GRAYS HARBOR COUNTY

SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025

Planning for a safe, cost-effective and sustainable solid waste management system that protects public health and the environment, now and into the future.

Adopted January 5, 2021

Amended July 6, 2021

Acknowledgements

Adopting Jurisdictions

Grays Harbor County
City of Aberdeen
City of Cosmopolis
City of Elma
City of Hoquiam
City of McCleary
City of Montesano
City of Oakville
City of Ocean Shores
City of Westport

Prepared by the Grays Harbor County Solid Waste Management Committee

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Adopted by the Grays Harbor County Board of Commissioners on January 5, 2021, by Resolution 2021-002

Contamination Reduction & Outreach Plan, Appendix H, adopted as an amendment on July 6, 2021, by Resolutions 2021-073

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Introduction

The Mission of the Grays Harbor County Solid Waste Management Plan

The Grays Harbor County Solid Waste Management Plan will provide a safe, cost-effective and sustainable solid waste management system that protects public health and the environment, now and into the future.

We will measure our success by:

- Reducing reliance on landfills by encouraging waste reduction through recycling and reuse of products
- Providing education and outreach to increase public awareness about solid waste programs and beneficial practices
- Removing toxic materials from the waste stream
- Maintaining the affordability of solid waste programs while adequately sustaining program infrastructure
- Encouraging innovation and public/private partnerships that improve options for waste diversion, collection, and reuse.

Achieving the Mission Statement

The Grays Harbor County Solid Waste Management Plan (SWMP) achieves this mission statement by creating a document for guiding solid waste management in Grays Harbor County and the nine incorporated municipalities over the next five years.

The SWMP provides information about current solid waste management practices in the county and establishes recommendations for coordinated programs for waste collection and disposal, waste diversion, special wastes, moderate risk wastes, dangerous waste generators, enforcement, administration, and public education and outreach. The SWMP aims at making its recommendations a reality through an implementation program.

SWMP Elements

- Planning area background
- Solid waste laws, regulations, & plans
- Waste generation
- Waste collection & disposal
- Waste diversion
- Special wastes
- Moderate risk wastes
- Dangerous waste generators
- Enforcement
- Public education & outreach
- Administration
- Solid waste funding
- Implementation

Plan Development and Adoption

Preparation of the SWMP is a mandate under RCW 70A.205.040, which requires "Each county within the state, in cooperation with the various cities located within such county, shall prepare a coordinated, comprehensive solid waste management plan." RCW 70A.205.075 further requires the SWMP to undergo update and review every five years. The timeframe for the Grays Harbor SWMP begins on January 1, 2021 and runs through December 31, 2025. The next SWMP update should be in place by January 1, 2026.

The Grays Harbor Solid Waste Advisory Committee (SWAC), assisted by county staff, played an instrumental role in developing the SWMP and guiding its implementation.[1] The SWAC initiated the plan development process by assessing countywide background data and existing solid waste management practices, identifying key trends, and then formulating recommendations for management actions. The SWMP concludes with an Implementation Plan that accomplishes the mission statement.

All nine cities and the county each adopt the SWMP through resolution, which follow in Appendix A.

[1] For more information about the SWAC, see page 46.

Section 1. Background of the Planning Area

1.1 Physical Description

Grays Harbor County borders the Pacific coast of Western Washington, extending approximately 50 miles along the lower Olympic Peninsula coastline. The county covers a geographic area of 1,902 square miles, ranking it 15th in area 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 and the river valleys are a defining geographic characteristic of the county. As one moves inland, the topography shifts from river lowlands and rolling hills to the Olympic Mountains in the northern half of 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 Chehalis Reservation straddles the Grays Harbor/Thurston County lines; approximately 80% of the 4,215-acre reservation is within Grays Harbor County. The Olympic National Forest and Olympic National Park own much of the northern half of the County.

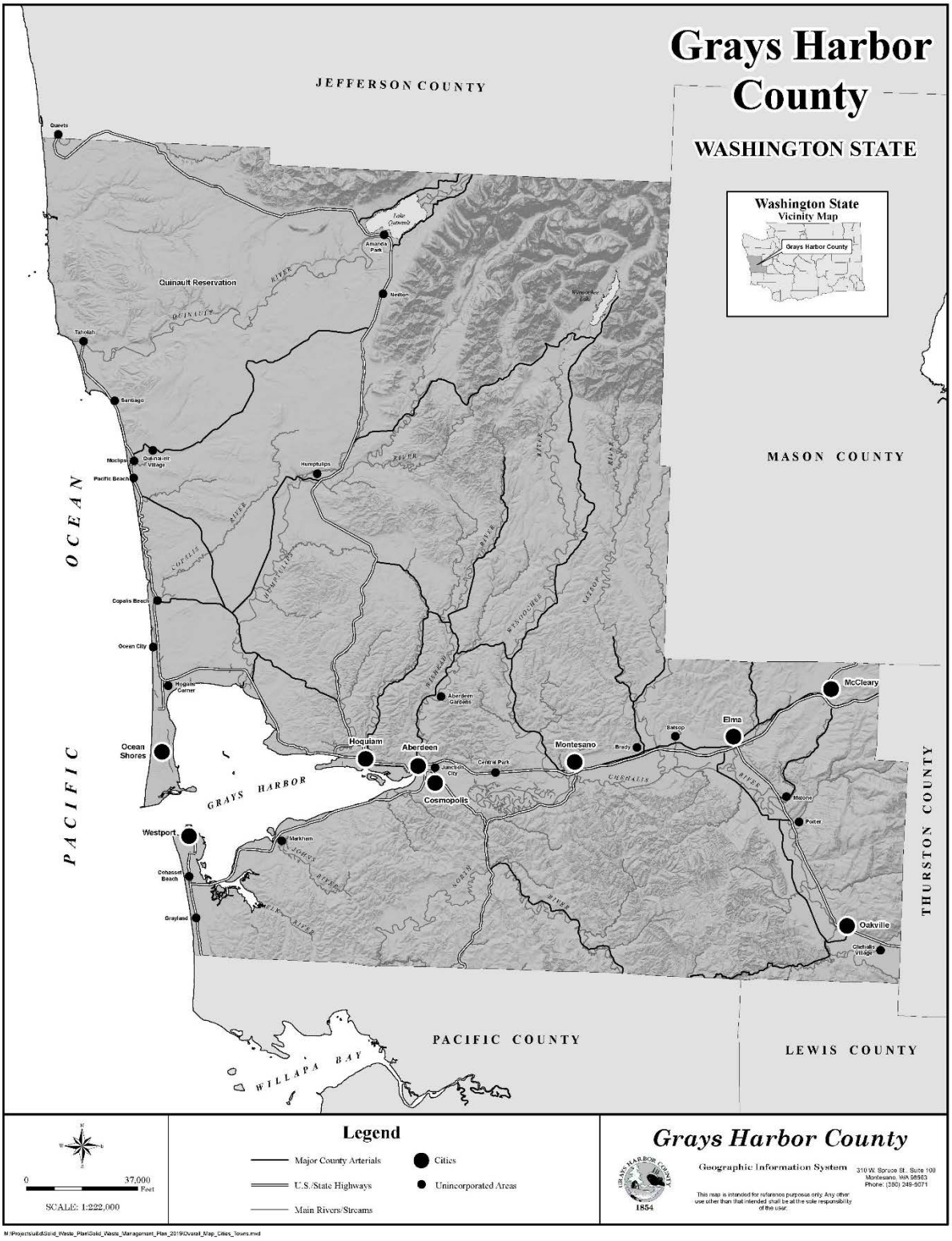
The county's climate is typical of the coastal Pacific Northwest, with cool summers and mild, wet winters. High temperatures average around 70° during the summer months and from 45° to 52° in the winter. There is a sizable variation in rainfall at different locations in the county; the average increases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

1.2 Population

The 2019 Office of Financial Management (OFM) population estimate for Grays Harbor County was 74,160, the 19th most populous county in Washington State. Between 2010 and 2018, the entire county grew by 1,363 people, a growth rate of 1.8 percent. This was the second lowest growth rate among the 39 counties during this period.

Most of the county population, 61.0 percent, resides within the incorporated cities, although the unincorporated area has the single highest population. Aberdeen, Hoquiam, and Cosmopolis alone account for 36.5 percent of the county population.

Figure 1: Map of Grays Harbor County



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There has been population growth and decline among the cities in the county. While Aberdeen and Hoquiam continue to lose population, other communities in Grays Harbor County are experiencing growth. Since 2010, the City of Ocean Shores exhibited the highest growth rate, followed by the east county Cities of Elma and McCleary. The unincorporated population of the county declined slightly.

Table 1: Grays Harbor County Population, 2010 - 2019

Jurisdiction	2010	2012	2014	2016	2018	2019	Avg. Annual Change	Total Change 2010-19
Grays Harbor County	72,797	73,150	73,300	72,820	73,610	74,160	0.21%	1.87%
Unincorporated County	28,438	28,610	28,635	28,110	28,320	28,410	-0.01%	-0.10%
Incorporated Cities	44,359	44,540	44,665	44,710	45,290	45,290	0.34%	2.10%
Aberdeen	16,896	16,890	16,850	16,780	16,760	16,880	-0.01%	-0.09%
Cosmopolis	1,649	1,640	1,645	1,650	1,665	1,680	0.21%	1.88%
Elma	3,107	3,110	3,130	3,145	3,360	3,375	0.94%	8.63%
Hoquiam	8,726	8,655	8,625	8,580	8,560	8,540	-0.24%	-2.13%
McCleary	1,653	1,655	1,660	1,685	1,760	1,790	0.90%	8.29%
Montesano	3,976	4,050	4,075	4,105	4,155	4,175	0.54%	5.01%
Oakville	684	690	690	695	690	695	0.18%	1.61%
Ocean Shores	5,569	5,745	5,880	5,955	6,220	6,490	1.72%	16.54%
Westport	2,099	2,105	2,110	2,115	2,120	2,125	0.14%	1.24%

A census designated places (CDP) is a concentration of population within unincorporated areas. The US Census Bureau define and collects information on CDPs. There are 23 CDPs in Grays Harbor County as shown in the table below.

Table 2: Population in Census Designated Places, 2010

Place	Population	Place	Population
Aberdeen Gardens	279	Amanda Park	252
Brady	676	Central Park	2,685
Chehalis Village	346	Cohasset Beach	722
Copalis Beach	415	Grayland	953
Hogans Corner	85	Humptulips	255
Junction City	18	Malone	475
Markham	111	Moclips	207
Neilton	315	Ocean City	200
Pacific Beach	291	Porter	207
Queets	174	Qui-nai-elt Village	54
Santiago	42	Satsop	675
Taholah	840		

Population fluctuations occur seasonally in the recreationally-oriented communities located along the ocean beaches. A high percentage of the seasonal population change occurs in the communities of Ocean Shores, Westport, Moclips, Copalis Beach, Pacific Beach, and Grayland. Fluctuations are primarily due to a significant tourist influx for the fish and shellfish openings and summer activities.

OFM prepares low, medium, and high 30-year population projections for each county fully planning under the Growth Management Act (GMA). While Grays Harbor County does not fully plan under GMA, OFM includes the county in the event it chooses to do so in the future.

State law requires OFM to review its projections every five years. The agency prepared its most recent project in 2017. A projection middle range represents OFM's estimate of the most likely growth scenario for the county.[2] Historic population trends for the county strongly suggest that the medium series best represents growth in the county.

Table 3: OFM GMA Population Projection for Grays Harbor County

		Projection					Percent
Series	2018	2020	2025	2030	2035	2040	Change
Low Series	73,610	69,202	69,369	69,425	68,597	67,846	-7.8%
Medium Series	73,610	73,613	74,617	75,794	75,865	75,589	2.7%
High Series	73,610	78,027	80,200	82,259	83,426	84,665	15.0%

1.3 Demographics

Age and Race/Ethnicity

The county has a higher percentage of residents who are 65 and older than the statewide average. Similarly, the county is less diverse than the statewide average.

Table 4: Countywide Population by Age, 2016 US Census

	Grays Harbor	WA State Average
Under 5 years old	5.5%	6.2%
Under 18 years old	20.8%	22.4%
65 years and older	20.2%	14.8%

[2] RCW 43.62.035

Table 5: Countywide Race/Ethnicity, 2016

Race/ethnicity, 2016	Grays Harbor	WA State Average
White	87.4%	80.0%
Black	1.4%	4.1%
American Indian, Alaskan Native	5.5%	1.9%
Asian, Native Hawaiian, other Pacific Islander	1.8%	9.4%
Hispanic or Latino, any race	9.9%	12.4%

Households

The most common type of housing units in the county are single-family residences. The incorporated cities have the highest number of multi-family homes with Aberdeen reporting the highest.

Table 6: Housing Units by Jurisdiction, 2018 Estimate

	Total Housing Units	Single-Family Units	Multi-Family Units	Mobile Home & Special Housing Units
Grays Harbor County	36,354	26,006	4,867	5,481
Unincorporated Grays Harbor County	13,274	9,204	297	3,773
Aberdeen	7,312	4,892	2,073	347
Cosmopolis	725	616	42	67
Elma	1,391	902	314	175
Hoquiam	3,869	2,837	882	150
McCleary	808	690	96	22
Montesano	1,747	1,322	339	86
Oakville	296	216	0	80
Ocean Shores	5,339	4,287	438	614
Westport	1,593	1,040	386	167

Other household statistics include:

- The average household has 2.45 people
- The 2017 median household income in the county was $50,498 and $68,289 statewide.
- The poverty rate in 2017 was 18.3 percent in Grays Harbor as opposed to 11.0 percent for the statewide average.
- 67.8 percent of households are owner-occupied
- 32.2 percent of households are rentals

1.4 Economy

Grays Harbor County is rural-resource driven economy emphasizing timber, wood and paper products, seafood processing, manufacturing, and agriculture.

Key Industries

Major wood product manufacturers include Sierra Pacific Industries, Simpson Door Company, Willis Enterprises, Cosmo Specialty Fibers, Murphy Company, and Girard Wood Products. Major food processing and manufacturing companies include the Ocean Gold, Protein, Cold, and Express Companies; Ocean Spray Cranberries; and Washington Crab Producers. The two shipyards in the county are Westport LLC and the Little Hoquiam Shipyard.

Other Businesses

The 2016 US Census reports a total of 1,622 businesses in the county under 19 separate categories.

Category	Number
Agriculture, forestry, fishing and hunting	68
Utilities	3
Construction	161
Manufacturing	80
Wholesale trade	45
Retail trade	262
Transportation and warehousing	64
Information	22
Finance and insurance	74
Real estate and rental and leasing	80
Professional, scientific, and technical services	86
Management of companies and enterprises	3
Administrative and support and waste management and remediation services	63
Educational services	7
Health care and social assistance	189
Arts, entertainment, and recreation	30
Accommodation and food services	227
Other services (except public administration)	152
Industries not classified	6
Total	1,622

US Department of Agriculture 2012 data reports there were 557 farms in the county totaling 119,440 acres.

Economic Forecast

The Department of Revenue reports the county's economy is slowly recovering to pre-recession levels, particularly in employment. The annual unemployment rate has decreased from a high of 13.9 percent in 2010 to 7.1 percent in 2017.

1.5 Key Trends

- People age 65 and older are a growing segment of the Grays Harbor County population and comprise a larger percentage of the total population compared to the rest of the state.
- As housing prices continue to increase along the I-5 corridor, growth is spilling into the county, especially in the East County area. The four fastest growing cities in the county since 2010 are Ocean Shores, McCleary, Elma, and Montesano.
- Tourism continues to grow and bring more visitors to the county. Solid waste planning needs to consider their impact to the waste stream.
- The permanent population in the North Beach area of the county is increasing. The populations of Ocean Shores and the community of Pacific Beach in particular are growing at rates faster than the county as a whole.

