar solid waste material discarded from residential, commercial, institutional, and industrial sources and community activities. The term also includes residual material after the separation of recyclables.

MSW does not include

- Dangerous wastes other than wastes excluded from the requirements of chapter 173-303 WAC, Dangerous waste regulations and in WAC 173-303-071 such as household hazardous wastes
- Any solid waste, including contaminated soil and debris, resulting from response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601), chapter 70.105D RCW, Hazardous waste cleanup – Model Toxics Control Act, chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation or a remedial action taken under those rules
- Mixed or segregated recyclable material that has been source-separated from garbage, refuse and similar solid waste

MSW Composition

Grays Harbor County has never conducted a study about the composition of its waste stream; however, estimates are available from studies prepared by the US Environmental Protection Agency (EPA).

EPA estimated in its *Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2010* that residential waste comprised 55 to 65 percent of total MSW generated in residences across the country. Wastes from commercial businesses and institutions, such as schools and hospitals, made up the remaining 35 to 45 percent of MSW.

Organic materials make up nearly 60 percent of MSW quantities by weight. These materials include paper and paperboard products, yard trimmings, and food scraps. Plastics are the next largest single waste product, followed by rubber, leather, and textiles, metals, wood, glass, and other.

Table 4. Estimate of Total MSW Stream, Percent of Total Tons before Recycling, 2010

Type of MSW	Percent
Paper and paperboard products	28.5%
Yard trimmings	13.4%

Type of MSW	Percent
Food scraps	13.9%
Plastics	12.4%
Metals	9.0%
Rubber, leather, and textiles	8.4%
Wood	6.4%
Glass	4.6%
Other	3.4%

MSW Generation Nationwide

The same EPA study also provided nationwide estimates for MSW generation.

The average US per capita generation of MSW in 2010 was 4.43 pounds per day, or 0.80 ton per year. Recycling and composting removed 1.51 pounds per capita per day, or 0.27 ton per year. Eventually, 2.92 pounds per day, or 0.53 tons per year, goes into landfills.

Nationwide, 54.3% of the waste stream ended up in landfill. Of the remainder, recovery removed 34.0%, and combustion with energy recovery removed 11.7%.

MSW Generation in Grays Harbor County

Grays Harbor County and LeMay Enterprise, Inc. maintains records of total tonnage of MSW brought to the Central Transfer Station for export and recycling. The table on the next page accounts for the total county MSW for the years 2005 through 2010.

Table 23 reports both total and per capita tonnage generated in Grays Harbor County. It is interesting to note how the per capita MSW generation rates in the county resemble the nationwide rates in the EPA study. However, recycling rates, though steadily growing, fall far below the nationwide estimate.

Table 5. MSW Total and Per Capita Tonnage as Reported at Central Transfer Station, 2005-2010

Total Tonnage	2005	2006	2007	2008	2009	2010
Exported for land disposal	56,321	57,509	60,481	60,234	51,869	52,648
Collected through recycling	1,503	1,483	2,562	3,304	3,517	3,664
Total tons generated	57,824	58,992	63,043	63,538	55,386	56,312

Per Capita Tonnage	2005	2006	2007	2008	2009	2010
Exported for land disposal	0.81	0.82	0.85	0.85	0.73	0.74
Collected through recycling	0.02	0.02	0.04	0.05	0.05	0.05
Total tons generated per capita	0.83	0.84	0.89	0.90	0.78	0.79

Although there is no data specific to MSW generation in the incorporated versus unincorporated areas, Table 24 estimates the waste flow based on population.

Table 6: Total Estimated Annual Tonnage of MSW Generated within Grays Harbor County based on EPA Per Capita National Averages and 2007 County Population

Area	2010	Total Annual Tons		
	Population	Generated	Recycled	Disposed
Grays Harbor County (Total)	71,600	56,312	3,664	52,648
Unincorporated (Total)	28,445	22,371	1,456	20,916
Incorporated (Total)	43,155	33,941	2,208	31,732
Aberdeen	16,450	12,938	842	12,096
Cosmopolis	1,645	1,294	84	1,210
Elma	3,120	2,454	160	2,294
Hoquiam	8,770	6,897	449	6,449
McCleary	1,565	1,231	80	1,151
Montesano	3,605	2,835	184	2,651
Oakville	715	562	37	526
Ocean Shores	4,940	3,885	253	3,632
Westport	2,345	1,844	120	1,724

Countywide Trends

While recycling remains below the national average, it should be noted that, the county introduced the highly popular co-mingled recycling program in 2007. Even without a full year behind the program, the results for 2007 show an increase in annual recycling tonnage from 1,483 to around 2,562 tons, an increase to .04 tons per person per year.

If people in Grays Harbor County continue to generate 0.81 ton of solid waste annually, it is possible to estimate the future total tonnage of the waste stream using the OFM Growth Management projections. In terms of population and waste stream tonnage, Grays Harbor County has been following the high growth rate.

Table 7: Low, Intermediate, and High Projections for Total Waste Stream, 2005 through 2025

Projection	2005	2010	2015	2020	2025
Low population growth	62,916	63,540	64,492	65,279	65,775
Total tons generated	50,962	51,467	52,239	52,876	53,278
Intermediate population growth	66,490	68,878	71,761	74,605	77,269
Total tons generated	53,857	55,791	58,126	60,430	62,588
High population growth	70,064	74,216	79,027	83,931	88,763
Total tons generated	56,752	60,115	64,012	67,984	71,898

Special Wastes

Special wastes include those wastes that fall outside the category of MSW because they require separate handling and/or disposal. Special wastes of particular interest to Grays Harbor County include wood waste, industrial solid waste, demolition waste, white goods, waste tires, asbestos, and medical waste.

Wood Waste

Wood waste is a solid waste that is a by-product of manufacturing wood products. This may include sawdust, shavings, stumps, wood chunks, hog fuel, pulp, and log sort waste. It does not include wood that has been painted or chemically treated. Wood waste constitutes the largest volume of special wastes in Grays Harbor County, although there is limited information on the exact quantities generated.

The primary types of wood waste generated in Grays Harbor County are log yard waste, shake and shingle waste, and slash. The most recent study, conducted in 1999, indicated that over five million cubic yards of wood waste went into landfills. In earlier years, this type of waste was burned. However, the adoption of air pollution regulations in the early 1970s stopped most open burning of wood waste generated in mills and log sort yards. Waste generators then relied on landfills as the least expensive alternative. Slash burning continues, but is receiving more scrutiny as air pollution control continues to improve.

Log yard waste occurs when logs are sorted and stored before export or processing. This waste consists mainly of Douglas fir and hemlock debris mixed with mud and crushed rock. Moisture and soil contamination prevent economical reuse or recycling of the material. The estimated generation rate for this waste is approximately 70,000 cubic yards per year.

Shake and shingle waste comes from the manufacturing of cedar building materials. Many sizable cedar waste piles are located throughout the County, most accumulating in the early 1970's when

the Federal Clean Air Act first placed restrictions on burning. Unlike most wood species that will biodegrade within a few years when left in outdoor piles, cedar contains natural preservative oils and can last for decades. Research indicates that there are approximately nine million cubic yards of cedar residuals stockpiled throughout Washington State, with about 55% of that volume located within Grays Harbor County. This translates into approximately five million cubic yards stockpiled at roughly 55 sites throughout the County. The number of active cedar mills has declined significantly over the past two decades. Of the 120 operating mills in Washington State, about 75 are located in Grays Harbor County (Cedar Waste Venture Feasibility Study, 1999). This study discusses alternative uses for cedar waste, with a goal of reducing the County's stockpiled cedar residuals.

Slash is the wood waste remaining on-site after logging operations. Historically, logging firms burned this wood waste after clear-cutting and before reforestation. However, recent regulations of the Olympic Region Clean Air Authority (ORCAA) will eventually ban slash burns.

The County's Environmental Health Division has only one wood waste landfill under permit per WAC 173-304.600. The Stafford Creek Facility opened in 1991, (acquired by Northwest Rock in 1998) and has permits to receive all three types of wood waste. Log yard waste makes up the bulk of disposed materials at the site. In 2007, 13,702 cubic yards of wood waste went to this facility. The expected lifespan of the site is 10 to 14 years. Closure funds have been projected through 2034.

Currently, there is increasing demand for wood waste as hog fuel by local mills, such as Grays Harbor Paper and Sierra Pacific. The Central Transfer Station itself removes approximately 90% of the wood waste that enters the facility for cogeneration or other recycled purposes.

Industrial Solid Waste

Industrial solid waste means solid waste generated from manufacturing operations, food processing, or other industrial processes. The most common sources of industrial solid waste generation are Grays Harbor Paper LLC in Hoquiam and Ocean Spray Cranberries Inc plant in Markham. Grays Harbor County Environmental Health Division permits land application sites.

Grays Harbor Paper LLC applies its industrial sludge to farmland near Copalis Crossing in the western part of the County. The County's Environmental Health Division monitors and permits Cottonwood Ranch for this application. In 2007, Grays Harbor Paper LLC applied 1,242 dry tons over 12 acres of pasture.

Ocean Spray periodically applies pulp and sludge generated from processing cranberries into juice and other products. The company applied approximately 456 dry tons of cranberry material over 163 acres on property in the Wishkah and Humptulips Valleys. Additional applications now occurs in the Wynoochee Valley.

Although recently closed, the Weyerhaeuser Pulp Mill in Cosmopolis has historically disposed of sludge produced in its industrial wastewater treatment facility in one of a series of ponds in South

Aberdeen. This site is still under permit and monitored, and there are plans to place additional waste into the pond.

The Central Transfer Station remains as an additional disposal site for industrial waste.