Section 2. Solid Waste Laws, Regulations, & Plans

2.1 Federal Regulations

Congress passed the Federal Resource Conservation and Recovery Act of 1976 (RCRA) to give the US Environmental Protection Agency (EPA) the authority to adopt specific regulations for a national system of hazardous and non-hazardous solid waste management. EPA's regulations, guidance, and policies form the framework for state and local government solid waste operating programs.

RCRA focuses on:

- Establishing the framework for states to implement municipal solid waste and non-hazardous secondary material management programs;
- Developing a comprehensive system and federal/state infrastructure to manage hazardous waste from its production to disposal;
- Preventing contamination from adversely impacting our communities and resulting in future Superfund sites;
- Restoring contaminated lands;
- Creating programs to encourage companies to modify manufacturing practices in which to generate less waste and reuse materials safely;
- Enhancing perceptions of wastes as valuable commodities that can be part of new products through its sustainable materials management efforts; and
- Bolstering the nation's recycling infrastructure and increasing the municipal solid waste (MSW) recycling/composting rate.

2.2 State of Washington

State Solid Waste Statutes

The primary state statutes governing solid waste management within the RCRA framework are:

- Chapter 70A.200 RCW, Waste Reduction, Recycling, and Model Litter Control Act, which focuses on controlling litter, increasing waste reduction, and encouraging recycling and composting
- Chapter 70A.205 RCW, Solid Waste Management – Reduction and Recycling, which establishes a comprehensive statewide program for solid waste handling, and solid waste recovery and/or recycling

- Chapter 70A.300 RCW, Hazardous Waste Management, which establishes a comprehensive statewide framework for the planning, regulation, control, and management of hazardous waste

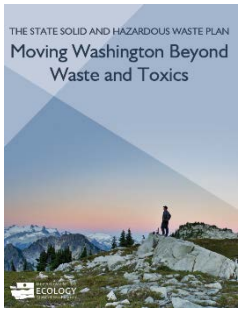
Title 70A RCW provides additional laws relating to waste reduction, solid waste incinerator and landfill operators, hazardous waste fees, labeling of plastics, packaging containing metals and toxic chemicals, used motor oil recycling, biosolids, biomedical wastes, mercury disposal, and electronic product recycling.[3]

These state statutes authorize the Department of Ecology (ECY) to adopt specific agency rules for statewide implementation.[4]

State Solid Waste Management Plan

Both Chapters 70A.205 and 70A.300 RCW require the state to develop and regularly update a state solid waste management plan that provides guidance for the future management of waste and materials statewide. The most recent state plan, Moving Washington Beyond Waste and Toxics, sets a state vision, implemented through plan goals and actions that focus on:

- Managing hazardous waste and materials,
- Managing the scope of solid waste and materials,
- Reducing the impacts of materials and products,
- Measuring progress, and
- Focusing on outreach and information.



Washington Utilities and Transportation Commission

The Washington State Utilities and Transportation Commission (WUTC) regulates solid waste collection companies through Chapter 81.77 RCW and Chapter 480-70 WAC. The commission's jurisdiction extends only to private collection companies operating within unincorporated county areas and does not extend to municipal or private collection companies operating within cities. However, if a city chooses to defer managing solid waste altogether under state law, collection by a private company within the city limits will fall under WUTC jurisdiction.

[3] See Chapters 70A.214, 70A.216, 70A.220, 70A.222, 70A.224, 70A.226, 70A.230, and 70A.500.
[4] See Chapters 173-300 through 173-351 WAC

2.4 Local Solid Waste Management Plan and Laws

The primary responsibility for regulating and overseeing the management of solid waste in Washington resides with local governments.[5] Local governments implement requirements for solid waste management through adopted policy and codes.

Grays Harbor County Solid Waste Management Plan

The Grays Harbor County Solid Waste Management Plan (SWMP) is the guiding policy document for solid waste management for Grays Harbor County and the nine incorporated municipalities. Preparation of a SWMP is a mandate under RCW 70A.205.040, which requires "Each county with the state, in cooperation with the various cities located within such county, shall prepare a coordinated, comprehensive solid waste management plan."

Grays Harbor County and the nine cities signed an interlocal agreement in 2009 to jointly undertake solid waste planning through a SWMP. The SWMP establishes joint programs for the collection and disposal of solid waste and programs for waste reduction, recycling, organics, special wastes, and administration. The plan also anticipates general solid waste management needs for the next 20 years.

The Grays Harbor Solid Waste Advisory Committee (SWAC) plays an instrumental role in developing the SWMP by providing a draft to county and municipal legislative officials to consider. Each municipality adopts the SWMP through interlocal agreement and the Board of County Commissioners adopt the document by resolution.

Grays Harbor County has been engaged in solid waste management planning since 1972. The county last revised its SWMP in 2012 and the current 2019 SWMP Revision supersedes all previous plans.

County and Municipal Codes

The county and the nine incorporated cities implement the SWMP through code provisions.

Table 7: County and Municipal Solid Waste Code Citations

Jurisdiction	Code Provisions
Grays Harbor County	• Chapter 8.12, Litter Control • Chapter 8.28, Solid Waste Collection and Disposal • Chapter 8.32, Minimum Levels of Service for Residential Recycling

[5] Chapter 36.58 RCW authorizes counties and Chapter 35.21 RCW authorizes cities to establish and operate solid waste management programs within the context of state statutes.

Jurisdiction	Code Provisions
Grays Harbor County Board of Health	• Ordinance 2004-1, Grays Harbor County Solid Waste Handling Standards
City of Aberdeen	• Chapter 13.08, Solid Waste and Recyclable Materials Collection System
City of Cosmopolis	• Chapter 7.04, Solid Waste and Collection • Chapter 7.08, Garbage Franchise • Chapter 7.12, Litter Control Code
City of Elma	• Chapter 8.04, Solid Waste Collection • Chapter 8.12, Littering
City of Hoquiam	• Chapter 3.16, Solid Waste Disposal Sites • Chapter 3.20, Garbage Disposal
City of McCleary	• Chapter 8.12, Litter Control • Chapter 8.20, Mandatory Solid Waste Collection
City of Montesano	• Chapter 6.04, Municipal Solid Waste Department
City of Oakville	• Chapter 8.04, City Dump • Chapter 8.16, Uniform Litter Control Code • Chapter 8.28, Solid Waste Management Program
City of Ocean Shores	• Chapter 8.04, Litter Control • Chapter 8.06, Solid Waste Collection and Recycling
City of Westport	• Chapter 6.08, Garbage Collection • Chapter 6.09, Solid Waste Disposal Systems • Chapter 6.10, Refuse and Litter

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

2.5 Other Pertinent Local Plans and Agreements

Grays Harbor County/LeMay Enterprises Solid Waste Agreements

The solid waste agreements between Grays Harbor County and LeMay Enterprises, Inc. have been key documents guiding solid waste management within the county for nearly 30 years. The two parties first entered into the current agreement in 1994. The initial agreement assigned LeMay Enterprises to construct, own, and operate the Grays Harbor County Transfer Station as well as be the sole entity responsible for disposing of all solid waste generated in the county. The agreement also provided for a rate structure that supported disposal, operating, landfill closure, capital facilities, and administrative costs.

The parties revised this agreement in 2014 with several key amendments. Major amendments to the agreement:

- Allowed affiliates of LeMay Enterprises to export county solid waste to the company-owned landfill facility at The Dalles, OR, or as an alternative, Boardman, OR;

- Provides emergency response procedures after disaster events;
- Allows the company to construct, own, and operate a new Transfer Station in coordination with county consultation; and
- Grants the county space at the Grays Harbor County Transfer Station to fund and operate a household hazardous waste facility.

This agreement will remain in effect until December 2034.

Another agreement between the two parties concerning the Aberdeen Sanitary Landfill dates to September 1990 and is still in effect. This agreement acknowledges LeMay Enterprises' ownership of the landfill and its responsibilities for operation, closure, and post-closure care. It also outlines a rate structure and establishes the county's financial responsibilities for the facility by creating the:

- Closure Account and Special Operation Account to pay for leachate management and temporary cover in accordance with the closure plan;
- Post-Closure Account to conduct post-closure care and monitoring; and
- County Reserve Account to support county efforts on solid waste issues including, but not limited to, closure of solid waste facilities, new facility siting, landfill oversight, solid waste planning, and assisting in rate stabilization.

This agreement remains in effect until completion of post-closure care as evidenced by little or no settlement, gas production, and leachate generation.

Municipal Collection Contracts

The cities of Aberdeen, Cosmopolis, Elma, McCleary, Montesano, Oakville, Ocean Shores, and Westport contract with LeMay Enterprises, Inc. to provide curbside collection programs. The City of Hoquiam contracts with locally-based Hometown Sanitation, LLC.

Emergency Management Plan

The Grays Harbor County 2018 Multi-Jurisdiction Hazard Mitigation Plan (page 17-7) has identified the need to locate, design, permit, and construct a solid waste staging area in the event of an earthquake, flood, landslides, severe weather, tsunami, or wildland fire hazard.

2.6 Key Trends

- The Washington State Legislature passed a series of bills in 2019 related to solid waste management. While it is too early to determine how these new laws will

affect the county's solid waste program, it will be important for the SWAC to monitor the state's planning activities. These newly adopted laws include:

- RCW 70A.240 and RCW 70A.205.045: Establishment of a Recycling Development Center within the Department of Ecology that will create a state recycling Contamination and Reduction Outreach Plan (CROP). Local jurisdictions will need to create their own CROP by July 1, 2021 or adopt the state's CROP.

- RCW 70A.205.715: Adopts a state goal to reduce food waste in the state by 50% by 2030. The Department of Ecology will work with the Departments of Agriculture and Health to develop a state wasted-food reduction plan by October 2020 with recommendations on changing state law to achieve reduction goals.

- RCW 70A.515: Requires architectural paint producers to participate in a Department of Ecology approved paint stewardship plan.

- RCW 70A.520: Requires a third-party study and recommendations on reducing plastic packaging waste by October 2020.

- The budget passed by the legislature for the 2019-2021 biennium failed to include an increase in funding for the Local Solid Waste Financial Assistance program (previously known as Coordinated Prevention Grants).

- The US Environmental Protection Agency (EPA), the US Department of Agriculture (USDA), and the US Food and Drug Administration (FDA) are launching a "Winning on Reducing Food Waste" initiative aimed at improving coordination and communication across federal agencies attempting to better educate Americans on the impacts and importance of reducing food loss and waste. In the United States, food waste is estimated at between 30 percent to 40 percent of the food supply, the three agency heads noted in a news release. Food waste is the largest category of material that ends up in landfills at more than 75 billion pounds a year.

- Efforts continue at developing domestic markets for recycled products, especially paper.

Section 3. Waste Generation

Wastes generated in Grays Harbor County originate from residential, commercial, industrial, and institutional sources. This section examines current and future trends regarding the quantities of solid wastes generated in the county that are exported to out-of-county landfills, collected through recycling, and landfilled within the county.

3.1 Disposal Quantities and Trends

Grays Harbor County and LeMay Enterprise, Inc. maintain records of total tonnage of solid waste brought to the Grays Harbor County Transfer Station for export and recycling.

Over the past five years, the overall total solid waste tonnage per person has been increasing at a slightly greater pace than the annual estimated population growth rate. Recycling rates, however, have fluctuated widely but have been relatively stable since 2015.

Table 8: Tons of Solid Waste Generated, 2012-2019

	Tons Generated							
	2013	2014	2015	2016	2017	2018	2019	Average
Exported for land disposal	48,033	48,948	51,232	51,655	53,673	55,037	58,252	52,404
Collected through recycling	5,741	5,494	5,550	6,041	6,088	5,900	6,010	5,832
Total tons generated	53,774	56,456	58,797	59,712	61,778	60,937	64,262	59,388

Table 9: Tons of Solid Waste Generated Per Capita, 2012-2019

	Tons Generated per Capita							
	2013	2014	2015	2016	2017	2018	2019	Average
Exported for land disposal	0.66	0.67	0.70	0.71	0.74	0.75	0.79	0.72
Collected through recycling	0.08	0.07	0.08	0.08	0.08	0.07	0.08	0.08
Total tons generated per capita	0.73	0.77	0.80	0.82	0.85	0.82	0.87	0.81

Since 2013, per capita generation of solid waste has increased by 280 pounds, or 19 percent.

Table 10: Percent Annual Increase, Tons of Solid Waste Generated

	Percent Increase					
	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	Average Increase
Exported for land disposal	4.5%	1.4%	4.2%	2.5%	5.8%	3.7%
Collected through recycling	14.3%	0.0%	0.0%	-13.4%	14.0%	3.0%
Total tons generated	3.9%	2.5%	3.7%	-2.4%	6.6%	2.9%

The Stafford Creek Limited Purpose Landfill operated by Northwest Rock, Inc., accepts inert wastes, such as wood and demolition wastes, and soil capping material.

Table 11: Stafford Creek Limited Purpose Landfill Volumes, 2015-2017

	Cubic Yards		
Waste Material	**2015**	**2016**	**2017**
Construction & demolition	11,018.0	8,568.0	9,746.5
Wood waste	13,124.0	15,594.0	16,851.0
Roofing	11,871.5	11,035.0	12,037.0
Soil capping	32,560.5	879.0	2,666.0
Total	68,874.0	36,075.0	41,300.5

3.2 Future Solid Waste Stream Forecast

Forecasting solid waste streams into the future is fraught with uncertainty. Changing attitudes about solid waste, the strength or weakness of the economy, and growth patterns are examples of changes that complicate predictions. However, using basic assumptions, a simple linear projection can provide reasonable insight in analyzing future solid waste management needs.

This forecast relies on:

- The 2017 OFM 20-year medium series population projection, 2020 through 2040;
- The average ton per capita rates for solid wastes exported for land disposal (0.72) and recycling (0.08) for the years 2013 through 2019;
- The average annual increase for solid wastes exported for land disposal (3.7%) and recycling (3.0%) for the years 2013 through 2019

The formula used for both solid wastes exported for land disposal and recycling:

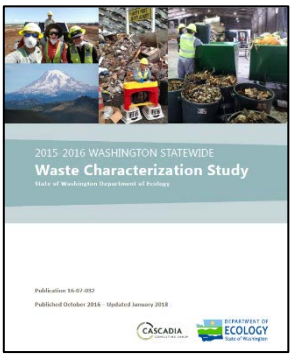
(Projected Population x Per Capita Average) x Average Annual Increase

Table 12: Solid Waste Forecast, 2018 through 2040

	2020	**2025**	**2030**	**2035**	**2040**
Medium series population projection	73,613	74,617	75,794	75,865	75,589
Exported for land disposal, tons	54,962	55,712	56,591	56,644	56,438
Collected through recycling, tons	6,066	6,148	6,245	6,251	6,229
Total tons generated	61,028	61,860	62,836	62,895	62,666

Future volumes at the Stafford Creek Limited Purpose Landfill are difficult to predict given the fluctuating flow of materials into the site.

3.3 Waste Characterization Study

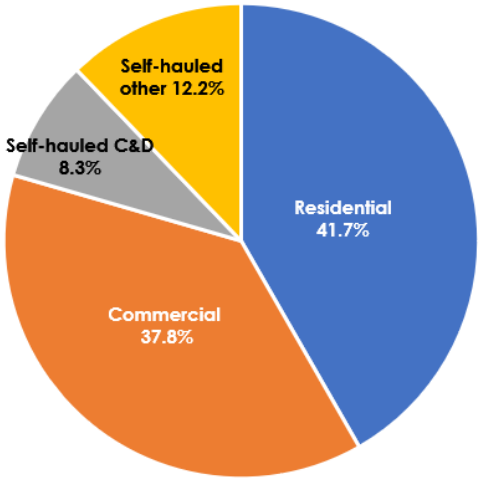


Grays Harbor County participated in the 2015-2016 statewide Waste Characterization Study. This study examined waste streams in six representative Waste Generation Areas (WGA) of the state. Grays Harbor and Clallam Counties made up the West WGA.[6]

The characterization study examined the quantity and type of solid waste originating from residential, commercial, and self-hauled categories.

- The study defined "residential wastes" as waste hauled by contracted or municipally operated vehicles in which 80 percent or more of the waste is from single-family and/or multifamily residential sources.
- "Commercial wastes" were wastes hauled by contracted or municipally operated vehicles in which 80 percent or more of the waste is from institutional, commercial, or industrial sources, and includes construction and demolition (C&D) materials.
- "Self-hauled construction and demolition (C&D) wastes" includes wastes hauled by vehicles not operated by a franchise or municipality and whose waste was generated as a result of construction or demolition activities. The study did not consider quantities landfilled at the Northwest Rock facility.
- "Self-hauled other wastes" include wastes hauled by vehicles not operated by a franchise or municipality and not from construction or demolition activities.

Figure 2: Percent of Solid Waste by Category, 2015-2016 West WGA



[6] The study did not account for the volumes accepted at the Stafford Creek Landfill.

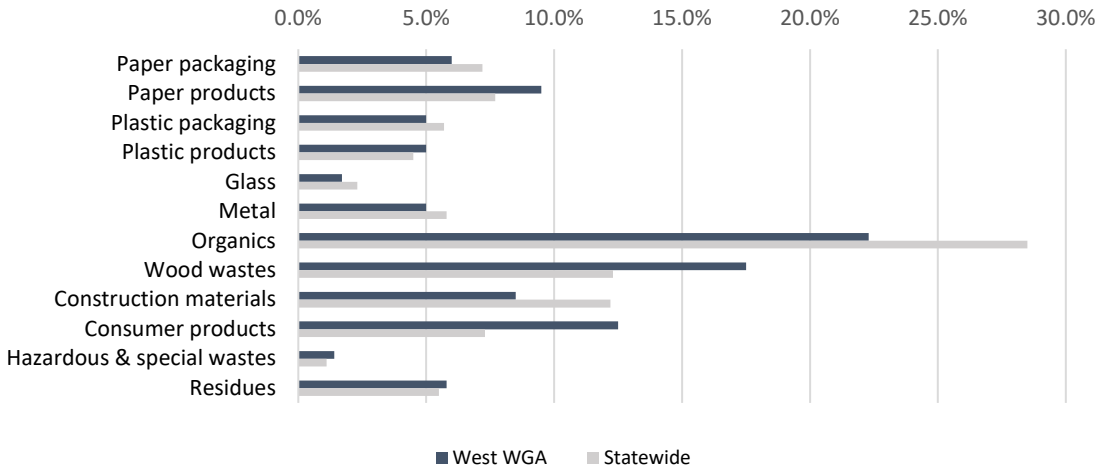
Within the West WGA, the residential waste stream accounts for the largest percentage of wastes, followed closely by those from commercial sources. The self-haul other sector is the next largest and likely comprised of those rural residents who choose not to use a commercial pick-up service.

The study also sorted the waste stream in each WGA into broad categories, followed by more refined subcategories.

Table 13: Percent of Waste Composition by Category, 2015-2016 West WGA

Material	Residential	Commercial	Self-hauled C&D	Self-haul other
Paper packaging	6.2%	7.3%	1.5%	4.3%
Paper products	11.5%	11.0%	1.6%	3.4%
Plastic packaging	6.0%	5.7%	0.3%	2.5%
Plastic products	5.7%	4.7%	1.2%	5.9%
Consumer products	8.6%	12.8%	2.0%	31.8%
Metal	4.8%	4.2%	4.6%	8.4%
Glass	2.9%	0.6%	0.1%	2.1%
Organics	35.3%	15.3%	0.3%	14.6%
Wood wastes	3.2%	27.2%	56.8%	9.8%
Construction materials	4.5%	6.1%	31.5%	13.8%
Residues	10.2%	3.2%	0.1%	2.8%
Hazardous & special	1.2%	2.1%	0.0%	0.5%

Figure 3: Composition of Total Waste Stream by Percent, 2015-2016 West WGA and Statewide



Finally, results of the study showed some interesting similarities and differences when comparing the statewide waste stream and the West WGA, as shown above in Figure 3. While the order of waste categories by percent of total volume generally in each WGA showed similarity, comparisons within individual categories highlighted regional

differences between the West WGA and other areas of the state. These distinctions likely reflect the types of industries within a region and the structure and strength of the local economy (for example, the amount of construction material in communities with strong economies).

Within the West WGA, edible and inedible vegetative food wastes comprised nearly 41.7 percent of all organics while edible and inedible meat, fats and oils added another 14.3 percent. Yard wastes made up 22.0% of organics.

The largest percentages of wood waste in the West WGA included painted wood (27.4%), dimensional wood (15.0%), untreated wood (12.4%), and engineered wood (10.8%).

Consumer products in the West WGA constituted a much larger share of the waste stream than elsewhere in the state. The largest percentages within this category were mattresses (23.5%), organic textiles (22.7%), furniture (21.2%), synthetic and mixed textiles (13.8%), and tires (5.8%).

Under the hazardous and special waste category, medical waste was the largest item (70.4%) followed by water-based paints (10.2%).

3.4 Key Trends

- The downturn in recycling tonnage in 2018 was unusual; the recycling stream typically is more consistent.
- There is a growing shift toward the use of multi-layered packaging for products like juice and soup that combine layers of paper, plastic, and metal. This type of packaging is more environmentally friendly in some ways than the more traditional metal, glass, and plastic packaging it replaced because it is lighter in weight and increases product shelf life. However, because these newer types of packaging consist of multiple materials, they can be more difficult and expensive to recycle.
- Organics comprise a much larger percentage of the waste stream in Grays Harbor and Jefferson Counties compared to the statewide average.

3.5 Waste Generation Management Actions

A. The Solid Waste Advisory Committee will review solid waste tonnage from the Grays Harbor Transfer Station annually to analyze impacts to planning and management.

Section 4. Waste Collection and Disposal

Solid waste collection and disposal programs in Grays Harbor County include municipally-contracted collection services, state-issued private collection certificates, the Grays Harbor County Transfer Station, export to out-of-county landfill facilities, and Northwest Rock's Stafford Creek limited purpose landfill.

The Grays Harbor County SWMP provides the same level of access to collection and disposal programs within the urban and the rural areas of the county, with the notable exception that participation in collection services within rural areas is not mandatory.

4.1 Residential and Commercial Collection Services

Municipal Collection Programs

Within the county, the cities of Aberdeen, Cosmopolis, Elma, McCleary, Montesano, Oakville, Ocean Shores, and Westport contract with LeMay Enterprises, Inc. for curbside collection services. LeMay Enterprises, Inc., owned by Waste Connections and doing business as LeMay Grays Harbor in the county, provides both residential and commercial solid waste and co-mingled recycling collection services as part of the contracted service. Residential collection is mandatory within each city.

The City of Hoquiam contracts with locally-owned and operated Hometown Sanitation, LLC. Hometown Sanitation provides both residential and commercial pick up services, including optional co-mingled recycling. Residential collection is mandatory within Hoquiam.

Unincorporated and Tribal Collection Programs

Lemay Enterprises, Inc. provides collection services throughout most of the unincorporated areas of the county under the Washington Utilities and Transportation Commission (WUTC) Certificate G000098. Subscribing to residential curbside collection is voluntary within the unincorporated areas of the county.

On the Quinault Indian Reservation, the Quinault Indian Nation provides collection service for its tribal members within the villages of Taholah in Grays Harbor County and Queets in Jefferson County. LeMay Enterprises, Inc. services most of the remaining part of the reservation. Two small areas along the northern boundary of the county on the reservation are within WUTC Certificate G000009 belonging to Murrey's Disposal Co. Inc. However, aerial photographs show no residences or businesses within these two areas.

The Confederated Tribes of the Chehalis Reservation relies on LeMay Enterprises, Inc. of Centralia for curbside collection service in Chehalis Village under WUTC established rates. However, solid waste and recyclables collected on the reservation by LeMay Enterprises, Inc. go to the Thurston County Waste and Recovery Center in Lacey.

4.2 Active Solid Waste Handling Facilities

Grays Harbor County Transfer Station

The Grays Harbor County Transfer Station is the primary disposal site for solid waste collected in the county. Newly constructed in 2019, this is a full-service facility accepting deliveries from private collection services and self-hauling residential and commercial customers.

The facility is located on 20 acres north of the Clemmons Road-Highway 12 junction. The site sets above the Wynoochee Valley floor to the east, is outside of the tsunami inundation zone, and has no nearby streams or wetlands. A newly installed traffic light at the intersection of Clemmons Road and Highway 12 will facilitate significantly safer access to the facility than the current facility.

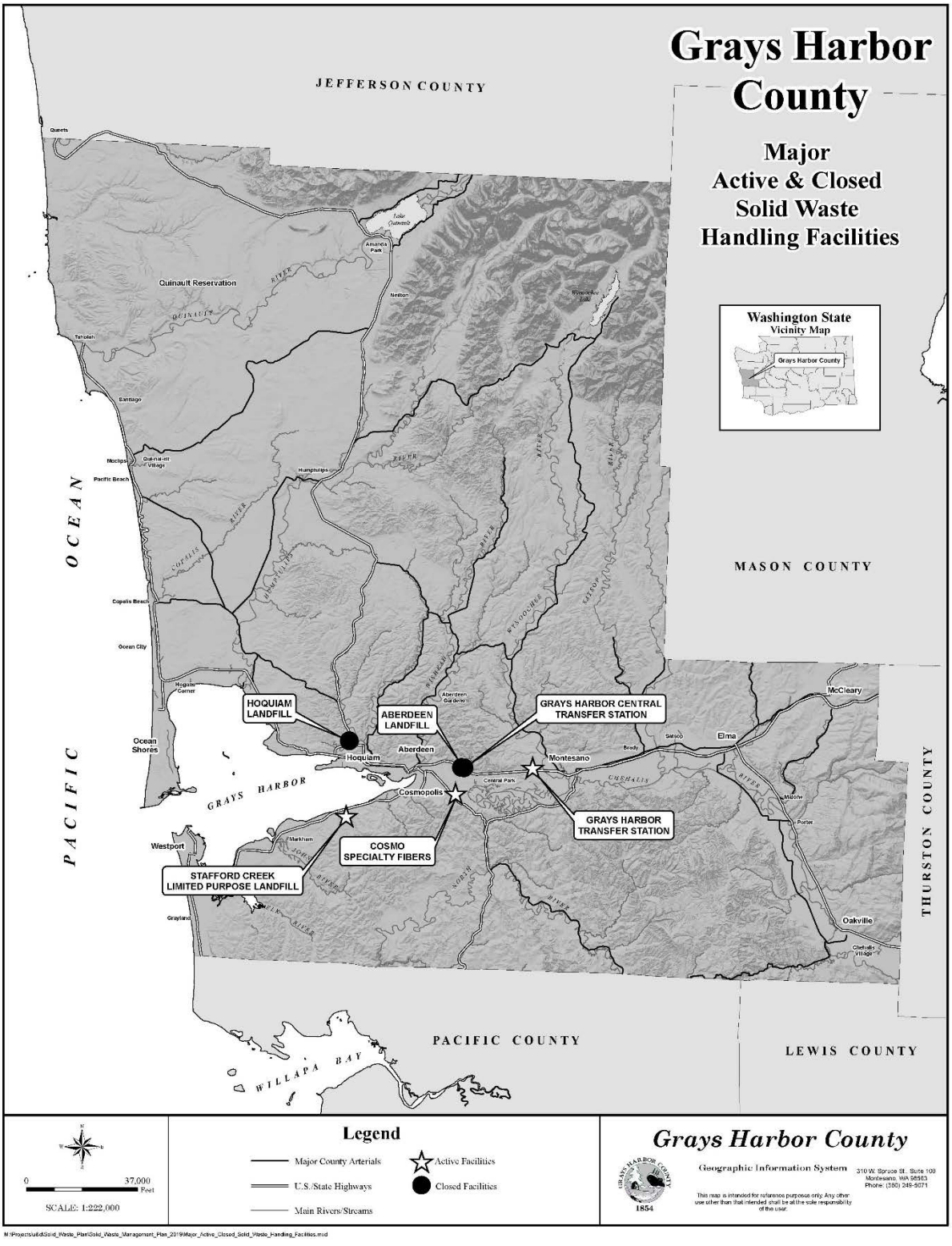
The station is a covered facility with a tipping floor for direct refuse unloading. A wheel-loader breaks down and places wastes into top-loading, 150-cubic-yard opossum belly trailers. A waste compaction, or tamping, arm compacts wastes to an average density of about 550 pounds per cubic yard once in the containers. 150 cubic-yard transfer trailers typically weigh about 32 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. The station also has a Household Hazardous Waste Collection Facility and an on-site recycling drop-off station.

The station primarily accepts unsegregated refuse, asbestos, refrigerators, tires, and rims. Drop-off containers are available to the public at no charge for cardboard, newspaper, mixed paper, glass, plastic bottles, cans, and used motor oil.

The Grays Harbor County Transfer Station operates under a permit issued annually through the county's Environmental Health Division. This permit specifies general facility requirements that govern operation, recordkeeping, reporting, inspection, storage piles, moderate risk waste, and future closure.

LeMay Enterprises, Inc. owns and operates the transfer station through an 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, LeMay, Inc. agrees to operate the facility for a minimum of 20 years, and

Figure 4: Major Active and Closed Solid Waste Handling Facilities



guarantees access to the self-haul public, private businesses, and commercial haulers, and the loading of wastes for long-haul transport.

The station is open Monday through Saturday and closed on Sundays, Thanksgiving, Christmas, and New Year's Day.

Waste Connections retains responsibility for the original transfer station located at 4201 Olympic Highway that closed in 2019.

Stafford Creek Limited Purpose Landfill

The Stafford Creek Limited Purpose Landfill owned by Northwest Rock, Inc. accepts only inert materials, primarily wood wastes and lumber and plywood demolition debris. It is located immediately east of the Stafford Creek Prison off State Route 105. The county permits the site as a solid waste disposal site under Chapter 173-350 WAC. The standards for operating the facility fall under Chapter 173-304 WAC.

The original design of the Stafford Creek Limited Purpose Landfill was to have 11 cells, each one being five acres in area. The estimated volume for each cell is 481,000 cubic yards. None of the cells have linings and a series of ditches collect leachates that empty into settling basins. Closed cells have a final cap and are seeded for revegetation.

Northwest Rock is considering plans to expand the site by another five cells. With this expansion, the site has adequate capacity to accept approved wastes for another 30+ years. The expansion will need to meet recently updated design and performance standards.

Cosmo Specialty Fibers, Inc. Solid Waste Disposal Site

The county also permits Cosmo Specialty Fibers, Inc. under WAC 173-350-490 to operate a solid waste disposal site for disposing of sludge material dredged from its wastewater treatment lagoons. The site is approximately 13.8 acres in area.

Other Active Solid Waste Handling Facilities

There are several, smaller exempt active solid waste handling facilities within the county. Table 14 lists these facilities by type and location.