Biosolids are municipal sewage sludge resulting from the domestic wastewater treatment process that can be beneficially recycled in accordance with WAC 173-308, *Biosolids Management*. There are nine municipal wastewater treatment plants (WWTP) operating in the county: Aberdeen, Elma, Hoquiam, McCleary, Montesano, Ocean Shores, Pacific Beach, Satsop Development Park, and Westport. In 2008, sewage sludge production by WWTP in the county was an estimated 659 dry tons with another 7,300 tons stored in the Hoquiam and Ocean Shores lagoons.

In addition to biosolids produced at municipal WWTPs, septage licensed pumpers collect biosolids throughout the County and usually apply them to permitted land application sites in a beneficial manner or taken to facilities capable of further treatment. There are currently no permitted biosolids site in Grays Harbor County. Grays Harbor County currently defers management of biosolids to the Department of Ecology.

Construction Demolition and Landclearing Debris (CDL)

Construction demolition and landclearing debris (CDL) consists primarily of those materials that are the result of building demolition or construction projects. These wastes are currently recycled or disposed of at the Central Transfer Station and/or the Stafford Creek Woodwaste Facility. However, limited quantities of CDL waste often are disposed of onsite or on other properties. WAC 173-350-320 lists the exemptions and limitations for onsite storage.

In 2007, Stafford Creek Woodwaste Facility landfilled 66,640 cubic yards of CDL. Increased reuse and recycling of construction demolition will likely further reduce volumes in the future. The Central Transfer Station currently recycles about 150 tons of CDL (sheetrock) per year and redirects wood building materials from the waste stream to local cogeneration facilities.

White Goods

White goods are previously-owned major household appliances such as washers, dryers, and refrigerators. Certain appliances contain dangerous wastes, which need to be treated appropriately. White goods are accepted at the rural transfer stations, the Central Transfer Station and at Spring Cleanup events. There is a fee for disposal of refrigerators brought to the transfer stations. White goods are commingled with other scrap metal and stockpiled until transported to market.

There is a continuing need for education of the public regarding the reuse and recycling of white goods. Second-hand use is generally available if dealers are notified of the availability of a piece that remains functional.

Existing collection and recycling facilities appear to be able to process all discarded goods. However, should either of the two white goods dealers in the County cease to handle these items, the residents would encounter considerable expense in disposing of these bulky wastes.

Waste Tires

There are currently no permitted tire piles in Grays Harbor County. All tires collected in the County are exported to tire processors out of County.

Asbestos

Asbestos currently is received at the Central Transfer Station. Approximately 500 cubic yards of asbestos material were disposed of in 1999 and transported to the Roosevelt Regional Landfill in Klickitat County, Washington. Any Subtitle D landfill may accept asbestos. The asbestos is handled separately from the municipal solid waste. LeMay maintains records documenting the handling and disposal location of the material. The Olympic Air Pollution Control Authority (OAPCA) administers regulations for asbestos removal, handling, and transportation.

Medical Waste

Medical waste includes all the infectious and injurious waste originating from medical, veterinary, or intermediate care facilities. This includes infectious and biohazardous wastes, such as blood, sharps, and identifiable body parts.

Stericycle, Inc. currently is the only commercial medical waste treatment and disposal company operating in Grays Harbor County. The company collects medical wastes from public and private customers and processes the material out of County. Grays Harbor Community Hospital does rely on an autoclave to process some materials.

Disaster Waste

LeMay is contractually obligated to provide a backup system for transfer and disposal should there be a disaster, such as an earthquake or flood. The Emergency Management Division within Public Services would assist in coordinating this effort in times of emergency.

CHAPTER 7

CHARACTERISTICS OF THE PLANNING AREA

PHYSICAL DESCRIPTION

Grays Harbor County borders the Pacific coast of Western Washington, extending approximately 50 miles along the lower Olympic Peninsula coastline. Inland, Grays Harbor County covers a geographic area of 1,918 square miles. The County ranks 15th in size amongst Washington's 39 counties.

The County shares borders with Jefferson County to the north, Pacific and Lewis Counties to the south, and Mason and Thurston Counties to the east.

The Grays Harbor Estuary is a defining geographic characteristic of the County. As one moves inland, the southern topography shifts from the river lowlands and rolling hills to the Olympic Mountains in the northern half of Grays Harbor County.

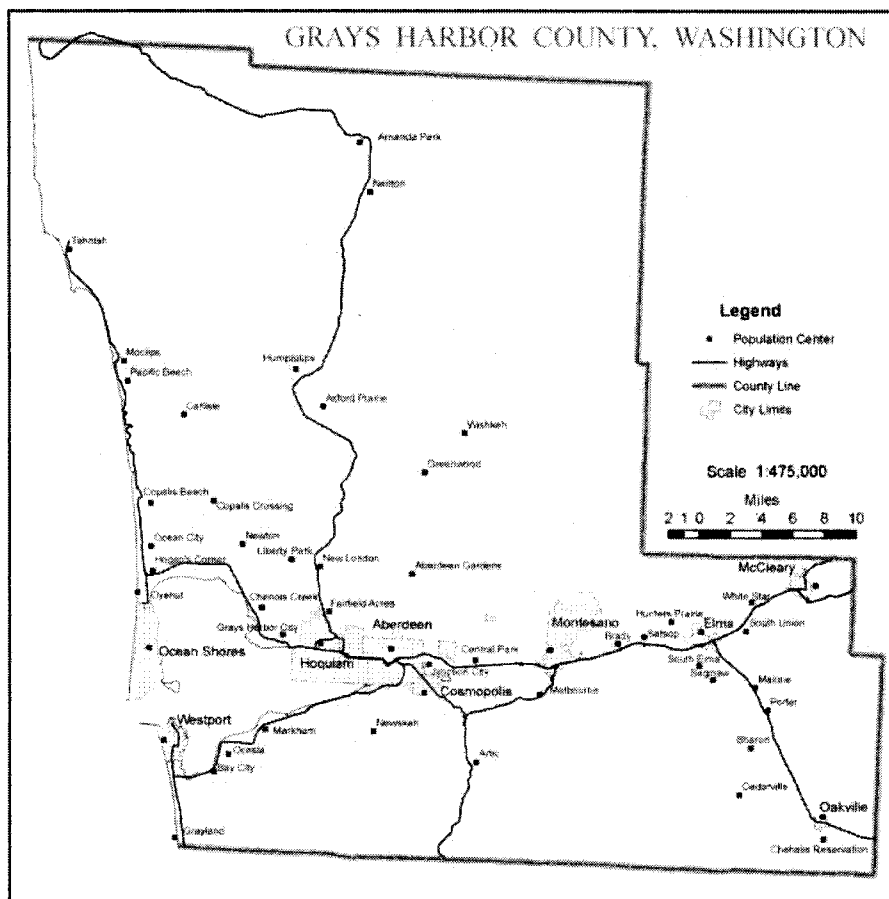


Figure 1: Grays Harbor County

Aberdeen, Hoquiam, and Cosmopolis, situated at the mouth of the Chehalis River, make up the commercial-industrial core of Grays Harbor County. Oakville, Elma, and Montesano are smaller cities located in the Chehalis River Valley. McCleary is on the western edge of the Black Hills and the Cities of Ocean Shores and Westport border the Pacific Coastline. The Quinault Indian Nation covers a 300-square mile area in the northwest corner of the County. The Olympic National Forest and Olympic National Park own much of the northern half of the County.

The County's climate is typical of the coastal Pacific Northwest, with cool summers and mild, wet winters. High temperatures average around 70° during the summer months and from 45° to 52° in the winter. There is a sizable variation in rainfall at different locations in the County; the average increases from 50 inches per year at the southeastern boundary to 220 inches per year at the northern boundary.

Population

Population data for incorporated and unincorporated Grays Harbor County are provided in Table 26. Grays Harbor County is the 18th most populous County in Washington State, with about 1.1% of the state's population. Approximately 35.7% of the County's population is concentrated in the cities of Aberdeen and Hoquiam, 24.9% in smaller towns and cities, and 39.4% in the unincorporated County.

While Aberdeen and Hoquiam continue to lose population, other communities in Grays Harbor County are experiencing growth. Since 2000, the City of Ocean Shores exhibited the highest growth rate (21.1%), followed by Westport (8.9%), and Montesano (7.1%). The unincorporated areas of the County also show a robust growth rate of 10.2%. Overall, the County grew by 8.3% since 2000.

Table 8: Grays Harbor Population 1990 - 2010

Area	1990	2000	2010
Grays Harbor County (Total)	64,175	67,194	72,797
Unincorporated (Total)	25,000	25,548	28,445
Incorporated (Total)	39,175	41,646	42,995
Aberdeen	16,565	16,461	16,440
Cosmopolis	1,372	1,595	1,640
Elma	3,011	3,049	3,110
Hoquiam	8,972	9,097	8,765
McCleary	1,473	1,484	1,555
Montesano	3,060	3,312	3,565
Oakville	529	675	715
Ocean Shores	2,301	3,836	4,860
Westport	1,892	2,137	2,345

Population fluctuations occur seasonally in the recreationally oriented communities located along the ocean beaches. Grays Harbor County regional planners indicate that a high percentage of the

seasonal population change occurs in the communities of Ocean Shores, Westport, Moclips, Copalis Beach, and Grayland. Fluctuations are primarily due to a significant tourist influx for the fish and shellfish openings and summer activities.

The Office of Financial Management (OFM) developed 25-year population projections for each County in 2002 for planning under the Growth Management Act. The low, intermediate, and high projections prepared for Grays Harbor County show negative to modest growth rates compared to most other Western Washington Counties.