Table 14: Other Exempt Active Solid Waste Handling Facilities

Facility	Facility-Type	Location
C&A Recycle	Inert waste	1831 SR105 Charlie Creek, Aberdeen
C&A Recycle	Recycling	1831 SR105 Charlie Creek, Aberdeen
Oil Drop Box (Cut Rate Auto Parts)	Limited MRW	216 E. Martin Street, Elma
Green Freedom	Compost	1087 Monte Elma Rd, Elma
HD Recycling	Material recovery	201 W Wynoochee Road, Elma
Oil Drop Box (Mahoney's Chevron)	Limited MRW	600 Simpson Avenue, Hoquiam
Hoquiam Demo Site	Inert waste landfill	400 Blk, S. Adams Street, Hoquiam
Jim Wells Rock, LLC	Recycling	171 Humptulips Road, Hoquiam
Lakeside Industries	Recycling	2400 Sargent Road, Aberdeen
Lakeside Industries	Inert waste	US 12 & Clemmons Road, Montesano
Oil Drop Box (Bowling Alley)	Limited MRW	222 E. Wynoochee Avenue, Montesano
Oil Drop Box (City Barn)	Limited MRW	303 E. Pine, Oakville
Oil Re-Refining Company	Material recovery	418 S Adams, Hoquiam
Pay More Recycle & Salvage, Inc.	Material recovery	1813 Westport Road, Aberdeen
Oil Drop Box (Port of Grays Harbor)	Limited MRW	326 Lamb Street, Westport
Schoch Farms	Compost	55 Wynoochee Road, Montesano
Stafford Creek Corrections Center	Compost	191 Constantine Way, Aberdeen
Oil Drop Box (Treatment Plant)	Limited MRW	3194 Ocean Beach Road, Pacific Beach
Universal Refiner Corp	Recycling	217 W Pioneer, Montesano
Weyerhaeuser Bio-Remediation	Pile – storage/treatment	215 H Street, Cosmopolis

4.3 Closed Solid Waste Handling Facilities

Aberdeen Sanitary Landfill

The closed Aberdeen Sanitary Landfill is a LeMay Enterprises, Inc. facility located at 4201 Olympic Highway east of the City of Aberdeen. Originally built on wetlands, the total landfill area encompasses 31 acres and was the largest landfill in the county. The landfill accepted approximately 430,700 tons of waste for 25 years until it closed in 1994 in accordance with WAC 173-304-490.

The closure design for the landfill includes a perimeter leachate toe seep collection system and a system of perimeter surface water drainage ditches that collect 57,000 to 138,000 gallons per day. Collected leachate flows through underground lines to the City of Aberdeen Sewage Treatment Plant. The leachate gas collection system relies on a primary treatment system for burning combustible emissions.

The landfill currently is in a post-closure stage that requires groundwater monitoring, surface water monitoring, gas monitoring, and maintenance of the facility, its structures, and monitoring systems. Post-closure continues for a period of twenty years or until such

time that the site stabilizes. Annual reports prepared by a licensed hydrogeologist is a requirement.

The Grays Harbor County Environmental Health Division supervises the post-closure of the Aberdeen Sanitary Landfill until the owners complete the requirements of the post-closure plan. As part of the post-closure compliance procedure, the division annually must issue a post-closure permit that reviews monitoring results and determines if changes in monitoring is necessary to protect public health and safety. They also conduct site inspections to ensure appropriate maintenance and monitoring of the physical facility, as well as compliance with other permit conditions.

Hoquiam Landfill

The City of Hoquiam operated a municipal solid waste landfill until 1989, with closure completed in 1990 in accordance with WAC 173-304. The city retains Parametrix to conduct annual post-closure monitoring of landfill gas, leachate, groundwater, and surface water.

Post-closure activities will continue until the city is able to demonstrate that the landfill is in a stable state to protect environmental and human health. The 2017 landfill permit issued by the county requires a two-year work plan to gather information to determine at what point monitoring may end. For termination to occur, monitoring must confirm that the landfill produces little to no gas and leachate, and that there is minimal settlement of the waste body. As a listed remedial action or "cleanup" site (see Section 8.2), additional monitoring of groundwater is necessary above the base or toe of the landfill in an area where documentation indicates the presence of disposed industrial waste.

The closure plan obligates the city to continue collecting and treating all future leachate through its the sanitary sewer treatment system, even after the termination of post-closure monitoring.

4.4 Waste Export

Waste Connections exports solid waste collected at the Grays Harbor County Transfer Station directly to its Wasco County Landfill located five miles southeast of The Dalles, Oregon. The site is a Subtitle D Regional landfill 337 acres in area, with 213 acres designated by the State of Oregon for active landfilling. The landfill accepts wastes from other counties in Washington and Oregon and likely will not achieve capacity until around 2085.

Waste Connections currently hauls waste to the landfill by trucks outfitted with opossum belly trailers. The company retains the option to rely on an intermodal system in the

future if trucking alone no longer is feasible. If the Wasco County Landfill becomes unavailable to receive wastes from Grays Harbor County, Waste Connections will rely on its affiliate Finley Buttes Landfill near Boardman, Oregon.

4.5 Key Trends

- The new Grays Harbor County Transfer Station will accommodate future solid waste volumes over the 20-year planning period. The new site also has plenty of room to expand, if necessary.

4.6 Waste Collection & Disposal Management Actions

Residential and Commercial Collection Services

A. Continue to monitor the contractual and management provisions in existing operating agreements and permits with all solid waste handling facility operators in the county.

B. The county will monitor solid waste collection programs in the county to evaluate success in meeting the plan objectives.

C. Continue to evaluate the solid waste service needs of growing areas of the county.

Grays Harbor County Transfer Station

D. The Solid Waste Program and the contracted service provider will monitor the long-term transfer capacity of the system.

E. Operate the transfer station as a self-supporting enterprise in accordance with 173-350 WAC. Continue to structure user fees at the existing transfer station to cover all costs.

Active Solid Waste Handling Facilities

F. The Environmental Health Division will continue to permit, inventory, assess solid waste handling facilities regarding their operations, and long-term capacity.

G. 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 all solid waste handling facilities.

Closed Solid Waste Handling Facilities

H. The Environmental Health Division will continue to identify and track existing and past sites; inventory and assess for public health threats.

I. The Solid Waste Division will continue to adequately provide financial assurance for post-closure activities at the Aberdeen landfill to protect public and environmental health.

Section 5. Waste Diversion

Waste diversion in Grays Harbor County seeks to minimize the amount of waste entering the landfill through recycling, composting, energy production, reuse, and waste reduction programs. The SWMP provides the same level of access to waste diversion programs within urban and rural areas of the county.

Determining how much material annually gets diverted from the waste stream in the county is becoming harder to quantify; the private sector continuously finds new uses for once discarded materials. For instance, food and wood wastes that at one time went into the waste stream now become new products through recycling or reuse.

5.1 Recycling

Recycling is the process of collecting and processing materials from the waste stream and turning them into new products. It reduces the amount of wastes that enter landfills, conserves natural resources, and creates jobs that reuse these materials.

Designated Recyclables

Over the past five years, recycling diverted an average of ten percent of the waste stream entering the Grays Harbor County Transfer Station. Table 15 provides a list of designated recyclables identified as a priority by the Solid Waste Advisory Committee given current market conditions.

Table 15: List of Designated Recyclables and Collection Method as of January 2020

Recyclable	Collection Method
Cardboard (corrugated boxes, paper towel tubes)	Comingle curbside, drop-off containers
Chipboard food and shoe boxes	Comingle curbside, drop-off containers
Glass	Drop-off containers
Magazines, phone books, brochures & catalogs	Comingle curbside, drop-off containers
Moderate risk waste	Moderate Risk Waste Facility
Newspaper and office paper	Comingle curbside, drop-off containers
Plastic #1PET and #2 HDPE	Comingle curbside, drop-off containers
Steel (tin) and aluminum cans	Comingle curbside, drop-off containers
Used motor oil	Drop-off containers

The SWMP recognizes that market rates for recyclables can change frequently. To keep costs down for consumers, recycling managers need flexible strategies and the freedom to determine when and when not to recycle certain items due to their low market value. Regular communication between the SWAC, Solid Waste Program staff, and recycling managers will be essential for finding an appropriate balance between

recycling costs, costs to consumers, and environmental protection when designating recyclables and their collection methods.

Curbside Recycling

Both LeMay Enterprises, Inc. and Hometown Sanitation offer a curbside single-cart, comingled recycling collection service for residential and commercial accounts. This service currently accepts the following designated recyclables:

- Cardboard (corrugated boxes)
- Plastic #1PET and #2 HDPE
- Newspaper and office paper
- Magazines, phone books, brochures & catalogs
- Chipboard food and shoe boxes
- Steel (tin) and aluminum cans

Both curbside recycling programs no longer includes glass and yard waste.

LeMay Enterprises reports that approximately 90 percent of their customer base subscribes to curbside recycling services, although the number of accounts that utilize the service is unknown. Co-mingled commercial recycling also is available for commercial accounts, but most businesses only access cardboard and office/mixed-paper collection services. In 2018, commercial accounts made up 30% of all recyclables collected.

The Grays Harbor County Transfer Station accumulates and stores comingled recyclables and transports them to commercial recycling facilities, such as Pioneer Recycling Services, LLC's in Tacoma facility.

Grays Harbor County Transfer Station

The Grays Harbor Transfer Station has drop-off containers for the following designated recyclables:

- Cardboard (corrugated boxes)
- Plastic #1PET and #2 HDPE
- Newspaper and office paper
- Magazines, phone books, brochures & catalogs
- Chipboard food and shoe boxes
- Steel (tin) and aluminum cans

- Glass

There is no fee for the public to access drop-off containers.

The station also has a designated E-Cycle recycling program that accepts televisions, computer monitors and towers every Tuesday.

Self-Haul Glass Recycling Containers

Self-haul glass recycling containers are available throughout the county. LeMay Enterprises, Inc. services all containers except for the one served by Hometown Sanitation in Hoquiam.

Table 16: Glass Drop-Off Container Locations

Location	Address
City of Aberdeen	South Side Swanson's, corner of Curtis & Boone
City of Cosmopolis	City Shop, 1800 1st St.
City of Elma	LeMay Recycle Center, 41 Marion Rd.
City of Hoquiam	Police Station, corner of 10th & Simpson
City of McCleary	Park and Ride, by City Hall
City of Montesano	Park & Ride, Behind Thriftway
City of Oakville	City Barn, corner of Alan & Pine
City of Ocean Shores	Overflow parking area for the Convention Center (off Minard Avenue)
City of Westport	City Street Shop, Corner of 1st & Sprague
Pacific Beach	Sewage Treatment Plant, 3194 Ocean Beach Rd.

Commercial Recycling Efforts

Private businesses in the county provide a wide-range of recycling/salvage services. These include such items as scrap metal, auto salvage, tires, and vehicle batteries. Because there are no reporting requirements for these businesses regarding the quantities of materials they recycle, their impact on the countywide recycling remains unknown.

Ocean Protein, LLC in Hoquiam takes fish offal that normally would go into the waste stream and recycles it into a fish meal used in aquaculture, livestock feed, and pet food. It produces annually approximately 4,000 metric tons (MT) of fish meal, 670 MT of oil, and 80 MT of bone annually since its opening in 2005.

County Recycling Trends

Recycling is becoming more problematic for the county due to a reduced number of available markets, increased quality requirements, lower prices for materials, consumer

trends, and operational costs. These impacts will significantly affect the financial support needed to continue recycling programs.

A major contributor to this trend is due to the Northwest's loss of its major export market for recycled materials in China. The Chinese government has implemented specific restrictions on the type and quality of imported recyclables that its companies can now accept. China has taken this approach to both support its own growing recycling industry and to reduce the acceptance of contaminated materials handled within the country.

The consequence of this new policy has particularly limited the importation of low-grade plastics and unsorted paper. China's regulations aim to increase the quality of recyclable materials entering the country by placing limitations on the amount of contamination within these materials. Materials exported to China for recycling need to be almost completely free of contaminants. In some cases, China is rejecting loads that contain more than 0.5 percent contamination.

Current comingled recycling practices within Washington State and elsewhere do not meet this threshold. Recent estimates of recycled material collected regionally contain approximately 10 percent or more in contaminants. Recycling programs either need to reduce their contamination levels or search for new markets in other less restrictive countries. In the meantime, local recycling efforts will need increased public education as well as further subsidization. For the time being, sporadic landfilling of recyclable materials will happen whenever accumulations become too large.

Consumer choices and packaging changes are creating a secondary impact to recycling. A decline in the use of cans and bottles to package beverages and vegetables, and an increase in the use of multi-layered aseptic packaging is reducing the supply of aluminum, steel, and glass for recycling.[7] In addition, the supply of newsprint for recycling has dropped dramatically over the last 10 years as people shift to on-line sources for news. Also, flexible plastic packages are increasingly being used instead of cardboard boxes to ship consumer products. These accelerating trends have lowered the overall value of the paper collected for recycling in the county.

Finally, serving a large rural county is costly. Providing curbside recycling services to the more remote areas of the county is uneconomic due to labor and fuel costs.

[7] Aseptic packaging is a specialized manufacturing process in which food, pharmaceutical, or other contents undergo sterilization separately from packaging. The process then insert contents into containers within a sterile environment. Food examples include milk, fruit juices, cream, yogurt, and salad dressings.

5.2 Composting

Composting is a form of recycling, transforming waste materials into usable or marketable materials for use other than landfill disposal or incineration.[8] Composting can be an effective tool in managing certain waste materials because it offers a means to generate a useful product, such as soil amendments, while diverting significant amounts of organic materials away from landfills. Composting programs can handle yard wastes or the organic portion of municipal solid wastes, such as food and wood waste, or even paper.

Local Composting Efforts

The City of Westport Sewage Treatment Plant has the only large-scale composting operation in the county. The only other active composting occurring in the county is through the individual efforts of farmers and homeowners.

The county and LeMay Enterprises currently are examining the economic feasibility of restarting the collection of yard waste and clean wood waste program within incorporated areas. Silver Springs Organics, another Waste Connections company located near Rainier in Thurston County, is a commercial composting facility. Silver Springs Organics also accepts food and farm wastes. The county and LeMay Enterprises have no specific timetable for deciding on this program.

Markets for composted material are scarce in 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 largescale operation that would result in a balanced formula for marketable compost.

5.3 Energy Recovery

Energy recovery from waste is the conversion of non-recyclable waste materials into usable heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolization, anaerobic digestion and landfill gas recovery.

Currently there are two energy recovery the Sierra Pacific Industries (SPI) sawmill in Junction City and another at Cosmo Specialty Fibers Inc. in Cosmopolis. SPI burns bark, sawdust, and other low-grade byproducts of the manufacturing process to fuel a steam boiler assembly that provides 30 megawatts of power for the plant. Cosmo Specialty

[8] RCW 70A.205

Fibers Inc. uses on average 95% biomass and deconstructed biomass from their cooking process to produce energy.

Until recently, collected yard waste and clean lumber was chipped and used as hogged fuel. However, with the implementation of new emission standards, markets for this material have decreased significantly. As a result, the county and LeMay Enterprises have discontinued collection of these materials.

5.4 Waste Reduction

Waste reduction, also known as pollution prevention, is any practice that reduces, eliminates, or prevents wastes or pollution at its source of origination. Waste reduction programs may be as broad and diverse as manufacturing earth-friendly products or encouraging selective purchasing and reuse patterns among consumers. Waste reduction differs from recycling because no material processing is necessary.

Effective waste reduction programs result in broad-ranging benefits, such as natural resource conservation, reduced energy consumption, and reduced air, water, and land pollution.

Reuse Activities

Waste reduction is a common practice in the county, especially in relation to the reuse of durable goods. Private, public, and charitable entities successfully encourage waste reduction through a variety of methods.

Stores operated by private individuals and nonprofit organizations are the most commonly associated reuse outlets. While some specialize in certain products, such as clothing or automobile parts, others cater to anything and everything. Individual, short-term garage sales also fall within this category of reuse.

The internet has become another important resource for reuse transactions. Grays Harbor County supports the Reusable Materials Exchange website as part of the 2 Good 2 Toss program. This site allows individuals to list items for free or sale. Currently, over 25,567 exchanges have taken place through the program. Other internet sites specialize in exchanging specific products, such as industrial wastes and building materials.

Waste reduction programs in the county also focus on classroom education as well as technical assistance to businesses and industries. Strategies for waste reduction focus on reducing initial consumption, reusing durable products, retrieving materials from

disposal, reducing the toxicity of the waste stream, or combination of all these approaches.[9]

5.6 Key Trends

- Glass is now costing $30 to $45 a ton to recycle. Recycling glass has become problematic due to transportation costs (weight) and contamination with other materials. Lighter-weight packaging materials are replacing glass and the markets for glass collected for recycling are declining in the Northwest.