Table 9: Grays Harbor Population Projection, 2000 to 2025

Projection	2000	2005	2010	2015	2020	2025	Percent Increase
Low	67,194	62,916	63,540	64,492	65,279	65,775	-2.1%
Intermediate	67,194	66,490	68,878	71,761	74,605	77,269	15.0%
High	67,194	70,064	74,216	79,027	83,931	88,763	32.1%

According to the 2000 US Census, Grays Harbor County is less diverse racially and ethnically than the state and nation. Caucasian Americans makes up the largest racial grouping at 86.5% of the total population. However, this is a decline of nearly 5% from the 1990 US Census. The 2000 US Census also showed that people of Hispanic Origin overtook Native Americans as being the largest minority group in County (4.8% versus 4.4% respectively).

Employment and Economic Statistics

General Trends

While the county has seen plenty of changes since the mid 1980s, the metamorphosis of the local economy has been slow and uneven. Between 2000 and 2006, nonfarm employment in the county has gained just 5.0 percent, an annual average increase of less than one percent – still positive, but miserably lagging the state numbers, which have thrived over the last several years.

Unlike many areas of the state that have seen Construction employment drive other sectors of the economy, the Grays Harbor economy has seen tepid Construction gains over the last several years, with annual average gains at or below 2.0 percent. Whether it is location or other factors, much of the residential and commercial construction that has driven the numbers in other areas of the state has bypassed Grays Harbor.

The Grays Harbor County economy is split between around 24 percent of nonfarm jobs being counted in Goods Producing and around 76 percent being tallied as Services Providing. Those percentages have shifted from 1990, when over 28 percent of all nonfarm jobs were counted in the Goods Producing sector. The county’s employment mix continues to evolve from the timber dependent days of the mid-1980s.

The Grays Harbor economy has worked hard to re-invent itself from the timber days of the 1980s, and while lumber and its manufacturing remains a big part of the local scene, the need to diversify has not been forgotten. The ability to attract tourism to the ocean beaches, and give the visitor recreational opportunities, have evolved in many new local events and festivals. The surging gas prices may hurt this endeavor, as the definition of close-to-home is relative. The ability to attract new employers will remain the key to the future outlook for Grays Harbor County.

Table 10: 2007 Employment by Industry in Grays Harbor County (2009)

Industry	Jobs
Farm Employment	767
Construction	1,609
Manufacturing	3,455
Retail Trade	3,627
Information	281
Finance & Insurance	1,016
Real Estate, Rental, & Leasing	1,179
Professional & Technical Services	988
Management of Companies	44
Administrative & Waste Services	855
Arts, Entertainment, & Recreation	498
Accommodations & Food Services	2,376
Other Services Except Public Administration	2,014
Federal Civilian & Military	510
State	1,342
Local	4,832
Unreported	6,078
Total Employment	31,471

Source : Regional Economic Analysis Project

Table 11: April 2010 Largest Employers in Grays Harbor County

Employer	Category	Employees
Primary Industries		
Westport Shipyard	Manufacturing	Undisclosed
Simpson Door Plant	Manufacturing	255
Grays Harbor Paper	Manufacturing	234
Sierra Pacific Industries	Manufacturing	194
Ocean Gold/Ocean Cold	Food Processing (Seasonal)	*168
Washington Crab Producers	Food Processing	150
Ocean Spray	Food Processing	125
Briggs Nursery	Farming	122
Mary's River Lumber	Manufacturing	110
Hoquiam Plywood	Manufacturing	103
Quigg Bros.	Construction	100

Employer	Category	Employees
Weyerhaeuser	Forestry	95
Murphy Veneer	Manufacturing	67
Lakeside Industries	Construction	65
Dow Chemical	Manufacturing	50
Pacific Veneer	Manufacturing	50
TMI Forest Products	Manufacturing	47
PanelTech	Manufacturing	42
Rognlins	Construction	40
Imperium Renewables	Manufacturing	24
Secondary Industries		
G.H. Community Hospital	Medical	710
Quinault Beach Resort	Hospitality	308
Wal-Mart	Retail	290
Express Employment Pros	Professional Services	175
McDonald's Restaurants	Hospitality	174
Safeway Foods	Retail	173
Anchor Savings Bank	Banking	165
Swanson Foods	Retail	150
Timberland Savings Bank	Banking	133
The Home Depot	Retail	109
Five Star Dealership	Retail	93
Bank of the Pacific	Banking	88
Duffy's Restaurants	Hospitality	60
Harbor Pacific Bottling	Distribution	57
Daily World	Media	52
Social, Educational & Government		
Stafford Creek Prison	Corrections	545
Aberdeen School District	Education	492
Grays Harbor County	Government	410
Quinault Indian Nation	Government	N/A
Hoquiam School District	Education	305
Grays Harbor College	Education	300
Coastal Community Action	Social Service	179
City of Aberdeen	Government	168
Grays Harbor Public Utility	Services	166
City of Hoquiam	Government	86
Port of Grays Harbor	Government	38
Dept of Social and Human Services	Government	40

Source: Grays Harbor Economic Development Council website - www.ghedc.com. (April 2010)

Unemployment Rates

Between 1991 and 1996, Grays Harbor County posted an annual average unemployment rate in the double digits. While unemployment dropped below 10% until 2009, it has since increased beyond that level and stays high in comparison to the state.

Table 12: Grays Harbor Unemployment v. Statewide

Year	Total Labor Force	Percent Unemployment	
		GHC	Statewide
2005	29,480	7.4	5.5
2006	28,880	7.1	5.0
2007	31,330	7.1	4.5
2008	29,410	7.4	5.5
2009	27,500	12.6	9.3
2010	26,960	13.3	9.6

Source : Workforce Explorer Washington, <http://www.workforceexplorer.com/>

Median Household Income

The estimated county annual median household income for 2010 was \$36,361, far below the state median of \$55,379.

Changes in the Dynamics of the Planning Area

Land Use

Grays Harbor County has experienced an 8.3% growth since the adoption of the 2000 Comprehensive Solid Waste Management Plan. In actual numbers, the county increased by 5,603 people. In the unincorporated areas, the population increased by 2,897 people. The total increase in population for all nine municipalities was 1,349. Current economic conditions may slow growth throughout the county.

Forestry-related activities, followed by agriculture, remain the dominate land uses in Grays Harbor County. The General Development District, the County's largest zoning designation in area, allows residential development at one dwelling unit per acre. Denser residential zoning districts ranging from three to six dwelling units per acre typically lie adjacent to municipalities or along the ocean beaches.

Outside of the nine incorporated communities, the County remains primarily rural in its development patterns except for unincorporated communities of Central Park and North and South Beach areas.

Current development patterns in the unincorporated areas of the County show growth focused primarily along the ocean beaches and adjacent to municipalities, particularly in those areas with access to urban utilities, especially water and sewer systems.

Comprehensive plans and zoning codes in both the county and the nine municipalities do not specifically address the location of municipal solid waste management facilities as permitted or conditional uses. The location of the Central Transfer Station, the hub facility for the Solid Waste Program, is in an I-2 Industrial District while the County Rural Transfer Stations lie in varying zoning

districts. Due to a lack of demand for expansion of solid waste management facilities, the County and its municipalities have not focused on siting these facilities in their comprehensive plan. Grays Harbor County does not plan under 36.70A and is not required to have countywide planning policies that address the siting of essential public facilities.

CHAPTER 8

PARTICIPANT ROLES IN PLAN DEVELOPMENT

PARTICIPANT ROLES

The development and update of the Grays Harbor Comprehensive Solid Waste Management Plan is a public process that involves the Solid Waste Advisory Committee, County staff from the Solid Waste and Environmental Health Divisions, citizens, and the Board of County Commissioners.

Role of the Solid Waste Advisory Committee

The Solid Waste Advisory Committee (SWAC) acts as the eyes and ears of the public to provide guidance to the County and municipalities regarding the most environmentally safe and economically responsible methods for waste reduction, recovery, and disposal. State law, *RCW 70.95.165*, requires each County to appoint a SWAC with a minimum of nine members that represent a balance of interests: citizens, public interest groups, business, the waste management industry, and local elected officials. The Board of County Commissioners appoints members to the committee.

The SWAC plays an instrumental role in developing and updating the Comprehensive Solid Waste Management Plan. With staff assistance, the SWAC stays informed on all aspects of solid waste management in the County. During the plan preparation process, the SWAC reviews current conditions and makes recommendations for future policies and programs.

Role of Staff

Staff members from the Solid Waste and Environmental Health Divisions of the Department of Public Services support and provide comment to the SWAC about solid waste management activities within the County. They play an active role during the plan development process by providing analysis and making recommendations regarding goals, objectives, and recommendations.

Role of Citizens

As ratepayers, citizens also share their opinions in the plan development and update process. Once the SWAC prepares a draft document, the Board of County Commissioners (BoCC) will hold one or more public hearings to allow citizens to comment. The Board may choose to remand citizen comments back to the SWAC or take action themselves.

Washington State Laws and Administrative Codes

The State of Washington, through the Revised Code of Washington (RCW), the Washington Administrative Code (WAC), and the Department of Ecology, establishes requirements and guidelines for development of the Comprehensive Solid Waste Management Plan. The Department of Ecology reviews and comments on the draft Comprehensive Solid Waste Management Plan and must approve or deny the final plan.

Board of County Commissioners

The Board of County Commissioners (BOCC) is the final point of local approval for the Comprehensive Solid Waste Management Plan and any subsequent updates. Their subsequent role in budget development and approval is instrumental to the long-term implementation of the plan.

CHAPTER 9

RELATIONSHIP TO OTHER PLANS AND PERMITTING OF SOLID WASTE FACILITIES

RELATIONSHIP TO OTHER PLANS

Other plans that are in effect or being developed in Grays Harbor County may interact with the requirements of this plan. Each is discussed separately below.

Previous Solid Waste Management Plans

Grays Harbor County has prepared several solid waste management plans, after starting a formal planning process in 1972. The most recently adopted plan was completed in 2001. This 2007 plan revision has been developed in part to continue and expand upon the actions recommended in the 1991 CSWMP with emphasis on waste reduction, reuse and recycling.