- Public education about recycling contamination is critical to improving the reuse of materials and lowering overall recycling costs. Too much material is entering the recycling stream that has no current market; it requires labor intensive separation and eventually enters the landfill anyway. These items can include beverage cartons, shredded paper and #3-7 plastics.

- Communities around the country that have effective recycling programs have intensive outreach and public education programs. Flexibility in programs also help to ensure that only those products that have markets enter the recycling stream.

- Rural areas experience a difficult time making composting of organics affordable due to the relatively small volumes generated and the cost of transportation to approved, out-of-county facilities.

5.7 Waste Diversion Management Actions

Recycling

A. The Solid Waste Advisory Committee will regularly review recycling market conditions and update its list of designated recyclables collected through comingled or drop-box programs.

B. The Solid Waste Advisory Committee will continue to explore new ways to expand sustainable recycling opportunities and programs for the public. The SWAC will hold a solid waste review every April that will include an analysis of recycling activities over the past year and potential changes and improvements.

C. The Solid Waste Advisory Committee encourages recycling and reuse through the educational component of the waste reduction and recycling plan.

[9] Section 7 on Moderate Risk Wastes discusses reducing the toxicity of the waste stream.

D. The Solid Waste Advisory Committee will provide information through its website about the recycling and reuse of white goods and e-wastes.

E. The Solid Waste Advisory Committee will work towards Incorporating flexibility in curbside recycling programs to accommodate changes in the recycling market to determine which materials to collect or discontinue.

Organics

F. The county will continue to work in cooperation with the WSU Extension, Master Gardener Program to promote backyard composter training, and education to the public and school districts.

G. The county will explore the possibility of adding a yard waste program.

H. Encourage the use of economically sustainable organics in energy facilities.

Energy Recovery

I. 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 and/or organics.

Waste Reduction

J. 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 construction, demolition, and land clearing (CDL) waste reduction and reuse.

K. Request technical assistance from Ecology 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.

L. Incorporate appropriate waste reduction strategies identified by the Solid Waste Advisory Committee, including product stewardship programs, into existing educational outreach efforts.

M. Support the transfer of common household items through exchanges, websites, and local businesses.

Section 6. Special Wastes

Special wastes require special handling and separate collection, recycling, or disposal from other wastes. Grays Harbor County, the cities, and private entities in the county address the safe disposal of special wastes.

6.1 Biomedical wastes

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.

Waste Management currently is the only commercial medical waste treatment and disposal company operating within the county. The company collects medical wastes from public and private customers and processes the material out of county. This material does not pass through the Grays Harbor County Transfer Station. Grays Harbor Community Hospital uses its autoclave to process some materials.

6.2 Pharmaceutical wastes

Pharmaceutical wastes are discarded prescription drugs that individuals or entities no longer need. The improper disposal of unused medications has become a significant concern in recent years due to their potential environmental and health risk as well as contributing to prescription drug abuse.

Drug Take-Back Program Legislation

The State Legislature recently adopted the Drug Take-Back Program, Chapter 69.48 RCW in July 2018. This law places responsibility on manufactures selling prescription drugs, referred to a "program operators," in the state to work with authorized collectors to create a drug take-back program. A manufacturer or group of manufacturers may designate an organization to act on their behalf as the "program operator."

Potential authorized collectors may include:

- An entity registered with the US Drug Enforcement Agency (DEA) to collect controlled substances;
- A law enforcement agency; or
- An entity authorized by the Washington State Department of Health (DOH) to collect non-controlled substances.

Program operators must individually, or through an organization, prepare a plan for implementing a collection program and submit it to DOH by July 1, 2019. The law also expects program operators to solicit and negotiate with authorized collectors to establish programs that meet state requirements.

The law requires program operators to include as an authorized collector any retail pharmacy, hospital or clinic with an on-site pharmacy, or law enforcement agency that offers to participate in the collection program without compensation. Program operators must also give preference to these sites as receptacle collection centers. Collection sites must be regularly open to the public.

Collection sites must use secure collection receptacles that meet state and federal law. Program operators must provide a service schedule for emptying the receptacles, including supplemental pick-ups when necessary. Authorized collectors must comply with state rules and DEA standards for collecting and transporting covered drugs.

Each city in the county must have at least one collection site. In areas outside of the cities, the program operator must seek in good faith to find authorized collectors regularly open to the public willing to participate in the program.

DOH currently is engaged in preparing rules under the Washington Administrative Code (WAC) relating to program implementation. It is unclear at this time when they will adopt these rules and what role county solid waste management programs will have in the program.

Current Local Efforts

Present options available for residents to dispose of no longer needed medications are drug take-back boxes located at the Aberdeen, Hoquiam, and Montesano police departments. Each department accepts controlled, legal substances as well as any outdated or unused prescriptions. The departments routinely transfer these medications to a licensed incineration facility for safe disposal. The Grays Harbor County Sheriff's Department has accepted medications in the past.

6.3 Wood wastes

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 painted or chemically treated wood. Wood waste likely constitutes the largest volume of special wastes in Grays Harbor County, although there is no information on the exact quantities generated.

The primary types of wood waste generated in the county are waste bark, shake and shingle waste, and slash. In earlier years, this type of waste was burned but the adoption of air pollution regulations in the early 1970's stopped most open burning at 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 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 and it requires landfilling. The privately-owned Stafford Creek Limited Purpose Landfill currently accepts these wastes.

Shake and shingle waste comes from the manufacturing of cedar building materials. Unlike most wood species that will biodegrade within a few years when left in outdoor piles, cedar contains natural preservative oils that prevent decay for decades.

WAC 173-350-020 (2) (b) and (c), Solid Waste Handling Standards, exempts wood waste

- Used for ornamental, animal bedding, mulch and plant bedding, or road building; and
- Resulting from the harvesting of timber and left at the point of generation.

To date, there are 117 known wood waste sites in Grays Harbor County inventoried by the Environmental Health Division. The division believes there remain many more undetected sites throughout the county. As resources become available, they will continue their inventory efforts.

6.4 Tire Wastes

Improper disposal of used tires is a significant environmental and health concern. Tires can harbor mosquitos, leach toxic substances, and present a considerable fire hazard.

Tires no longer suitable for their original use because of wear, damage, or defect are waste tires under state law.[10] The Department of Ecology has the responsibility for licensing businesses engaged in the storage, transportation, and disposal of waste tires.

Grays Harbor County does not have a permitted tire storage facility although historic waste tire piles still exist. Waste tire disposal is available through local retailers and at the Grays Harbor County Transfer Station. Private tire disposal and recycling firms collect waste tires and recycle them into a variety of products, such as aggregates, tire derived fuels, building materials, playground surfacing, and rubber modified asphalt.

[10] RCW 70A.205.400

Funding is available from the Department of Ecology's Waste Tire Removal Account for the county to hold temporary amnesty and targeted clean-up events. The county's Environmental Health Division last received funding through the program in 2013.

6.5 Industrial Wastes and Sludges

Industrial wastes within the scope of this plan consist of non-hazardous by-products of manufacturing processes. These wastes typically are chemically inert and insoluble substances. The Grays Harbor County Transfer Station and approved landfills may accept disposal of these wastes. The disposal of hazardous industrial wastes is not within the scope of this plan.

Biosolids, also known as sewage sludge, from sewage treatment plants that are suitable for land application, is not a solid waste under WAC 173-308-060. Biosolids that cannot meet land application standards, however, are classified as solid waste. Regardless of the quality, such biosolids may enter the waste stream if land application opportunities are not available. At present, none of the sewage treatment plants are using the Grays Harbor County Transfer Station to dispose of their biosolids.

Cosmo Specialty Fibers in Cosmopolis operates a dissolving wood pulp sulfite mill that processes wastewater through a treatment plant. Solids from the process form a sludge stored in a series of settling ponds in South Aberdeen. Cosmo periodically dredges the ponds and disposes of the sludge in the west spoils landfill site near the ponds.

No industries are using the Grays Harbor County Transfer Station for disposal of industrial wastes or sludges.

6.6 Contaminated Soils

Contaminated soils have one or more contaminants intentionally or unintentionally introduced to the ground because of a spill, leak, disposal, or application. Examples of uses and activities that contaminated soils in the past were service stations, industrial/ manufacturing sites, junkyards, waste disposal sites, dry cleaners, intense agrochemical storage and application, and road sweepings.

Petroleum contaminated soils are generally the most prevalent of the contaminated soils occurring in the county. Petroleum products commonly found in these soils are gasoline, diesel fuel, and fuel oil. Remediation of contaminated soils typically is through a private contractor who will transport directly to a landfill if on-site treatment is not possible.

6.7 Disaster Debris

Floods, earthquakes, tsunamis, and severe weather events create the potential for significant quantities of disaster debris, including disruption of solid waste services.

The waste agreement between Grays Harbor County and LeMay Enterprises, Inc. facilitates the ability of both parties to expedite clean-up and recovery assistance to communities affected by disaster events. The agreement describes how to initiate disaster recovery service and reimbursement.

In the event the Grays Harbor County Transfer Station becomes inaccessible or overwhelmed by a disaster event, the Grays Harbor County 2018 Multi-Jurisdiction Hazard Mitigation Plan has identified the need to determine alternate locations in the county as disaster debris management sites. There is no set date to move forward with this project.

6.8 Animal Carcasses

Chapter 16-25 WAC regulates animal carcass burial, composting, natural decomposition, incineration, and landfilling within specific limitations. These regulations set standards for where and how these disposal procedures take place.

The Grays Harbor County Transfer Station accepts disposal of domestic and wild animal carcasses. There are also private firms servicing the county that specialize in dead animal removal.

Marine mammal and fish carcasses that occasionally wash ashore along the ocean beaches within the state's Seashore Conservation Area are the responsibility of the Washington State Parks and Recreation Commission. The state may choose to bury or allow the carcass to decompose naturally. It is illegal for the public to harvest all or any part of a decomposing marine mammal carcass.

6.9 Key Trends

- There are no approved tire storage facilities in the county, although there are waste tire piles present in the county that predate current legislation or result from illegal dumping. Addressing these piles is a complaint driven process. While grants are available for addressing waste tire storage in the county, funds cover only disposal costs – the coordination and collection process remains a county cost.
- Planning for disaster debris is a major concern for the county and it needs to focus on identifying appropriate locations for temporary collection and storage.

6.10 Special Wastes Management Actions

Biomedical Wastes

A. Support private haulers of medical waste collection by maintaining updated lists of firms on its Solid Waste Program website.

Pharmaceutical Wastes

B. Encourage public participation in the Drug Take-Back Program for pharmaceuticals as required under state law.

Wood Wastes

C. 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.

D. The SWAC may request technical assistance from the Department of Ecology to learn about opportunities for wood waste reduction and reuse.

E. Encourage the use of wood waste in cogeneration and renewable energy for fuels.

F. The Environmental Health Division will continue to identify, track, and monitor existing and past wood waste sites.

Tire Wastes

G. The county encourages the use of the Waste Tire Removal Account for sites that contain more than 800 waste tires.

H. The county will allow the piling of waste tires only under permit per WAC 173-350-350. The county may require financial assurances to ensure post-closure clean-up.

Industrial Wastes and Sludges

I. The Environmental Health Division will review annually with designated industrial entities their waste and sludge disposal programs (check with Jeff).

J. The Environmental Health Division will continue to monitor and regulate industrial facility activities through the Environmental Health Division (check with Jeff).

Contaminated Soils

K. The Environmental Health Division will request technical assistance from the Department of Ecology for removal of contaminated soils (check with Jeff).

Disaster Debris

L. The county's contract with LeMay contractually obligates them to provide a backup system for the transfer and disposal of wastes after a disaster event, such as an earthquake or flood. If a disaster creates waste that becomes a public health hazard, the BOCC may, by resolution, reimburse LeMay for tipping fees incurred at the Grays Harbor Transfer Station.

M. The county may make free disposal options available to the public during periods of a declared emergency to ensure public health.

N. Initiate planning efforts for identifying strategic sites for interim solid waste storage in the event of a disaster occurrence that prevents access to the Grays Harbor Transfer Station.

Animal Carcasses

O. Work with the agricultural community to develop an environmentally safe livestock disposal program in the event of major losses occurring from a natural disaster.

Section 7. Moderate Risk Wastes

7.1 Regulatory Framework

The definition of "moderate risk waste" (MRW) under RCW 70A.300.010 means:

- Any waste that exhibits any of the properties of hazardous waste generated at quantities below the threshold for regulation; and
- Wastes disposed by household that the Department of Ecology identifies as hazardous household substances.

Although moderate risk waste is exempt from regulation under Chapter 70A.300 RCW, Hazardous Waste Management, this chapter does require local governments to plan for and carry out programs to manage MRW to protect both the environment and public health.

MRW is a combination of hazardous household wastes (HHW) and wastes from conditionally exempt small quantity generators (CESQG). HHW is waste created in the home, while CESQG consist of small quantities generated by businesses or non-household waste.

CESQG produce MRW 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.

The six most common MRWs in Washington State include non-contaminated used motor oil, antifreeze, paint-related material, latex paint, oil-based paint, and flammable liquids.[11]

7.2 Moderate Risk Waste Facility

The Grays Harbor County Transfer Station operates the Moderate Risk Waste Facility to collect hazardous materials from households and CESQG generators. While LeMay Enterprises, Inc. owns the physical facility, the Solid Waste Division and its staff operates the collection program.

This facility, operating since 1998, collects MRW free of charge from county residents on the first Wednesday and the first Saturday of each month. Residents may drop-off up to 15 gallons each visit. There were 3,241 such drop- off visits in 2017. The facility also

[11] Solid Waste in Washington State, Publication #17-07-007, December 2015.

accepts wastes from CESQG generators 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 2017. While use of the facility has been growing annually, an unknown quantity of moderate risk waste likely continues to enter the solid waste stream through curbside collection or self-haulers. Table 17 summarizes the type and quantity of MRW collected from 2015 through 2017.

Table 17: Collected MRW, 2015 -2017

	2015				2016				2017			
	SQG		HHW		SQG		HHW		SQG		HHW	
Waste Type	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.	Disp.	lbs.
Antifreeze	R	79	R	3,397	R	13	R	3,068	R	9	R	3,625
Oil non-contaminated			R	3,552								
Aerosols	E	430	E	4,870	E	673	E	4,440	E	281	4,698	
Acids	T	218	T	1,774	T	349	T	2,064	T	27	T	3,625
Bases	T	1,287	T	2,302	T	540	T	4,807	T	311	T	4,102
Batteries (Auto Lead Acid)			R	720								
Batteries (Nicad/NIMH/Lithium)	R	376	R	454	R	179	R	1,337	R	85	R	1,302
Batteries (Household Dry Cell)	H	341	H	1,895	H	569	H	1,733	H	121	H	2,545
Flammable Solids					O	18	O	76			O	25
Flammable Liquids	E	1,193	E	12,370	E	1,606	E	20,017	E	1,053	E	1,639
Flammable Liquid – Poison	O	250									O	
Mercury – Fluorescent Tubes/CFLs	R		R	2,989	R	1,042	R	1,905	R	986	R	1,940
Mercury Thermometers, Thermostats					R	2						
Non-Regulated Liquids					T	234						
Oil with PCBs (Ballasts)	H	155	H	403	T				H	18		
Organic Peroxides			O	11								
Oxidizers	T		T	156	T	128	T	152	T	2	T	
Paint – latex	T	6,060	T	56,822	T	4,461	T	50,030	T	2,616	T	48,533
Paint – oil based	E	2,535	E	28,534	E	2036	E	30,482	E	2,526	E	30,593
Pesticide/Poison Liquid	O		O	2,900	O	298	O	4,493	O	345	O	5,455
Pesticide/Poison Solids	O		O	2,323	O	235	O	1,986	O	48	O	2,264
Photo/Silver Fixer	R		T	45	R	148	R		R	193	T	
Reactives	T		T	71								
Propane tanks	R		R	112 ea.	R	2 ea.	R	97			R	75 ea.
Petroleum soaked pads & brooms	T	263	T	723	R	271			T	150	T	130

Key for disposal methods:

U – Reused R – Recycled E – Energy Recovery T – Treated/Landfill

W – Wastewater O – Incineration S – Landfill Untreated H – Hazardous Waste Facility

The Stericycle facility in Auburn processes MRW collected at the Grays Harbor Transfer Station.