Moderate Risk Waste Management Plan

The County's Moderate Risk Waste Management Plan of 1991 addresses the need to remove moderate risk wastes (MRW) from traditional solid waste handling and disposal paths. Hazardous waste within the County has caused poisoning, chemical burns, exposure to toxic fumes, contamination of ground water, fish kills, and explosions in sewers, garbage trucks, landfills, and homes. In November of 1997, the County opened the Household Hazardous Waste Collection Facility which accepts hazardous chemicals found in homes, garages, and other storage areas.³

Solid Waste Enforcement

The Grays Harbor County Code 8.28, Solid Waste Collection and Disposal, and Ordinance 2004-1 addresses solid waste enforcement within the County.

Enforcement efforts were boosted in November 20, 2006 when the ECY awarded Grays Harbor County Environmental Health a \$99,729 grant⁴. The County has used this money to support solid waste technical assistance, compliance and enforcement activities, including the following:

- Responding to complaints involving illegal dumping or improper handling of solid waste by the public.
- Providing technical assistance consultations for review or issue of solid waste permits.
- Conducting inspections of permitted facilities.
- Locating and identifying closed and abandoned landfills in the County.

³ http://www.co.grays-harbor.wa.us/info/pub_svcs/Recycle/HouseHazWaste.htm

⁴ <http://www.ecy.wa.gov/news/2006news/2006-242.html>

Litter Control

The Grays Harbor County Code 8.12.040 – Litter Control was enacted to control littering and illegal dumping within Grays Harbor County. The County receives some funding through the ECY Community Litter Cleanup Program.

Resource Lands and Critical Areas Designations

While Grays Harbor County does not fully plan under the Growth Management Act (GMA), it has designated resource lands and critical areas, as well as adopted development regulations that protect critical areas as required by RCW 36.70A. Title 18 of the Grays Harbor County Code contains provisions for protecting critical areas in the county. The county does recognize the importance of comprehensive planning and continues to participate in countywide long range planning efforts that incorporate those aspects of the GMA that are relevant to local needs and circumstances, and achievable within the staffing and financial constraints currently facing the County.

Overall, the concerns that prompted development of the GMA, such as urban growth, sprawl, congestion, and the loss of open space, are not generally applicable to Grays Harbor County. As a result, Grays Harbor County uses Section 18.06 as a basis for classification and designation of resource lands and critical areas. The designation of districts either coincides with existing jurisdictional boundaries, or uses criteria from the Uniform Building Code. No changes to existing regulations or creation of new regulations are recommended.

Economic Development Plan

The *Overall Economic Development Strategy for the Columbia-Pacific Region (CEDS)* originally prepared in 1998 was revised in 2005. The CEDS serves as a comprehensive statement of plans for district-wide economic growth and development over the next twenty years in Grays Harbor, Mason, Pacific and Wahkiakum Counties.

Economic conditions in Grays Harbor County are described as economically-distressed area in regard to employment levels⁵. As the goal of increasing tourism is achieved, the solid waste system is equipped to handle the increase in waste generation.

OTHER COUNTY PLANS/CONTRACTS

The development of any new facility must be in accordance with Ordinance 38 – Title 3 - Zoning. The *Grays Harbor County Estuary Management Plan* also has specifications of what can or cannot be constructed in certain areas. The Shorelines Master Program regulates development in shoreline areas.

⁵ http://www.colpac.org/assets/noncritical/files/CEDS_2005.pdf

The County has entered into a 20-year contract (1994) with LeMay Enterprises Inc. to construct and operate the Central Transfer Station. The same year, a 20-year contract was signed with the Roosevelt Regional Landfill to provide transportation and disposal of the County's solid waste. LeMay is also contracted to staff and operate the Grays Harbor County Household Hazardous Waste Collection Facility and run the County's five rural transfer stations.

Permitting of Solid Waste Facilities

WAC 173-350-700, Permits and Local Ordinances, requires that no solid waste storage, treatment, processing, handling or disposal facility shall be maintained, established, substantially altered, expanded or improved until the person operating or owning such site has obtained a permit or permit deferral from the jurisdictional health department or a beneficial use exemption from the department [of Ecology].

WAC 173-350-040, Performance Standards, requires that The owner or operator of all solid waste facilities... shall:

- (1) Design, construct, operate, and close all facilities in a manner that does not pose a threat to human health or the environment;
- (2) Comply with chapter 90.48 RCW, Water pollution control and implementing regulations, including chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington;
- (3) Conform to the approved local comprehensive solid waste management plan prepared in accordance with chapter 70.95 RCW, Solid waste management – Reduction and recycling, and/or the local hazardous waste management plan prepared in accordance with chapter 70.105 RCW, Hazardous waste management;
- (4) Not cause any violation of emission standards or ambient air quality standards at the property boundary of any facility and comply with chapter 70.94 RCW, Washington Clean Air Act; and
- (5) Comply with all other applicable local, state, and federal laws and regulations.

Any solid waste related project permit not exempt under the State Environmental Policy Act (SEPA) requires environmental review and a subsequent threshold decision by the appropriate responsible official. As part of that process, the goals, objectives, and recommendations contained in this plan will assist the County or a state agency with jurisdiction in determining whether the project permit will or will not have a significant impact on the environment, or require the imposition of specific conditions. WAC 197-11-660(1) allows denial under SEPA if a project will result in a significant adverse environmental impact.

CHAPTER 10

OVERVIEW OF PLANNING TO DATE

INITIAL PLAN DEVELOPMENT

Grays Harbor County has a 35-year history of comprehensive solid waste management planning.

- 1972 – Adoption of the County’s first Comprehensive Solid Waste Management Plan
- 1977 – Amendments made to 1972 plan
- 1986 – Major update to the 1972 plan
- 1991 – Revisions to plan for incorporating waste reduction and recycling mandates
- 2001 – Adoption of new Comprehensive Solid Waste Management Plan
- 2009 – Amendment to the 2001 plan regarding recycling service changes

Jurisdictional Involvement

In accordance with RCW 70.95.080, the Grays Harbor County Comprehensive Solid Waste Plan is a collaborative effort between the County and each of the nine incorporated cities: Aberdeen, Cosmopolis, Elma, Hoquiam, McCleary, Montesano, Oakville, Ocean Shores, and Westport. Each municipality has adopted this plan.

Solid Waste Advisory Committee

RCW 70.95.165(3) requires each County to appoint a solid waste advisory committee to ... assist in the development of programs and policies concerning solid waste handling and disposal and to review and comment upon proposed rules, policies, or ordinances prior to their adoption. The Grays Harbor County Board of County Commissioners appoints members of the Solid Waste Advisory Committee (SWAC). The SWAC consists of up to 15 members, five from each Commissioner district. They represent a balance of interests including citizens, public interest groups, business, the waste management industry, and local elected officials. The SWAC has adopted by-laws for conducting business.

Solid Waste Management Accomplishments Since 2001

Waste Reduction

- Grays Harbor County now purchases and uses locally produced, 100% recycled paper
- Initiated Grays Harbor County participation in the www.2good2toss.com program, a web-based material exchange program for citizens and business
- Disseminated information on waste reduction strategies through public information and outreach

Recycling

- Introduced the non-mandatory co-mingled recyclables program throughout Grays Harbor County and the nine municipalities

- Continued to fund and expand public education and outreach programs for recycling

Composting

- Contracted with Washington State University Extension/Master Gardeners to produce and operate a Master Composter Program for the public

Bio-Solids

- Encouraged the land application of bio-solids as a fertilizer and/or soil amendment on private property

Construction Demolition and Land Clearing Debris

- Encouraged and supported the efforts of the private sector to utilize, recycle, and/or separate inert materials from the waste stream by providing a program at the Central Transfer Station that allows a separate tip fee for clean CDL

White Goods

- Continued to offer recycling white goods through the Central and Rural Transfer Stations
- Promoted recycling of white goods through public education and outreach programs

Waste Tires

- Continued to offer opportunities for recycling waste tires through the Central and Rural Transfer Stations

Asbestos

- Maintained program for disposing of asbestos material through the Central Transfer Stations

Disaster Waste

- Developed a program for handling wastes during declared emergency periods

Contracted Collection

- Continued to monitor and implement the collection contract with Lemay, Inc
- Integrated ongoing service improvements

Central and Rural Transfer Stations

- Added a recycled material drop off area at the Central Transfer Station
- Continued to operate the transfer facilities as a self-supporting enterprise
- Closed the Humptulips satellite station
- Maintained and replaced facility equipment as needed

- Instituted site and service improvements that encourage reuse (material exchange area) and recycling
- Monitored operations and performance annually to ensure the highest service levels possible

Household Hazardous Waste

- Operated the Household Hazardous Waste Collection Facility, a disposal program for the public at the Central Transfer Station; construction of improvements to the collection facility

Administration and Management

- Formed new partnership with Grays Harbor College to assist in delivering contracted education and outreach programs
- Continued to monitor contractual and management provisions in existing operating agreements and permits with all solid waste handling facility operators in the County

Plan Review and Revision

Annual Review

The SWAC will review the Comprehensive Solid Waste Management Plan annually to track the status of recommended actions and their efficacy in achieving the plan goals.

Five-Year Review: 2016

Every five years, the Utilities and Development Division of the Grays Harbor County Department of Public Services will undertake a comprehensive review of the plan to determine its overall performance. RCW 70.95.110 outlines the requirements for maintenance of plans. The SWAC will assist in this process and generally advise the County of overall concerns and potential revisions. Based on this input, the County may need a plan amendment or a plan revision.

Plan Amendment

Plan amendments constitute additions to an existing program or changes that implement a program. Plan amendments do not require the same extensive level of review and adoption as required of a plan revision, which often focuses on establishing a new overall vision or approach for solid waste management within the County. The type of changes that prompt a plan amendment includes:

- Updating the 6- and 20-year projects that are in the same scope and scale as the current approved plan
- Adding an interim program to provide an equivalent service because of an implementation delay of a full program
- Making minor changes in the scope of the program, such as identifying the number of permitted facilities or the addition of new target audiences for education

- Inventorying actions and non-actions implemented from the original plan

The amendment process entails the following steps:

1. County staff consultation with the Solid Waste Advisory Committee
2. Development of a draft amended plan and forwarded to the Board of County Commissioners, participating jurisdictions, and the regional Department of Ecology solid waste planner
3. Receipt of letters of concurrence from all participating jurisdictions and comments from the Department of Ecology on the draft amended plan
4. Adjustment of the draft amended plan, if necessary
5. Public hearing on the draft amended plan held before the Board of County Commissioners
6. Action by the Board of County Commissioners and forward adopted amended plan to the Department of Ecology.

Plan Revision

A plan revision may include redefining the vision for solid waste management within the County and updating each component of the plan to make it current. Examples of plan revision involve:

- Major shifts in the level of service in a program that is not specified in the plan, which might include the addition or subtraction of curbside collection'
- Closure of a local landfill and a transition to long-haul
- Development of a new private transfer or disposal facility
- Regionalization between previously independent planning entities

Plan revisions require the same adoption process as adoption of a new plan. Chapter 70.95 RCW lists the requirements for plans and RCW 70.95.094 specifically covers the review and approval process. The Department of Ecology publication *Guidelines for the Development of Local Solid Waste Management Plans and Plan Revisions* provides further detail.

GLOSSARY

The selected definitions below are from WAC 173-350-100.

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |

A

AGRICULTURAL WASTES

Wastes on farms resulting from the raising or growing of plants and animals including, but not limited to, crop residue, manure and animal bedding, and carcasses of dead animals weighing each or collectively in excess of fifteen pounds.

AIR QUALITY STANDARD

A standard set for maximum allowable contamination in ambient air as set forth in chapter 173-400 WAC, General regulations for air pollution sources.

B

BENEFICIAL USE

The use of solid waste as an ingredient in a manufacturing process, or as an effective substitute for natural or commercial products, in a manner that does not pose a threat to human health or the environment. Avoidance of processing or disposal cost alone does not constitute beneficial use.

BIOSOLIDS

Municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all applicable requirements under chapter 173-308 WAC, Biosolids management. Biosolids includes a material derived from biosolids and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under chapter 173-308 WAC, Biosolids management.

C

CLOSURE

Those actions taken by the owner or operator of a solid waste handling facility to cease disposal operations or other solid waste handling activities, to ensure that all such facilities are closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period.

CLOSURE PLAN

A written plan developed by an owner or operator of a facility detailing how a facility is to close at the end of its active life.

COMPOSTED MATERIAL

Organic solid waste that has undergone biological degradation and transformation under controlled conditions designed to promote aerobic decomposition at a solid waste facility in compliance with the requirements of this chapter. Natural decay of organic solid waste under uncontrolled conditions does not result in composted material.

COMPOSTING

The biological degradation and transformation of organic solid waste under controlled conditions designed to promote aerobic decomposition. Natural decay of organic solid waste under uncontrolled conditions is not composting.

CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (CESQG)

A dangerous waste generator whose dangerous wastes are not subject to regulation under chapter 70.105 RCW,

Hazardous waste management, solely because the waste is generated or accumulated in quantities below the threshold for regulation and meets the conditions prescribed in WAC 173-303-070 (8)(b).

CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (CESQG) WASTE

Dangerous waste generated by a conditionally exempt small quantity generator.

CONTAINER

A portable device used for the collection, storage, and/or transportation of solid waste including, but not limited to, reusable containers, disposable containers, and detachable containers.

CONTAMINANT

Any chemical, physical, biological, or radiological substance that does not occur naturally in the environment or that occurs at concentrations greater than natural background levels.

CONTAMINATE

The release of solid waste, leachate, or gases emitted by solid waste, such that contaminants enter the environment at concentrations that pose a threat to human health or the environment, or cause a violation of any applicable environmental regulation.

CONTAMINATED SOILS

Soils removed during the cleanup of a hazardous waste site, or a dangerous waste facility closure, corrective actions or other clean-up activities and which contain harmful substances but are not designated dangerous wastes.

D

DANGEROUS WASTES

Any solid waste designated as dangerous waste by the department under chapter 173-303 WAC, Dangerous waste regulations.

DETACHABLE CONTAINERS

Reusable containers that are mechanically loaded or handled, such as a dumpster or drop box.

DISPOSABLE CONTAINERS

Containers that are used once to handle solid waste, such as plastic bags, cardboard boxes and paper bags.

DISPOSAL / DEPOSITION

The discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water.

DROP BOX FACILITY

A facility used for the placement of a detachable container including the area adjacent for necessary entrance and exit roads, unloading and turn-around areas. Drop box facilities normally serve the general public with loose loads and receive waste from off-site.

E

ENERGY RECOVERY

The recovery of energy in a useable form from mass burning or refuse-derived fuel incineration, pyrolysis or any other of using the heat of combustion of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

EXISTING FACILITY

A facility which is owned or leased, and in operation, or for which facility construction has begun, on or before the effective date of this chapter and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances.

F

FACILITY

All contiguous land (including buffers and setbacks) and structures, other appurtenances, and improvements on the land used for solid waste handling.

G

GARBAGE

Animal and vegetable waste resulting from the handling, storage, sale, preparation, cooking, and serving of foods.

GROUND WATER

That part of the subsurface water that is in the zone of saturation.

H

HOME COMPOSTING

Composting of on-site generated wastes, and incidental materials beneficial to the composting process, by the owner or person in control of a single-family residence, or for a dwelling that houses two to five families, such as a duplex or clustered dwellings.

HOUSEHOLD HAZARDOUS WASTES

Any waste which exhibits any of the properties of dangerous wastes that is exempt from regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated by households. Household hazardous waste can also include other solid waste identified in the local hazardous waste management plan prepared pursuant to chapter 70.105 RCW, Hazardous waste management.

I

INCINERATION

Reducing the volume of solid wastes by use of an enclosed device using controlled flame combustion.

INCOMPATIBLE WASTE

A waste that is unsuitable for mixing with another waste or material because the mixture might produce excessive heat or pressure, fire or explosion, violent reaction, toxic dust, fumes, mists, or gases, or flammable fumes or gases.

INDUSTRIAL SOLID WASTES

Solid waste generated from manufacturing operations, food processing, or other industrial processes.

INERT WASTE

Solid wastes that meet the criteria for inert waste in WAC 173-350-990.

INERT WASTE LANDFILL

A landfill that receives only inert wastes.

INTERMODAL FACILITY

Any facility operated for the purpose of transporting closed containers of waste and the containers are not opened for further treatment, processing or consolidation of the waste.

J

K

L

LAND APPLICATION SITE

A contiguous area of land under the same ownership or operational control on which solid wastes are beneficially utilized for their agronomic or soil-amending capability.

LANDFILL

A disposal facility or part of a facility at which solid waste is permanently placed in or on land including facilities that use solid waste as a component of fill.

LEACHATE

Water or other liquid within a solid waste handling unit that has been contaminated by dissolved or suspended materials due to contact with solid waste or gases.

LIMITED MODERATE RISK WASTE

Waste batteries, waste oil, and waste antifreeze generated from households.

LIMITED MODERATE RISK WASTE FACILITY

A facility that collects, stores, and consolidates only limited moderate risk waste.

LIMITED PURPOSE LANDFILL

A landfill which is not regulated or permitted by other state or federal environmental regulations that receives solid wastes limited by type or source. Limited purpose landfills include, but are not limited to, landfills that receive segregated industrial solid waste, construction, demolition and landclearing debris, wood waste, ash (other than special incinerator ash), and dredged material. Limited purpose landfills do not include inert waste landfills, municipal solid waste landfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills, landfills disposing of special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards, landfills regulated under chapter 173-303 WAC, Dangerous waste regulations, or chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

LIQUID

A substance that flows readily and assumes the form of its container but retains its independent volume.

LIQUID WASTE

Any solid waste which is deemed to contain free liquids as determined by the Paint Filter Liquids Test, Method 9095, in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846.

M

MUNICIPAL SOLID WASTE (MSW)

A subset of solid waste which includes unsegregated garbage, refuse and similar solid waste material

discarded from residential, commercial, institutional and industrial sources and community activities, including residue after recyclables have been separated. Solid waste that has been segregated by source and characteristic may qualify for management as a non-MSW solid waste, at a facility designed and operated to address the waste's characteristics and potential environmental impacts. The term MSW does not include:

- Dangerous wastes other than wastes excluded from the requirements of chapter 173-303 WAC, Dangerous waste regulations, in WAC 173-303-071 such as household hazardous wastes;
- Any solid waste, including contaminated soil and debris, resulting from response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601), chapter 70.105D RCW, Hazardous waste cleanup – Model Toxics Control Act, chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation or a remedial action taken under those rules; nor
- Mixed or segregated recyclable material that has been source-separated from garbage, refuse and similar solid waste. The residual from source separated recyclables is MSW. Open burning the burning of solid waste materials in an open fire or an outdoor container without providing for the control of combustion or the control of emissions from the combustion.

MATERIAL RECOVERY FACILITY

Any facility that collects, compacts, repackages, sorts, or processes for transport source separated solid waste for the purpose of recycling.

MODERATE RISK WASTE (MRW)

Solid waste that is limited to conditionally exempt small quantity generator (CESQG) waste and household hazardous waste (HHW) as defined in this chapter.