7.3 Used Motor Oil Collection Facilities

Used motor oil is a designated recyclable that the county coordinates as a self-service program using 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 are available to the public at no cost.

The county's Solid Waste Division coordinates collection from the containers and transports their contents to the Grays Harbor County Transfer Station for storage. The county pays Emerald, a Seattle recycling firm, to collect the oil. Emerald recycles the oil to produce low-sulphur marine diesel oil and other industrial fuels at its Seattle plant.

Private businesses in the county collect used motor oil as well and arrange their own disposal efforts.

Table 18: County-Supported Used Motor Oil Collection Facilities, 2018

Location	Address
Aberdeen	Household Hazardous Waste Facility - Grays Harbor County Transfer Station, 4201 Olympic Highway E.
Elma	216 E. Martin St. - Behind Cut-Rate Auto Parts in the Alley
Montesano	222 E. Wynoochee Ave. - Behind Bowling Alley in the Parking Lot
Oakville	303 E. Pine Street - Next to City Barn
Pacific Beach	3194 Ocean Beach Rd. - Sewer Treatment Plant

The Port of Grays Harbor assumed ownership of the oil collection facility at its location in 2017. Collection at the Pacific Beach location began in 2017.

As with household hazardous waste, community support for used motor oil recycling efforts continues to grow. Used motor oil recycling increased by 13,690 pounds between 2016 and 2017. This does not include used motor oil collected at non-county supported sites.

Table 19: Used Motor Oil Collection at Public Facilities

	Pounds	
Collection Facility	2016	2017
Aberdeen	37,666	39,220
Montesano	23,754	26,344
Elma	24,198	25,160
Oakville	8,436	11,692
Ocean Shores	6,216	9,101

Collection Facility	Pounds 2016	2017
Pacific Beach	0	2,442
Port of Grays Harbor	17,612	0
Total	**117,882**	**113,960**

As the price oil recyclers charge for collecting used-oil continues to climb, the county will need to increase its subsidy of the program from its budget. Recyclers also are pushing for required testing of bulk used-oil pickups to ensure no contaminants, such as PCBs, are present.

7.4 Other MRW Programs

Electronics Disposal

Collection points in the Grays Harbor area currently available to the public for safely disposing of used electronic equipment such as computers, monitors, and televisions include Aberdeen Goodwill, Staples, the Grays Harbor County Transfer Station, and Pay More Recycle and Salvage Inc. The latter two sites are registered with the Department of Ecology's Recycle Database.[12]

Materials-Exchange Program

The materials-exchange program is a reuse center for residents of the county at the Household Hazardous Waste Facility. Many items that enter the 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 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, including 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 Household Hazardous Waste Facility. The county requires respirator testing semi-annually and testing records to be logged according to the facility operations plan. All technician-level employees

[12] https://fortress.wa.gov/ecy/recycle/UISearch/ServiceSearch.aspx

receive medical monitoring. The employer provides all health and safety training and protective equipment.

7.5 Key Trends

- The county currently has limited hours at the Household Hazardous Waste (HHW) Facility, due to budget constraints for staffing. However, it is unclear if this impacts public access to the facility. If more grant funding through state programs become available, the county may consider keeping the facility open longer.

- Latex paint is the single largest volume item deposited by the public at the facility. In 2019, state legislation was passed that requires the paint industry to establish sites for the public to drop off their unused paint for recycling. These sites should be available by the end of 2020. After they open, the county's MRW program costs should drop, and this may affect how the county manages their MRW Facility.

- Used motor oil is a significant concern for the county solid waste program. Potential contamination of non-oil product in unattended holding tanks could present significant liability to the county. The program is also costly for the county to operate since it must pay a private contractor to collect and dispose of each gallon. If the state requires permitting of oil collection facilities, or the private contractor who collects the motor oil requires contamination testing, the program would become prohibitively expensive to operate. In either case, cessation of the program likely would create a used motor oil disposal problem for the public.

- As the potential for solar panels to enter the waste stream grows in the future, their disposal could become problematic for the county due to the heavy metals used in their construction.

7.6 Moderate Risk Waste Management Actions

A. Encourage increases in state funding through the Local Solid Waste Financial Assistance to support expanded hours for the Moderate Risk Waste Facility at the Grays Harbor Transfer Station.

B. Explore management options for preventing contaminants from entering oil collection facilities.

C. Continue accepting asbestos wastes at the Grays Harbor Transfer Station in accordance with state regulations.

Section 8. Dangerous Waste Generators

Counties must include an inventory of dangerous waste generators and facilities, remedial action sites, and list of hazardous waste transporters which service businesses within the jurisdiction.

8.1 Dangerous Waste Generators

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

- Large quantity generators (LQG) generate more than 2,200 lbs. of hazardous wastes and/or 2.2 lbs. of acute hazardous waste each month, and/or accumulate more than 2,200 lbs. of hazardous wastes at any one time.
- Medium quantity generators (MQG) generate between 220 lbs. and 2,200 lbs. of hazardous wastes each month and/or accumulates less than 2,200 lbs. at any one time.
- Small quantity generators (SQG) generate less than 220 lbs. each month and/or accumulate less than 2,200 lbs. at any one time.
- Facilities that have an EPA or state identification number but did not generate hazardous wastes within the reporting year have an XQG status

ECY records show that the following number of registered businesses and institutions in Grays Harbor County that are hazardous waste generators as of December 2016 include:

Entity	Status	Location
Little Green LLC	LQG	Hoquiam
Vertellus Performance Chemicals LLC	LQG	Elma
Westport Shipyard, Inc.	LQG	Westport
Westway Terminal Co LLC	LQG	Hoquiam
WSDOT Simpson Ave Hoquiam	LQG	Hoquiam
Cosmo Specialty Fibers Inc	MQG	Cosmopolis
Home Depot 8964	MQG	Aberdeen
INDUSTRIAL ELECTRIC SERVICE CO INC	MQG	Aberdeen
Ovalstrapping Inc Hoquiam	MQG	Hoquiam
REG GRAYS HARBOR	MQG	Hoquiam
Simpson Door Co	MQG	McCleary
Vaughan Co Inc	MQG	Montesano
WA Stafford Creek Corrections CTR	MQG	Aberdeen
Wal Mart Store 2037	MQG	Aberdeen
Aberdeen City Equip Rental Maintenance Shop	SQG	Aberdeen

Entity	Status	Location
Aberdeen School District Maintenance	SQG	Aberdeen
Economy Cleaners	SQG	Hoquiam
Grays Harbor Community Hosp	SQG	Aberdeen
Grays Harbor Port	SQG	Aberdeen
Hoquiam School Dist. 28 Transportation Coop	SQG	Hoquiam
Kenworth NW Aberdeen	SQG	Aberdeen
Little Hoquiam Boat Shop 2	SQG	Hoquiam
Ocean Spray Markham	SQG	Aberdeen
RITE AID #5282	SQG	Aberdeen
Rite Aid #5283	SQG	Hoquiam
SAFEWAY STORE 1546	SQG	Aberdeen
Sears Unit 2299/6111	SQG	Aberdeen
Tacoma Public Utilities Wynoochee Dam	SQG	Montesano
United Parcel Service Elma	SQG	Elma
USCG Station Grays Harbor	SQG	Westport
Westport LLC Hoquiam	SQG	Hoquiam
Whitney's Chev Inc	SQG	Montesano
16th and B St	XQG	Hoquiam
Apex Environmental	XQG	Hoquiam
BMT-NW Acquisition LLC	XQG	Elma
Chevron 81740	XQG	Westport
Grays Harbor Energy LLC	XQG	Elma
Little Hoquiam Boat Shop 1	XQG	Hoquiam
McCleary City Light Power	XQG	McCleary
Pasha Automotive Services Aberdeen	XQG	Aberdeen
Port of Grays Harbor	XQG	Elma
Qwest Corporation W00998	XQG	Aberdeen
The Shipyard LLC	XQG	Hoquiam
WA AGR Grayland	XQG	Grayland
WA AGR Grays Harbor 1	XQG	Aberdeen
WA AGR Grays Harbor 2	XQG	Elma
WA Parks Twin Harbors State Park	XQG	Westport

In summary, there were:

- Five Large Quantity Generators (LQG) in Elma, Hoquiam, and Westport
- Nine Medium Quantity Generators (MQG) in Aberdeen, Cosmopolis, Hoquiam, McCleary, and Montesano
- Eighteen Small Quantity Generators (SQG) in Aberdeen, Elma, Hoquiam, Montesano, and Westport

- Fifteen businesses and institutions with XQG status in Aberdeen, Elma, Grayland, Hoquiam, McCleary, and Westport

None of these facilities had an on-site treatment, storage, or disposal permit nor did they receive hazardous wastes from off-site sources.

8.2 Remedial Action Sites

The Department of Ecology 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 61 such sites within Grays Harbor County on the Hazardous Sites List.

Table 20: County Hazardous Sites List, September 2017

FS ID	Site Name	Location	Rank	Status
45142528	Bay City Shop Aberdeen	Aberdeen	1	Cleanup Started
62154192	Grays Harbor County PUD 1 Maint Yard	Aberdeen	1	Cleanup Started
2472930	Pakonen Boatyard	Aberdeen	1	Cleanup Started
77165487	Gasamat Oil Corp	Aberdeen	2	Cleanup Started
13492255	Texaco Wishkah Aberdeen	Aberdeen	2	Awaiting Cleanup
81441978	Aberdeen Police Dept City Hall	Aberdeen	3	Cleanup Started
8888315	Ade Natural Gas Corp District Ofc	Aberdeen	3	Cleanup Started
1138	Chevron Station 91102	Aberdeen	3	Cleanup Started
82757276	Entus Log Road Construction Co Inc	Aberdeen	3	Awaiting Cleanup
74116865	Harbor Tool Rental	Aberdeen	3	Awaiting Cleanup
55483231	Hubb's Muffler	Aberdeen	3	Awaiting Cleanup
32277166	Kaman Bearing & Supply Corp	Aberdeen	3	Cleanup Started
17523493	Krasowski Estate Property	Aberdeen	3	Cleanup Started
11477124	Maki Garage	Aberdeen	3	Awaiting Cleanup
8655483	Mini Mart	Aberdeen	3	Cleanup Started
44714997	R & G Electronics	Aberdeen	3	Awaiting Cleanup
9999535	Sears Automotive Center Aberdeen	Aberdeen	3	Awaiting Cleanup
61846758	Southland Corp 22478	Aberdeen	3	Cleanup Started
75887849	Superior Auto Body & Towing	Aberdeen	3	Awaiting Cleanup
34659643	US West Aberdeen	Aberdeen	3	Cleanup Started
88894421	Chevron 9-6708	Aberdeen	5	Awaiting Cleanup
1141	Crystal Steam Baths	Aberdeen	5	Awaiting Cleanup
5988174	Grays Harbor Equipment	Aberdeen	5	Cleanup Started
9401122	Sherman Property	Aberdeen	5	Awaiting Cleanup
49931569	Sunshine Deli	Aberdeen	5	Cleanup Started
17952115	Western Timber Salvage	Aberdeen	5	Cleanup Started
8396916	Stajcar Property	Copalis Beach	1	Awaiting Cleanup

FS ID	Site Name	Location	Rank	Status
55626589	Copalis Crossing Texaco	Copalis Crossing	3	Cleanup Started
37135584	Maxi Mini Mart (Cosmopolis)	Cosmopolis	3	Cleanup Started
22586116	Chevron 93843	Elma	2	Cleanup Started
69672675	Trus Joist Macmillan	Elma	2	Cleanup Started
28206	Butchers Scrap Metal Inc	Hoquiam	1	Awaiting Cleanup
97672932	Lamb Grays Harbor Co	Hoquiam	1	Awaiting Cleanup
1117	Most Western Laundry	Hoquiam	1	Cleanup Started
87399456	Pettit Oil 640 700 or 720 Myrtle St	Hoquiam	1	Cleanup Started
1121	Bergs Marine Construction & Repair	Hoquiam	2	Awaiting Cleanup
76293784	15 Minute Lube	Hoquiam	3	Cleanup Started
56149154	7 Eleven Store22261	Hoquiam	3	Cleanup Started
33548485	BNSF Hoquiam Site	Hoquiam	3	Cleanup Started
1137	Chevron Station 1125	Hoquiam	3	Cleanup Started
64241737	Gull Hoquiam	Hoquiam	3	Cleanup Started
31771524	Hoquiam City of Lincoln St Shop	Hoquiam	3	Cleanup Started
1130	Howard Moe Enterprises	Hoquiam	3	Awaiting Cleanup
21142429	Texaco Ken Harrison	Hoquiam	3	Cleanup Started
1115	Hoquiam Municipal Landfill	Hoquiam	4	Awaiting Cleanup
33315723	Anderson & Middleton Co	Hoquiam	5	Awaiting Cleanup
33541272	Apex Environmental	Hoquiam	5	Awaiting Cleanup
4061791	Roderick Timber Co	Junction City	1	CC-Perf. Monitoring
58141852	McCleary Transit Center	McCleary	3	Cleanup Started
8840748	Ikan Auto Wrecking	Montesano	1	Awaiting Cleanup
6508672	Pederson Property Montesano	Montesano	1	Cleanup Started
1128	Virgil Foster	Montesano	1	Awaiting Cleanup
29685123	Montesano City of City Shop	Montesano	2	Cleanup Started
26655668	Montesano Fire Dept	Montesano	2	Cleanup Started
97193494	Tony's Short Stop	Montesano	3	Cleanup Started
36813164	Whitney's Chev Inc	Montesano	3	Cleanup Started
86125878	You & I Market	Pacific Beach	1	Cleanup Started
4619393	WA DOT Weyerhaeuser Ponds	Quinault	1	Awaiting Cleanup
88269183	Lake Quinault Garage	Quinault	2	Awaiting Cleanup
58253768	CENEX	Satsop	2	Cleanup Started
92421271	Chevron Bulk Plant	Westport	2	Cleanup Started
1127	Hungry Whale Grocery	Westport	2	Cleanup Started

8.3 Hazardous Waste Transporters & Facilities

There are four primary Transportation, Storage, Disposal and Recycling (TSDR) companies that service businesses in Grays Harbor County. Table 21 lists each company operating in the county along with its TSDR identification number.

Table 21: TSDR companies servicing Grays Harbor County

TSDR ID #	Company Name
WAD981769110	Emerald Services Incorporated
WAD988482089	Stericycle of Washington
KSD980633259	Systech Environmental Corporation
UTD991301748	Safety Kleen Systems Inc. 7-148

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Section 9. Enforcement

9.1 Regulating Agencies

Grays Harbor County

Chapter 8.28, Solid Waste Collection and Disposal, of the Grays Harbor County Code (GHCC) directs a range of solid waste enforcement activities. These include:

- 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; and
- Locating and identifying closed and abandoned landfills in the County.

While county staff focus only on illegal dumping within the unincorporated areas, they are involved in other solid waste enforcement activities countywide.

Chapter 8.12 GHCC specifically address litter control. Community Litter Cleanup Program (CLCP) grants have been especially important in maintaining an active program in the county. During the 2017-2019 biennium funding cycle, the county expanded the program by purchasing a new litter van.

Municipalities

Each of the nine cities in the county manage illegal dumping and litter control through local ordinances and enforcement activities.

State of Washington

The Washington Department of Ecology oversees a statewide litter collection program funded through a 0.015 percent tax on the retail sale of wrappers, bottles, and other items typically found in roadside litter. Along with providing funding through the Community Litter Cleanup Program, the agency is active in roadside litter cleanup using the Ecology Youth Corps.