MRW FACILITY

A solid waste handling unit that is used to collect, treat, recycle, exchange, store, consolidate, and/or transfer moderate risk waste. This does not include mobile systems and collection events or limited MRW facilities that meet the applicable terms and conditions of WAC 173-350-360 (2) or (3).

N

O

P

PERMIT

An authorization issued by the jurisdictional health department which allows a person to perform solid waste activities at a specific location and which includes specific conditions for such facility operations.

PILE

Any noncontainerized accumulation of solid waste that is used for treatment or storage.

PLAN OF OPERATION

The written plan developed by an owner or operator of a facility detailing how a facility is to be operated during its active life.

POST-CLOSURE

The requirements placed upon disposal facilities after closure to ensure their environmental safety for at least a twenty-year period or until the site becomes stabilized (i.e., little or no settlement, gas production, or leachate generation).

POST-CLOSURE PLAN

A written plan developed by an owner or operator of a facility detailing how a facility is to meet the post-closure requirements for the facility.

PRIVATE FACILITY

A privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.

Processing an operation to convert a material into a useful product or to prepare it for reuse, recycling, or disposal. Public facility a publicly or privately owned facility that accepts solid waste generated by other persons.

Q

R

RECYCLABLE MATERIALS

Those solid wastes that are separated for recycling or reuse, including, but not limited to, papers, metals, and glass, that are identified as recyclable material pursuant to a local comprehensive solid waste plan.

RECYCLING

Transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport.

REUSABLE CONTAINERS

Containers that are used more than once to handle solid waste, such as garbage cans.

S

SEWAGE SLUDGE

Solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated.

SOIL AMENDMENT

Any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department, such as biosolids as defined in chapter 70.95J RCW, Municipal sewage sludge – Biosolids and wastewater, as regulated in chapter 90.48 RCW, Water pollution control.

SOLID WASTE OR WASTES

All putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

SOLID WASTE HANDLING

The management, storage, collection, transportation, treatment, use, processing or final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery of energy resources from such wastes or the conversion of the energy in such wastes to more useful forms or combinations thereof.

SOLID WASTE HANDLING UNIT

Discrete areas of land, sealed surfaces, liner systems, excavations, facility structures, or other appurtenances within a facility used for solid waste handling.

SOURCE SEPARATION

The separation of different kinds of solid waste at the place where the waste originates.

STORAGE

The holding of solid waste materials for a temporary period.

T

TRANSFER STATION

A permanent, fixed, supplemental collection and transportation facility, used by persons and route collection vehicles to deposit collected solid waste from off-site into a larger transfer vehicle for transport to a solid waste handling facility.

TREATMENT

The physical, chemical, or biological processing of solid waste to make such solid wastes safer for storage or

disposal, amenable for recycling or energy recovery, or reduced in volume.

U

V

W

WASTE TIRES

Any tires that are no longer suitable for their original intended purpose because of wear, damage or defect. Used tires, which were originally intended for use on public highways that are considered unsafe in accordance with RCW 46.37.425, are waste tires. Waste tires also include quantities of used tires that may be suitable for their original intended purpose when mixed with tires considered unsafe per RCW 46.37.425.

WOOD DERIVED FUEL

Wood pieces or particles used as a fuel for energy recovery, which contain paint, bonding agents, or creosote. Wood derived fuel does not include wood pieces or particles coated with paint that contains lead or mercury, or wood treated with other chemical preservatives such as pentachlorophenol, copper naphthanate, or copper-chrome-arsenate.

WOOD WASTE

Solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, construction, demolition, handling and storage of raw materials, trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hogged fuel, and log sort yard waste, but does not include wood pieces or particles containing paint, laminates, bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

X

Y

YARD DEBRIS

Plant material commonly created in the course of maintaining yards and gardens and through horticulture, gardening, landscaping or similar activities. Yard debris includes, but is not limited to, grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, and vegetable garden debris.

Z

APPENDIX A: INTER-LOCAL AGREEMENT FOR SOLID WASTE PLANNING

Department of Public Services
Phone: 360-249-4222
Fax: 360-249-3203



100 West Broadway, Suite 31
Montesano, Washington 98563
www.co.grays-harbor.wa.us

GRAYS HARBOR COUNTY STATE OF WASHINGTON

September 10, 2009

TO: BOARD OF COUNTY COMMISSIONERS
FROM: KEVIN VARNES, DIRECTOR OF UTILITIES & DEV. DIV.
SUBJECT: INTER-LOCAL AGREEMENT SOLID WASTE PLANNING

The attached Inter-Local Agreement has been prepared to document authorization by our cities for the County to lead the current update of our Local Solid Waste Plan and their participation.

The Agreement was prepared with the assistance of the Prosecutor's office along with the review by the City Attorney's. It has been executed by all the cities and awaits the Board's signature.

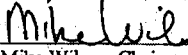
We recommend approval and request signature of the Agreement by the Board. The Agreement is a condition of plan approval by the State Department of Ecology.

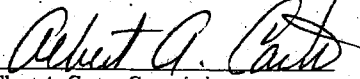
Respectfully,

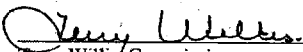

Kevin Varnes
Director of Utilities & Development Division

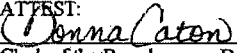
ACCEPTED and APPROVED this 14th day of September, 2009.

BOARD OF COUNTY COMMISSIONERS
GRAYS HARBOR COUNTY, WASHINGTON


Mike Wilson, Chairman


Albert A. Carter, Commissioner


Terry Willis, Commissioner

ATTEST:

Clerk of the Board Date
G:\PS\Utilities\Kevin V\BOCC 09-10-09

**INTERLOCAL AGREEMENT
BETWEEN GRAYS HARBOR COUNTY
AND THE CITIES OF ABERDEEN, COSMOPOLIS, ELMA, HOQUIAM,
MCCLEARY, MONTESANO, OAKVILLE, OCEAN SHORES AND
WESTPORT**

REGARDING COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

THIS AGREEMENT, made on the last date written below, by and among GRAYS HARBOR COUNTY, a political subdivision of the State of Washington, and THE CITIES OF ABERDEEN, COSMOPOLIS, ELMA, HOQUIAM, MCCLEARY, MONTESANO, OAKVILLE, OCEAN SHORES and WESTPORT, all municipal corporations organized and existing under the laws of the State of Washington.

1. RECITALS/PURPOSE

- 1.1. The parties hereto, being duly organized and existing governmental units acting pursuant to their authority under RCW Chapter 39.34 agree to participate in a joint effort to prepare and implement a Comprehensive Solid Waste Management Plan as authorized by RCW 70.95.080.
- 1.2. Grays Harbor County ("the County") prepared a Comprehensive Solid Waste Management Plan approved by the Washington State Department of Ecology and adopted by the Grays Harbor County Board of Commissioners through Resolution 01-150 on December 3, 2001. The parties hereto agree that this Agreement will authorize the County to update the Plan for consideration and adoption by the Cities as provided herein.

2. DEFINITIONS

- 2.1 "City" means an incorporated City located in Grays Harbor County, Washington.
- 2.2 "Comprehensive Solid Waste Management Plan" means the Grays Harbor County Comprehensive Solid Waste Management Plan, as adopted by Grays Harbor County Resolution 01-150 on December 3, 2001, and as amended thereafter.
- 2.3 "County" means Grays Harbor County, Washington.
- 2.4 "Solid Waste" means solid waste as defined by RCW 70.95.030, as now in effect or as may be hereafter amended.
- 2.5 "Solid waste handling" means the management, storage, collection, transportation, treatment, utilization, processing and final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery

of energy resources from such wastes, or the conversion of the energy in such wastes to more useful forms or combinations thereof, and including such modification of the term as may be made by subsequent amendment to RCW 70.95.030(17).

3. COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

3.1 During the term of this Agreement, each City shall participate with the County in preparing an updated Comprehensive Solid Waste Management Plan for adoption by the parties consistent with the requirements of Chapter 70.95 RCW.

3.2 During the term of this Agreement, each City authorizes the County to include information in the Comprehensive Solid Waste Management Plan regarding the management of solid waste generated in each City. The Cities agree to provide information on solid waste programs and applicable data pertaining to their individual jurisdiction to the County as needed for solid waste planning purposes.

4. TERM

4.1 This Agreement shall continue in full force and effect during the Plan update process and will expire on the latter date of adoption of the updated Plan by the County and approval by the Washington State Department of Ecology, unless earlier terminated as provided in Paragraph 8.

5. NO SEPARATE LEGAL OR ADMINISTRATIVE AGENCY FORMED

5.1 No separate legal or administrative agency is created by this Agreement.

6. REPRESENTATIVES

6.1 Each party shall appoint one person as its representative for all matters concerning the administration and implementation of this Agreement.

7. MODIFICATION AND TERMINATION

7.1 Modification of this Agreement may be accomplished by written agreement of all the parties hereto and no oral understandings or agreements shall suffice to alter the terms of this Agreement.

7.2 Termination of or withdrawal from this Agreement by any party may be accomplished upon thirty (30) days written notice to the other parties stating the reason for said termination or withdrawal.

8. MISCELLANEOUS

8.1 No waiver by any party of any term or condition of this Agreement shall be deemed or construed to constitute a waiver of any other term or condition or of any subsequent breach whether of the same or of a different provision of this Agreement.

8.2 No other person or entity shall be entitled to be treated as a third party beneficiary of this Agreement.

8.3 The effective date of this Agreement is the date the last agreeing party affixes its signature. As provided by RCW 39.34.040, this Agreement shall be filed prior to its entry in force.

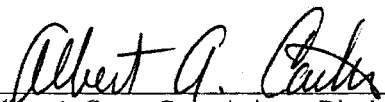
IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as duly indicated below.

ADOPTED this 14th day of Sept., 2009.