The Correctional Camps Program is a joint effort of the Washington Department of Natural Resources, the Department of Corrections, and the Juvenile Rehabilitation Administration that uses juvenile and adult offenders to do illegal dump site cleanups on state and other public lands.

The Department of Transportation offers the Adopt-a-Highway roadside cleanup program. The program relies on volunteers from community groups and business sponsors to help pickup roadside litter along state highways.

9.2 Enforcement Management Actions

A. Continue enforcement to reduce dumping on public and private property.

B. Grays Harbor County and the municipalities will continue to earmark funding within their annual budget for abatements and illegal dumping enforcement within their jurisdictions.

C. Support volunteer litter control programs.

D. The county may provide assistance for the removal of abandoned vehicles through the Junk Vehicle Verification, Notification, and Affidavit (Hulk Slip) program.

E. Strengthen and review countywide litter control activities.

Section 10. Education and Outreach

Education and outreach to Grays Harbor County citizens on solid waste, recycling, and hazardous waste management is critical to ensuring public and environmental health from improper use and disposal methods. Chapter 70A.205 RCW acknowledges this need by requiring both state and local governments to provide public information about recycling and waste reduction.

10.1 Grays Harbor County Education & Outreach

Small rural programs like those operated in Grays Harbor County are heavily dependent on state grant funds to provide financial assistance in order to keep disposal and recycling rates affordable. Historically the county depended on Coordinated Prevention Grants, now renamed as Local Solid Waste Financial Assistance, to fund education and outreach programs.

Funding for this financial assistance program is from the Local Toxics Control Accounts (LTCA), established under Chapter 70A.305 RCW, the Model Toxics Control Act (MTCA). This law, passed by voter initiative in 1988, set a tax on first possession of hazardous substances in the state, RCW 82.21.030. The amount available each biennium depends on the legislative appropriation from the account or alternative funding identified by the legislature.

For the past number of fiscal years, the legislature has decreased the amount of money available to counties under this program, resulting in a significant decrease in funding to provide education and outreach by Grays Harbor County.

Despite budget restraints, the county continues to provide a minimal level of education and outreach support through its county website. The Department of Public Services webpage provides basic information on the following topics:

- Garbage services
- Transfer Station
- Rates
- Special wastes
- Hazardous materials
- Household hazardous waste
- Small Quantity Generators
- Recycle/reduce
- Used motor oil disposal
- Yard waste, composting
- Illegal dumping
- Information for teachers
- Solid Waste Management Plan

The website also provides external links to other web resources such as the Grays Harbor Reusable Materials Exchange, which is affiliated with the 2Good2Toss program.

10.2 Other Outreach & Education Resources

LeMay Grays Harbor

LeMay Grays Harbor also provides a basic informational website that includes links to other web-based information resources.

Washington State Department of Ecology

The Washington State Department of Ecology (ECY) provides a Waste & Toxics webpage focusing extensively on:

- Household Waste & Toxics
- Business Waste
- Nuclear Waste
- Reducing & Recycling Waste
- Reducing Toxic Chemicals
- Solid Waste & Litter

A particularly useful tool provided by ECY for the public is the Washington's 1 800 Recycle Database. This site provides commercial and residential recyclers by county for a wide range of materials that include: appliances, automotive products, batteries, building materials, business hazardous waste, electronics, glass, household hazardous waste, light bulbs, metals, paper, plastics, food and yard wastes, and other miscellaneous items.

11.3 Key Trends

- If the state returns to previous levels of funding for solid waste grants, Grays Harbor County will be in position to resume a more active education and outreach program.
- Recycling education and outreach will be especially important for county citizens in the future to address changing markets for products and avoiding product contamination. Programs need to be fresh, active, and flexible to respond to the changes within the recycling environment.
- There are a multitude of sites on the web that provide information about waste diversion. These sites provide a valuable resource for developing more locally oriented information resources.

11.4 Education and Outreach Management Actions

A. As funding becomes available, provide staff to implement and provide outreach and education programs.

B. The Solid Waste Program will continue to promote recycling public education and information programs. The program will also explore new partnerships and techniques to deliver programs throughout the county.

C. The SWAC will support an outreach program aimed at educating the public about proper disposal of prescription medications.

D. The county will incorporate proper waste tire handling into the waste reduction and recycling educational program.

E. 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.

F. The county will continue to encourage the reuse, conversion, and proper disposal of CDL waste through the educational component of the waste reduction and recycling plan.

G. The county will maintain updated lists on its Solid Waste Program website of private firms that recycle or reuse white goods.

H. Emphasize the importance of avoiding potential contamination of recyclables through education and outreach programs.

I. Improve public awareness of moderate risk wastes in homes and businesses and educate on less toxic alternatives.

J. Monitor the latest recycling opportunities and update the county's solid waste management website.

K. Collaborate with other agencies, organizations, and the faith community to increase education and outreach resources.

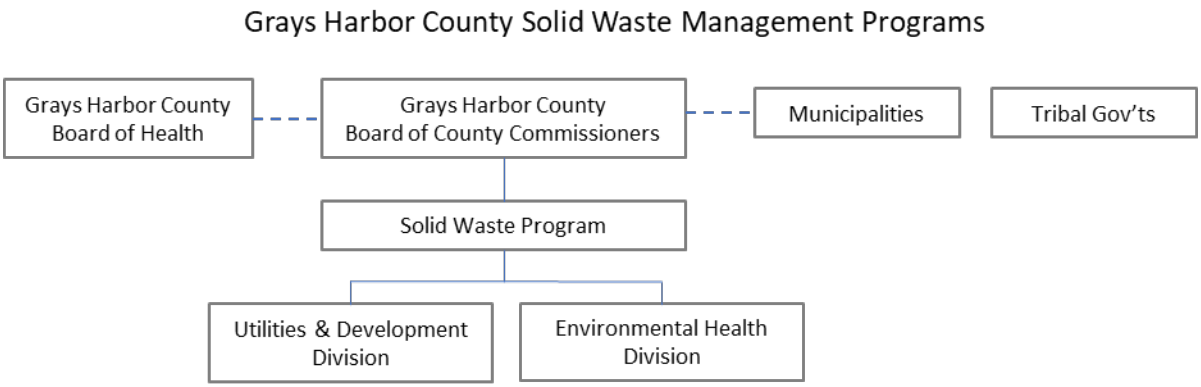
L. Include recycling, reuse, and MRW education and outreach materials and programs in Spanish.

M. Share information with visitors about which products are recycled locally and their proper disposal.

N. Develop and implement a Contamination Reduction and Outreach Plan (CROP) as required under the state's 2019 Sustainable Recycling Act for inclusion in the county's solid waste management plan. The CROP should be completed and adopted by the county by July 1, 2021 as required under RCW 70A.205.045.

Section 11. Administration

Solid waste management programs in the county is a public-private partnership shared by Grays Harbor County, the municipalities, and the private sector.



11.1 Grays Harbor County

Board of County Commissioners

The Board of County Commissioners (BoCC) are responsible for adopting ordinances, plans, and policies as well as executing contracts with private entities regarding solid waste services within the county's jurisdiction.

The BoCC also acts as the county's Board of Health under RCW 70.05.030. In this capacity, the board is responsible for protecting public health from the potential dangers of inappropriate management of solid waste through the local health officer's authority to enforce state and local public health statutes, rules and regulations. The board adopts and enforces local solid waste handling requirements through the authority of the local health officer.

Department of Public Services

The Department of Public Services oversees administrative and planning aspects of solid waste under the county's purview. The Utilities and Development Division provides:

- Coordination of solid waste management planning with the municipalities and the Solid Waste Advisory Committee (SWAC);
- Preparation of the Solid Waste Management Plan;
- Supervision of the contractual relationship with LeMay Enterprises, Inc.;

- Management of county solid waste facilities at the Grays Harbor County Transfer Station, including the Household Hazardous Waste Facility and used-oil collection facilities;
- Preparation and oversight of solid waste budget and funds;
- Promotes solid waste information, education, and technical assistance to the public and businesses; and
- Enforcement of county solid waste regulations not under the authority of local health officer.

The Environmental Health Division is the "regulatory arm" for solid waste management by providing annual permitting and enforcement of the solid waste handling standards through the authority of the local health officer. Division staff also provide technical assistance to the Solid Waste Advisory Committee.

Together, both divisions serve as co-managers for the Solid Waste Program.

Solid Waste Advisory Committee

The Grays Harbor County Solid Waste Advisory Committee (SWAC) is a requirement under RCW 70A.205.110. The purpose of this committee is to:

- Assist in the development of programs and policies concerning solid waste handling and disposal; and
- Comment upon proposed rules, policies, or ordinances before their adoption by the BoCC.

The SWAC by state law must have a minimum of nine members appointed by the BoCC and must have a wide representation interests including, but not limited to, citizens, public interest groups, business, the waste management industry, agriculture, and local elected public officials.

The SWAC meets regularly to discuss current solid waste issues and to periodically amend, update, or revise the Solid Waste Management Plan.

11.2 Municipalities

RCW 70A.205.040 assigns solid waste planning authority to each county in cooperation with the cities in that county. The nine cities in Grays Harbor County continue to participate in the development and adoption of a county-wide plan for solid waste management.

Each city also administers its own solid waste program by contracting for private collection services for solid waste and recyclables. All collected solid waste and recyclables go the Grays Harbor County Transfer Station for disposal. Enforcement of solid waste regulations, such as provisions for mandatory collection, litter control, and illegal dumping, are the responsibility of each municipality.

The Cities of Aberdeen, Cosmopolis, McCleary, Ocean Shores, and Westport offer their residents annual one- or two-day spring clean-up days at no charge. McCleary relies on containers within the city while the other communities have their residents self-haul to the Grays Harbor County Transfer Station.

11.3 Tribal Governments

Both the Quinault Indian Nation (QIN) and the Confederated Tribes of the Chehalis Reservation are responsible for solid waste management programs on their reservations. QIN maintains its own solid waste collection service within the villages of Taholah and Queets but relies on the Grays Harbor County Transfer Station for disposal. Solid waste collected by LeMay Enterprises on the Chehalis Reservation goes to the Lewis County Transfer Station in Centralia.

Both tribal governments receive financial and technical assistance from the US Environmental Protection Agency and the Indian Health Service for solid waste management on their reservations.

While both tribal governments may cooperate with Grays Harbor County in solid waste management programs, they are self-governing and operate independent of the Solid Waste Management Plan.

11.4 Administration Management Actions

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

B. The Solid Waste Advisory Committee and the Solid Waste Program annually will evaluate its compliance with planning requirements under state law.

C. Recruit membership to the Solid Waste Advisory Committee from the municipalities, citizens, agriculture, business, and solid waste and recycling industries.

D. Review and amend, if necessary, the Solid Waste Advisory Committee by-laws.

E. Municipalities shall monitor their solid waste programs to ensure compliance with the Solid Waste Management Plan.

Section 12. Solid Waste Funding

Washington State law, Grays Harbor County, the nine cities, the Washington State Utilities and Transportation, Commission (WUTC), the Washington Department of Ecology, and private collection contractors collectively play a vital role in funding facets of solid waste management within the county.

12.1 State Law

State law provides the legal framework for funding solid waste in counties and cities. Table 22 summarizes the state statutes used by Grays Harbor County and the cities to fund solid waste management within their jurisdictions. These laws allow for the setting of rates and charges for collection and use of the Grays Harbor County Transfer Station by the public and private contractors. For the nine municipalities in the county, it also allows them to set collection rates for residential and commercial services.

Table 22: State Statutes

Statute	Description
RCW 36.58.040	• Gives the county jurisdiction to: ▪ Construct, purchase, or contract for the solid waste systems or facilities ▪ Establish rates and charges, ▪ Award contracts for solid waste handling that include collection of county fees
RCW 36.58.045	• Allows the county to levy fees on the collection of solid waste in unincorporated areas of the to fund solid waste administration and planning expenses
RCW 70A.205.125	• Give the county authority to collect permit fees on solid waste facility permits
RCW 35.211.130	• Allows each city to: ▪ Require property owners and occupants to use the solid waste collection ▪ Set rates for solid waste collection

The WUTC, under the authority of RCW 81.77.030, also plays an important role in setting collection rates in certificate issued areas. This statute only affects collection rates paid by unincorporated residents subscribing to collection services through LeMay Enterprises, Inc.

12.2 Grays Harbor County

Grays Harbor County's primary functions in solid waste management focuses on providing countywide planning and coordination, contracting with LeMay Enterprises, Inc. to provide the Grays Harbor County Transfer Station, operating recycling and moderate risk programs, and providing education and outreach to community.

Revenues for these county efforts come from two primary sources: tipping fees collected through the Grays Harbor County Transfer Station and grants from the Washington State Department of Ecology. County financial management for these programs is through the Solid Waste Plan Fund 401.

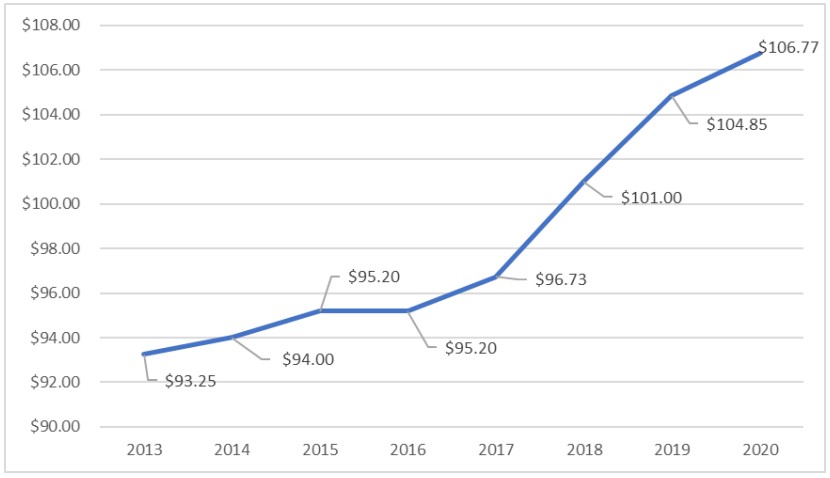
Tipping Fees

LeMay Enterprises, Inc. owns, operates, and maintains the Grays Harbor County Transfer Station through a contract with Grays Harbor County. This contract established a base per-tonnage tipping fee that covers the cost of LeMay Enterprises operation of the Grays Harbor County Transfer Station, recycling programs at the station, and exporting and disposing of wastes at Waste Connection's Oregon landfills. The contract allows for annual rate adjustments keyed to the Consumer Price Index and other considerations, such as the rise or fall in fuel prices.

As of January 2020, the total tipping fee at the Grays Harbor County Transfer Station is $106.77 per ton for municipal solid waste. Operation, transfer, and disposal costs constitute 81% or $86.83 of the total tipping fee. The tipping fee also covers the county's administrative solid waste management responsibilities. These include salaries and program expenses in both the Solid Waste and Environmental Health Divisions. The county's administrative costs comprise approximately 19% or $19.94 of the total fee.

From 2013 to 2017, tipping fees increased by an average of only 0.9% annually. The county maintained this low rate artificially by absorbing increased costs within its share of the budget. By 2018, however, the county recognized that it was failing to keep up with growing expenses. These included matching increases in the Consumer Price Index, covering the jump in fuel prices, and replenishing the Aberdeen Landfill closure fund to continue treating leachate and making costly repairs.

Figure 5: Grays Harbor County Transfer Station Tipping Fees, 2013-2019



After 2017, annual increases in tipping fees have been 4.4% in 2018, 3.8% in 2019, and 1.8% in 2020, or an annual average of 3.4% during this period. If tipping fees continue to rise by 3.4% annually, the per tonnage rate will reach approximately $126.20 by January 2025.

Table 23: Projected Tipping Fees, 2020 - 2025

	2020 Actual	2021	2022	2023	2024	2025
Tipping Fee	$106.77	$110.40	$114.15	$118.04	$122.05	$126.20

Special wastes, such as white goods, tires, and asbestos, also have assigned rates per unit.