GRAYS HARBOR COUNTY
BOARD OF COMMISSIONERS


Mike Wilson, Chair, Commissioner, District 2


Terry Willis, Commissioner, District 1


Albert A. Carter, Commissioner, District 3

ADOPTED this _____ day of _____, 2009.

CITY OF ABERDEEN



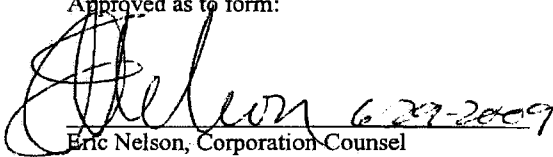
Bill Simpson, Mayor

Attest:



City Clerk

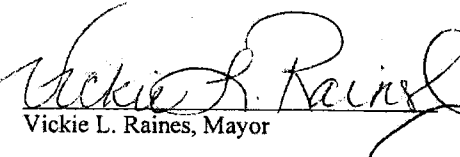
Approved as to form:



Eric Nelson, Corporation Counsel

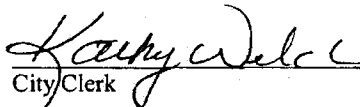
ADOPTED this 8 day of June, 2009.

CITY OF COSMOPOLIS



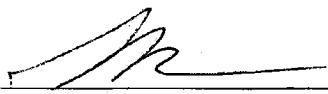
Vickie L. Raines, Mayor

Attest:



City Clerk

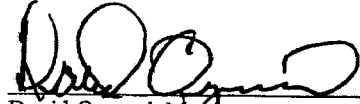
Approved as to form:



Steve Hyde, City Attorney
WSB # 5204

ADOPTED this 20th day of July, 2009.

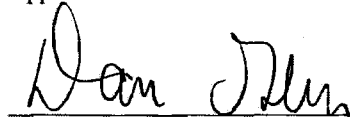
CITY OF ELMA


David Osgood, Mayor

Attest:

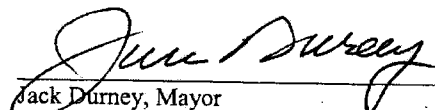

City Clerk

Approved as to form:


Daniel Glenn, City Attorney

ADOPTED this 27th day of JUNE, 2009.

CITY OF HOQUIAM

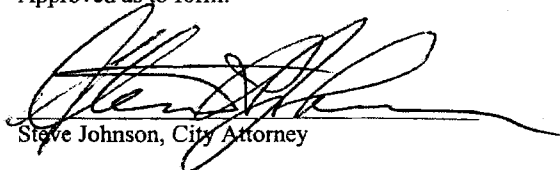

Jack Durney, Mayor

Attest:



Mike Folkers, Finance Director

Approved as to form:


Steve Johnson, City Attorney

ADOPTED this 30th day of June, 2009.

CITY OF MCCLEARY

Walt Bentley
Walt Bentley, Mayor

Attest:

City Clerk

Approved as to form:

Daniel Glenn, City Attorney

ADOPTED this 14th day of July, 2009.

CITY OF MONTESANO

Ronald W. Schillinger
Ron Schillinger, Mayor

Attest:

Kristy Powell
City Clerk

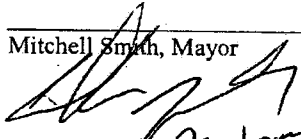
Approved as to form:

Daniel O. Glenn (CP)
Daniel O. Glenn, City Attorney

ADOPTED this 13 day of JULY, 2009.

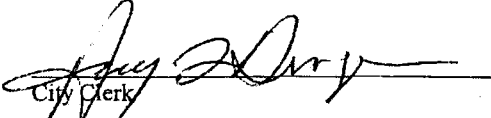
CITY OF OAKVILLE

Mitchell Smith, Mayor



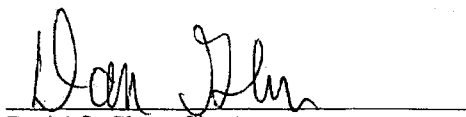
mayor pro tem

Attest:



City Clerk

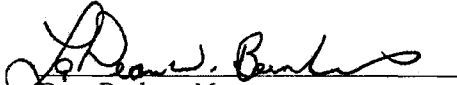
Approved as to form:



Daniel O. Glenn, City Attorney

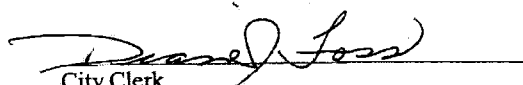
ADOPTED this 13th day of July, 2009.

CITY OF OCEAN SHORES



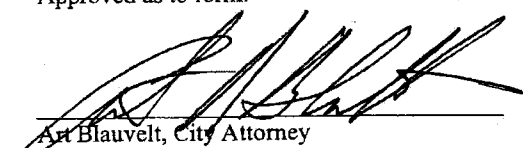
Dean Bunkers, Mayor

Attest:



City Clerk

Approved as to form:



Art Blauvelt, City Attorney

ADOPTED this 14th day of July, 2009.

CITY OF WESTPORT

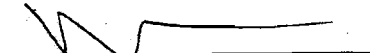


Michael Bruce, Mayor

Attest:


City Clerk

Approved as to form:


Wayne D. Hagen, Jr., City Attorney

Grays Harbor County
WUTC COST ASSESSMENT QUESTIONNAIRE

RECEIVED

MAR 14 2012

WA State Department
of Ecology (SWRO)

PREPARED BY: Kevin Varness

CONTACT TELEPHONE: 360.249.4222

DATE: February 2012

DEFINITIONS

Throughout this document:

YR.1 shall refer to **2012**

YR.3 shall refer to **2014**

YR.6 shall refer to **2017**

Year refers to the calendar year beginning January 1 and ending December 31

1. DEMOGRAPHICS:

1.1 Population

1.1.1 What is the **total** population of your County/City? (Estimated annual growth rate: 1.4%)

2012	2014	2017
72,900	74,956	78,148

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.)

2012	2014	2017
72,900	74,956	78,148

1.2 References and Assumptions

The recent economic downturn suggests that population levels will likely remain relatively flat at 1.4%. This is the rate of increase in population between the 2010 US Census and the 2011 OFM estimate for Grays Harbor County.

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.

2012	2014	2017
3,069	3,162	3,306

2.2 Tonnage Disposed

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

2012	2014	2017
52,648	54,239	56,717

2.3 References and Assumptions

Recycling and disposed tonnage rates have varied widely over the past three years. Between 2008 and 2009, disposed tonnage decreased by 13.9%, but rose by 1.5% between 2009 and 2010. Recycling tonnage, while increasing by 6.4% between 2008 and 2009, rose by 4.2% the following year. The large increase for recycling tonnage is due to expansion of service in various areas of the county. For this projection, an annual increase of 1.5% was used for disposed tonnage and 4.2% for recycling tonnage.

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

- 3.1.1 Please list the solid waste 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.

Implemented	Proposed
Waste reduction/2 Good 2 Toss, p. 4	Explore yard waste collection, p. 5
Wood waste, p. 7	Continue to expand curbside recycling

	countywide, p. 4
WSU Master Gardner compost project, p. 5	
Household hazardous waste, p. 25	
White goods, 8	
Construction demolition & landscaping debris, p. 9	
Waste tire collection, p.10	

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

Operating Costs

The contract Grays Harbor County carries with LeMay Enterprises is to provide MSW and recycling collection services as well as manage the transfer stations. As part of this agreement, LeMay retains a set portion of the tipping fee in compensation for providing these services. Because the reimbursement is a single payment to LeMay, and since LeMay states that to provide detailed costs for these services would reveal confidential business practices, the county is unable to identify explicit costs for waste reduction programs.

The county pays from its administration portion of the tipping fees the expense of collecting and disposing materials collected through its household hazardous waste facility at a FY 2011 cost of \$175,000. Predicting the future cost of this program to the county over the next six years is difficult to predict. Assuming a 1.5% annual increase, this program would increase to \$180,300 in 2013 to \$188,525 in 2016.

The county, separate from the tipping fees, does receive variable funding from WDOE Coordinated Prevention Grants for waste reduction programs. This amount, estimated at \$60,000 for 2011, funds a variety of waste reduction recycling and composting education programs and efforts. WDOE grant funding has been fluctuating due to recent state revenue shortfalls, making it impossible to make predictions on future revenues from this source.

Capital Costs

Grays Harbor County will be retiring its debt service on the Aberdeen Central Transfer Station in 2014. A yet undetermined portion of the amount that had been going towards debt service eventually will go into a dedicated capital outlay fund. Waste reduction programs may receive a portion of this anticipated dedicated capital funding. However, the county has made no formal decision on this direction at this time.

3.2 Recycling Programs

3.2.1 Please list the proposed or implemented recycling program(s) and, their costs, and proposed funding mechanism or provide the page number in the draft plan on which it is discussed.

Note: Please see discussion for 3.1.2.

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: Harold Lemay Enterprises, Inc
Registered Trade Names: Harbor Disposal & Eastern Grays Harbor Disposal

G-permit # G-98

	2012	2014	2017
RESIDENTIAL			
- # of Customers	10,941	11,272	11,787
- Tonnage Collected	7,153	7,369	7706
COMMERCIAL			
- # of Customers	1,731	1,783	1,865
- Total Tonnage Collected	2,384	2,456	2,568

3.3.2 Other (non-regulated) Solid Waste Collection Programs Fill in the table below for other solid waste collection entities in your jurisdiction. (LeMay Enterprises collects for commercial customers in all non-regulated municipalities except Hoquiam. Because LeMay would not reveal the tonnage it collects for commercial accounts, the total tonnage collected reflects residential accounts only.)

Hauler Name: Harold LeMay Enterprises, Inc
City of Aberdeen

	2012	2014	2017
Residential tonnage	2,795	2881	3012
Commercial tonnage			
- # of Customers	5,956	6,136	6,416
- Total Tonnage Collected	2,795	2,879	3,011

Hauler Name: Harold LeMay Enterprises, Inc
City of Cosmopolis

	2012	2014	2017
Residential tonnage	697	718	751
Commercial tonnage			
- # of Customers	648	668	698
- Total Tonnage Collected	697	718	751

Hauler Name: Harold LeMay Enterprises, Inc
City of Elma

	2012	2014	2017
Residential tonnage	675	695	727
Commercial tonnage			
- # of Customers	912	940	982
- Total Tonnage Collected	675	695	727

Hauler Name: Harold LeMay Enterprises, Inc
City of McCleary

	2012	2014	2017
Residential tonnage	502	517	541
Commercial tonnage			
- # of Customers	645	664	695
- Total Tonnage Collected	502	517	541

Hauler Name: Harold LeMay Enterprises, Inc
City of Montesano

	2012	2014	2017
Residential tonnage	998	1,028	1,075
Commercial tonnage			
- # of Customers	1,430	1,473	1,541
- Total Tonnage Collected	998	1,028	1,075

Hauler Name: Harold LeMay Enterprises, Inc
City of Oakville

	2012	2014	2017
Residential tonnage	250	258	269
Commercial tonnage			
- # of Customers	249	257	268
- Total Tonnage Collected	250	258	269

Hauler Name: Harold LeMay Enterprises, Inc
City of Ocean Shores

	2012	2014	2017
Residential tonnage	3,053	3,145	3,289
Commercial tonnage			
- # of Customers	2,494	2,569	2,687
- Tonnage Collected	3,053	3,145	3,289

Hauler Name: Harold LeMay Enterprises, Inc
City of Westport

	2012	2014	2017
Residential tonnage	1,750	1,803	1,885
Commercial tonnage			
- # of Customers	1,088	1,121	1,172
- Total Tonnage Collected	1,750	1,803	1,885

Hauler Name: Hometown Sanitation
City of Hoquiam

	2012	2014	2017
Residential tonnage			
Commercial tonnage			
- # of Customers	2,938		
- Total Tonnage Collected	3,175		

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.)

Not Applicable

3.5 Land Disposal Program

Not Applicable

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. (Budget projections based on 1.5% annual increase.)

Budgeted Cost		
Year 1	Year 3	Year 6
\$1,709,000	\$1,760,000	\$1,841,000
Funding Source		
Year 1	Year 3	Year 6
Tipping fees, WDOE grant	Tipping fees, WDOE grant	Tipping fees, WDOE grant

3.6.2 Which cost components are included in these estimates?

This figure reflects the cost of Grays Harbor County to administer its solid waste program. It includes salary and wages; personnel benefits; disposal costs for moderate risk waste; abatements; professional services; computer services; communications; travel; advertising; rentals; and insurance.

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

Revenue generated from tipping fees covers the majority of these expenditures. Funds from the WDOE Coordinated Prevention Grant pay for a smaller portion of administrative costs.

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.

None

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.

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 (2010)	Total Revenue Generated (2011 Budget Estimate)
Aberdeen Central Transfer Station	Transfer	\$87.50*		Aberdeen Landfill, off SR 12	Roosevelt Regional Landfill	51,071	\$4,718,000
Elma Transfer Station	Transfer	\$29 per cy*	a	2 mi E of Elma	Central Transfer Station	100	a
Westport Transfer Station	Transfer	\$29 per cy*	a	4 mi E of Westport	Central Transfer Station	59	a
Hogan's Corner Transfer Station	Transfer	\$29 per cy*	a	4 mi N of Ocean Shores	Central Transfer Station	297	a

* This rate increase took effect in January 2012; fees at the rural transfer stations will increase, but at a yet undetermined rate.

a The rural transfer stations charge by volume rather than weight; there are no scales at these facilities.

Table 4.1.2 Tip Fee Components

Tip Fee by Facility	Tip Fee per Ton	Transportation Cost	Debt Service	Operational Cost	Administration Cost	Closure Costs
Aberdeen Central Transfer Station	\$87.50	\$44.69	\$12.29	\$18.63	\$9.64	NA

The above tip fee components represent an average distribution of the costs over 2011. These components change on a monthly basis depending on the volume of MSW received at the Central Transfer Station. Administration costs are a broad category of expenses as explained in 3.6.2 above.

Table 4.1.3 2011 Revenues for County Solid Waste Management Program

Description	
Beginning Cash and Investments	\$1,140,000
Coordinated Prevention Grant	\$60,000
General – Litter Control	\$20,000
Tippling fee – export	\$2,500,000
Tippling fee – operations	\$600,000
Investment interest	\$2,000
Interfund misc. revenue	\$395,000
Other misc. revenue	\$1,000
Total Department Revenues	\$4,718,000

Table 4.1.4 Tip Fee Forecast

Tip Fee per Ton by Facility	2012	2013	2014	2015	2016	2017
Aberdeen Central Park Transfer Station	\$87.50	\$88.30	\$89.00	\$90.00	\$90.70	\$91.50

Calculated at a 0.9% annual increase

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.

Year One						
Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total
Waste Reduction						100%
Household Hazardous Waste (HHW)	79.7%	17.0%	0.0%	0.0%	3/4%	100%
Recycling	56.8%	39.8%	0.0%	0.0%	3.4%	100%
Collection						100%
ER&I						100%
Transfer	95.6%	1.0%	0.0%	0.0%	3.4%	100%
Land Disposal						100%
Administration	96.6%	0.0%	0.0%	0.0%	3.4%	100%
Other (Waste Export)	95.6%	1.0%	0.0%	0.0%	3.4%	100%

Year Three						
Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total
Waste Reduction						100%
Household Hazardous Waste (HHW)	78.5%	16.7%	0.0%	0.0%	4.7%	100%
Recycling	58.4%	36.9%	0.0%	0.0%	4.7%	100%
Collection						100%
ER&I						100%
Transfer	94.3%	1.0%	0.0%	0.0%	4.7%	100%
Land Disposal						100%
Administration	95.3%	0.0%	0.0%	0.0%	4.7%	100%
Other (Waste Export)	94.3%	1.0%	0.0%	0.0%	4.7%	100%

Year Six						
Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total
Waste Reduction						100%
Recycling	63.7%	32.5%	0.0%	0.0%	3.7%	100%
Collection						100%
ER&I						100%
Transfer	95.4%	0.9%	0.0%	0.0%	3.7%	100%
Land Disposal						100%
Administration	96.3%	0.0%	0.0%	0.0%	3.7%	100%
Other (Waste Export)	95.4%	0.9%	0.0%	0.0%	3.7%	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.

ACT	EL	OB	SU	Description	2012 Budget
REVENUES					
308	00	00	00	Beginning Cash & Investments	913,553
334	03	14	00	WSDOE CPG Amendment	60,000
334	03	16	00	WSDOE Litter Grant	30,000
343	70	01	00	Tipping Fee - Export	2,600,000
343	70	02	00	Tipping Fee - Operations	650,000
361	11	00	00	Investment Interest	1,500
366	90	00	00	Interfund Miscellaneous Rev	500,000
369	90	00	00	Other Miscellaneous Revenue	1,000
385	00	00	00	Collections of Receivables	0
DEPARTMENT REVENUE TOTAL					4,756,053

ACT	EL	OB	SU	Description	2012 Budget
EXPENDITURES					
508	00	00	00	Ending Cash & Investment	361,938
508	**	**	**	Ending Cash & Investment	361,938
537	00	00	00	Garbage & Solid Waste	
	60	00	00	Operations - Contracted	
		49	00	Miscellaneous Export Services	2,600,000
		40	**	SUPPLIES	2,600,000
	60	**	**	Operations-Contracted	2,600,000
	80	00	00	Operations-General	
		12	00	Salaries & Wages	600,798
		13	00	Extra Help	20,000
		14	00	Overtime	25,000
		10	**	SALARIES & WAGES	645,798
		20	00	Personnel Benefits	261,590
		20	**	Personnel Benefits	261,590
		31	00	Supplies	30,000
		31	01	Supplies I/F	1,000
		32	00	Fuel Consumed	1,000
		35	00	Small Tools & Minor Equipment	10,000

ACT	EL	OB	SU	Description	2012 Budget
		30	**	SUPPLIES	41,000
		41	00	Professional Services	50,000
		41	01	Professional Services I/F	125,000
		41	02	I/F CS Computer Services	66,450
		41	03	I/F CS Communications	3,240
		42	00	Communication	10,000
		42	01	Communication I/F	2,000
		43	00	Travel	6,000
		44	00	Advertising	5,000
		45	00	Rentals	10,000
		45	01	Rentals I/F	125,000
		46	00	Insurance Services I/F	28,037
537	80	46	01	Insurance Premiums I/F	0
		47	00	Utilities Services	60,000
		48	00	Repairs & Maintenance	30,000
		49	00	Miscellaneous	25,000
		49	01	Abatement Expenses	100,000
		49	02	Household Hazardous Waste Facility	175,000
		49	07	Miscellaneous Clean-Ups	25,000
		40	**	OTHER SERVICES & CHARGES	845,727
	80	**	**	Operations-General	1,794,115
537	**	**	**	Garbage & Solid Waste	4,394,115
585	00	00	00	Disbursement of Accrued Expenditures	
		00	00	Disbursement of Accrued Expenditures	0
585	**	**	**	Disbursement of Accrued Expenditures	0
594	00	00	00	Capital Outlay	
	37	00	00	Garbage/Solid Waste	
		64	00	Machinery & Equipment	50,000
		60	**	CAPITAL OUTLAYS	50,000
	37	**	**	Garbage/Solid Waste	50,000
594	**	**	**	Capital Outlay	50,000
DEPARTMENT EXPENDITURE TOTAL					4,756,053