Table 24: Transfer Station Rates for Special Wastes, 2020

Description	Rate	Charged by	Minimum
Asbestos	$95.31	Cubic Yard	$95.31
Refrigerator	$33.85	Each	$33.85
Garbage	$106.77	Tons	$10.68*
Rims	$1.70	Each	$1.70
Tires -Large	$11.85	Each	$11.85
Tires-Regular	$2.82	Each	$2.82

Grants

There are two grant programs through the Washington Department of Ecology that play a vital role in funding solid waste programs in rural Grays Harbor County. The Local Solid Waste Financial Assistance[13] and the Community Litter Cleanup Programs provide a significant financial resource for maintaining a variety of local programs and educational and outreach efforts.

The purpose of the Local Solid Waste Financial Assistance (LSWFA) program is to:

- Provide financial assistance for local solid and hazardous waste planning.
- Promote regional solutions and intergovernmental cooperation for eligible projects.
- Promote efficient implementation of programs contained in local solid and hazardous waste management plans.
- Help local governments prevent or minimize environmental contamination through compliance with state and local solid and hazardous waste laws and rules. Compliance includes the enforcement of rules and regulations promulgated under Chapter 70A.205 RCW

[13] The title for this program in previous years was "Coordinated Prevention Grants."

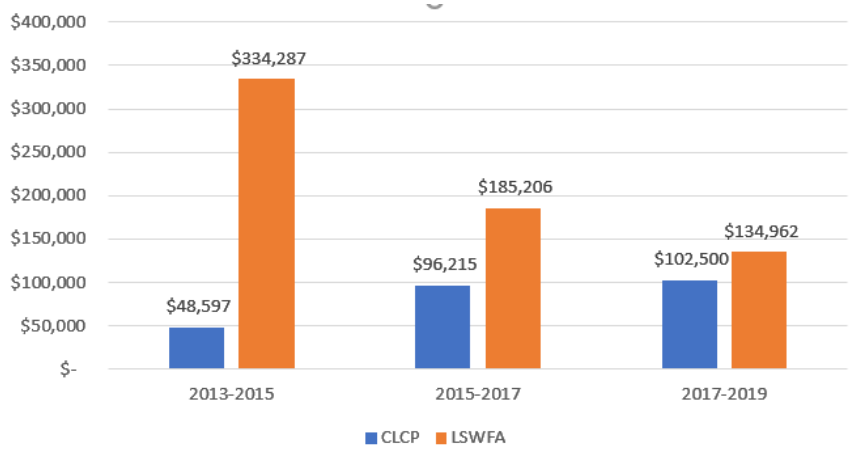
Ecology awards LSWFA funding to counties under this program on a biennial basis, which runs from July 1 to June 30 over a two-year span. The program is not entirely a grant; the county must cover 25% of the reimbursable costs submitted under an Ecology-approved contract. The Washington State Legislature sets the total amount of funds available for the program. The 2017 – 2019 allocation to the county was $70,327.

Community Litter Cleanup Program (CLCP) grants cover a wide range of costs related to litter control, disposal, and education and outreach. Ecology awards funds to counties on a funding formula based on geographic and demographic factors as well as an efficiency and effectiveness criteria. Like the LSWFA program, CLCP awards are on a biennial basis.

These grants are particularly important for all of Grays Harbor County residents; they cover expenses associated for programs beyond operating the Grays Harbor County Transfer Station, such as solid waste planning, the Household Hazardous Waste Facility, oil recycling, reuse programs, and education and outreach.

In recent years, while available funding for CLCP grants have increased, it has declined for the LSWFA program. Figure 6 compares Ecology awards to Grays Harbor County for the CLCP and LSWFA programs over the last three biennia.

Figure 6: CLCP and LSWFA Funding to Grays Harbor County Over Last Three Biennium



Beginning with the 2015-2017, the state legislature slashed LSWFA funding amounts for counties and directed these funds to other programs. Awards decreased even further the following biennium. To date, there has been no substantive increase in LSWFA funding.

The reduced budgets under LSWFA has significantly affected county programs by forcing a reduction in services. This has been most noticeable in reduced hours for keeping the HHW Facility open and cutbacks in outreach and education programs.

Aberdeen Post Closure Fund

When the Aberdeen Landfill closed in 1994, there was a $3 million post closure fund established to cover closure, monitoring, and maintenance costs anticipated for a 30-year period. The county controls this funding through a dedicated fund, the Aberdeen Landfill Post Closure Fund #117. As of January 2020, this fund has a balance of approximately $892,000.

However, site conditions at the closed landfill necessitate continued monitoring and maintenance into the foreseeable future. Annual costs associated with leachate management and other general maintenance will require preservation of the post closure fund.

Although currently there are no anticipated major capital expenses associated with the landfill, the county aims to maintain a fund balance of $1 million in the event of future needs. Investments aid in sustaining the fund, but during those times when interest rates are low, the county will need to periodically subsidize the fund through its 15% administrative share of the tipping fee.

Projected 20-Year Fiscal Goals for Capital Facilities and Programs

The current structure of the county solid waste program primarily relies on the private sector to own and finance major capital facilities. However, the county's primary focus will be to ensure adequate reserve funding is available for capital expenditures and operational costs related to the closed Aberdeen landfill.

If state grant funding increases over the next 20 years, the county also will pursue expanding its education and outreach program and expanding the operation of its Moderate Risk Waste Facility.

12.3 Municipalities

Solid waste management in the county's nine cities primarily center on commercial and residential collection services, litter control, and occasionally other special collection events.

Each city independently funds its own solid waste management program by setting collection rates within their jurisdiction. Their rates reflect the cost of contracting LeMay Enterprises, Inc. or Hometown Sanitation LLC for collection and recycling services, and disposal at the Grays Harbor County Transfer Station as well as covering associated administrative and supplemental program costs.

12.4 Washington Utilities and Transportation Commission (WUTC)

Within unincorporated Grays Harbor County, the WUTC sets rates for LeMay Enterprises, Inc. to provide residential and commercial collection services. The WUTC relies on the Lurito-Gallagher Methodology to determine rate structures. This methodology examines a company's rate structure to ensure it is "fair, just, reasonable, and sufficient."[14] The model uses the test period adjusted expenses and average investment to calculate the revenue required to recover these expenses and allow a return on invested capital. The return component is an operating ratio.

12.5 Six-Year Capital Improvement Plan

Disposal-Related Capital Facilities

Solid waste management in Grays Harbor County relies on the private sector to fund and finance large capital improvements, such as the newly constructed Grays Harbor Transfer Station owned and operated by LeMay Enterprises. The rate structure built within the solid waste agreement between LeMay Enterprises, Inc. and the county covers the cost of building, operating, and maintaining the facility.

The Grays Harbor County Solid Waste Department does own a limited number of containers and equipment related to used motor oil-recycling and operation of the Household Hazardous Waste Facility. Currently, the county's only anticipated capital expenditure is to replace two of the used motor oil-recycling containers within the next six years at cost of around $5,000.

Collection-Related Capital Facilities

The municipalities have negotiated collection contracts with LeMay Enterprises and Hometown Sanitation. Each contractor owns, operates, and maintains their own capital equipment and facilities associated with their collection contracts. Similarly, LeMay Enterprises serve residents in the unincorporated areas of the county under WUTC Certificate G000098.

The rate structures incorporated within each municipal contract and the WUTC certificate allows these contractors to adequately fund their capital costs.

[14] Cost Assessment Guidelines for Local Solid Waste Management Planning, 2001

12.6 Key Trends

- To keep tipping fees at the Grays Harbor County Transfer Station affordable for county residents and businesses, grants will be an important factor in funding public outreach and education programs.
- Tip fees at the Grays Harbor County Transfer Station need to reflect the actual costs of operating the solid waste management program, including maintaining closed facilities such as the former Aberdeen Landfill.

12.7 Solid Waste Funding Management Actions

A. Continue to rely on the private sector to fund and finance large capital projects for the county solid waste system.

B. Inform state legislators of the importance of increasing Local Solid Waste Financial Assistance funding for rural counties.

C. Pursue grant funding from governmental and non-governmental entities for projects that implement the solid waste management plan.

Section 13. Five-Year Implementation Program

The Grays Harbor County Solid Waste Program will implement a series of Management Actions within the Solid Waste Management Plan during the county's fiscal years of January 2020 through December 2024.

Most of the Management Actions in the plan are either on-going actions implemented by the Solid Waste Program or associated with the annual review by the Solid Waste Advisory Committee (see below). However, there are a few Management Actions in the plan slated for future implementation, if staffing resources and funding become available. Table 25 on the next page provides a comprehensive chapter list of the Management Actions within the plan.

13.1 Ongoing Program Delivery Evaluation

The Solid Waste Program staff in the Utilities & Development and Environmental Health Divisions have the responsibility to track and evaluate some Management Actions on a continuous basis. They will serve as the "first stop" in identifying and resolving program issues as they arrive. They will consult monthly with the Solid Waste Advisory Committee on any potential issues that require substantive changes to the Solid Waste Program or deviation from the Solid Waste Management Plan.

13.2 Annual SWAC Review

The Solid Waste Advisory Committee (SWAC) plays a key leadership role in the implementation process by regularly assessing the performance of the solid waste program in relation to the plan, developing recommendations for increasing its effectiveness, and serving as a communication channel with the municipalities and all county citizens.

While the SWAC meets monthly to discuss ongoing program matters and to stay abreast of current local, state, and nation solid waste management topics, they will devote their September and October meetings to conducting an annual evaluation of the Solid Waste Management Plan. Table 25 identifies those Management Actions the SWAC specifically will rely upon to evaluate plan progress.

As part of their annual review, SWAC members will:

- Evaluate whether the plan is functioning as intended by examining specific Management Actions;
- Consider and make recommendations for changes to increase program effectiveness;

- Identify emerging issues that they intend to review over the following year; and
- Work with Solid Waste Program staff to amend the plan as needed.

13.3 New Program Efforts

The SWAC has identified several new programs they would like to pursue in the future if funding and resources become available. Because of current funding uncertainties with the Local Solid Waste Financial Assistance (LSWFA), these are optional efforts that may or may not occur over the five-year planning cycle. However, these new programs remain a priority for the Solid Waste Program and will remain on their agenda just in case a change in funding occurs or new resources become available.

13.4 Implementation Actions and Schedule

Table 25: Implementation Schedule for SWMP Management Actions

Management Actions	Implementation Timeframe: On-going Program Delivery	Annual SWAC Evaluation	New Program Year(s)
Section 3. Waste Generation			
A. The Solid Waste Advisory Committee will review solid waste tonnage from the Grays Harbor Transfer Station annually to analyze impacts to planning and management.		✓	
Section 4. Waste Collection and Disposal			
A. Continue to monitor the contractual and management provisions in existing operating agreements and permits with all solid waste handling facility operators in the county.		✓	
B. The county will monitor solid waste collection programs in the county to evaluate success in meeting the plan objectives.		✓	
C. Continue to evaluate the solid waste service needs of growing areas of the county.		✓	
D. The Solid Waste Program and the contracted service provider will monitor the long-term transfer capacity of the system.	✓		
E. Operate the transfer station as a self-supporting enterprise in accordance with 173-350 WAC. Continue to structure user fees at the existing transfer station to cover all costs.	✓		
F. The Environmental Health Division will continue to permit, inventory, assess solid waste handling facilities regarding their operations and long-term capacity.	✓		

Management Actions	Implementation Timeframe: On-going Program Delivery	Annual SWAC Evaluation	New Program Year(s)
G. 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 all solid waste handling facilities.		✓	
H. The Environmental Health Division will continue to identify and track existing and past sites; inventory and assess for public health threats.	✓		
I. The Solid Waste Division will continue to adequately provide financial assurance for post-closure activities at the Aberdeen landfill to protect public and environmental health.	✓		
Section 5. Waste Diversion			
A. The SWAC will regularly review recycling market conditions and update its list of designated recyclables collected through comingled or drop-box programs.	✓		
B. The Solid Waste Advisory Committee will continue to explore new ways to expand sustainable recycling opportunities and programs for the public.	✓		
C. The county encourages recycling and reuse through the educational component of the waste reduction and recycling plan.	✓		
D. The county will provide information through its website about the recycling and reuse of white goods and e-wastes.	✓		
E. Incorporate flexibility in curbside recycling programs to accommodate changes in the recycling market to determine which materials to collect or discontinue.	✓		
F. The county will continue to work in cooperation with the WSU Extension, Master Gardener Program to promote backyard composter training, and education to the public and school districts.	✓		
G. The county will explore the possibility of adding a yard waste program.		✓	
H. Encourage the use of economically sustainable organics in energy facilities.			2020-2022
Section 6. Special Wastes			
A. Support private haulers of medical waste collection by maintaining updated lists of firms on its Solid Waste Program website.	✓		
B. Encourage public participation in the Drug Take-Back Program for pharmaceuticals as required under state law.	✓		
C. 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.		✓	

Management Actions	Implementation Timeframe: On-going Program Delivery	Annual SWAC Evaluation	New Program Year(s)
D. The SWAC may request technical assistance from the Department of Ecology to learn about opportunities for wood waste reduction and reuse.			2021-2024
E. Encourage the use of wood waste in cogeneration and renewable energy for fuels.			2021-2024
F. The Environmental Health Division will continue to identify, track, and monitor existing and past wood waste sites.		✓	
G. The county encourages the use of the Waste Tire Removal Account for sites that contain more than 800 waste tires.	✓		
H. The county will allow the piling of waste tires only under permit per WAC 173-350-350. The county may require financial assurances to ensure post-closure clean-up.	✓		
I. The Environmental Health Division will review annually with designated industrial entities their waste and sludge disposal programs.	✓		
J. The Environmental Health Division will continue to monitor and regulate industrial facility activities through the Environmental Health Division	✓		
K. The Environmental Health Division will request technical assistance from the Department of Ecology for removal of contaminated soils.	✓		
L. 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, paying the tipping fees at the Grays Harbor Transfer Station. LeMay would be reimbursed for cost of services provided.	✓		
M. The county may make free disposal options available to the public during periods of a declared emergency to ensure public health.	✓		
N. Initiate planning efforts for identifying strategic sites for interim solid waste storage in the event of a disaster occurrence that prevents access to the Grays Harbor Transfer Station.			2020-2024
O. Work with the agricultural community to develop an environmentally safe livestock disposal program in the event of major losses occurring from a natural disaster.			2020-2024
Section 7. Moderate Risk Wastes			
A. Encourage increases in state funding through the Local Solid Waste Financial Assistance to support expanded hours for the Moderate Risk Waste Facility at the Grays Harbor Transfer Station.		✓	

Management Actions	Implementation Timeframe: On-going Program Delivery	Annual SWAC Evaluation	New Program Year(s)
B. Explore management options for preventing contaminants from entering oil collection facilities.			2020-2024
C. Continue accepting asbestos wastes at the Grays Harbor Transfer Station in accordance with state regulations.	✓		
Section 9. Enforcement			
A. Continue enforcement to reduce dumping on public and private property.	✓		
B. Grays Harbor County and the municipalities will continue to earmark funding within their annual budget for abatements and illegal dumping enforcement within their jurisdictions.	✓		
C. Support volunteer litter control programs.	✓		
D. The county may provide assistance for the removal of abandoned vehicles through the Junk Vehicle Verification, Notification, and Affidavit (Hulk Slip) program.	✓		
E. Strengthen and review countywide litter control activities		✓	
Section 10. Education & Outreach			
A. As funding becomes available, provide staff to implement and provide outreach and education programs.			2021-2024
B. The Solid Waste Program will continue to promote recycling public education and information programs. The program will also explore new partnerships and techniques to deliver programs throughout the county.	✓		
C. The SWAC will support an outreach program aimed at educating the public about proper disposal of prescription medications.			2020-2024
D. The county will incorporate proper waste tire handling into the waste reduction and recycling educational program.			2020-2024
E. 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.			2020-2024
F. The county will continue to encourage the reuse, conversion, and proper disposal of CDL waste through the educational component of the waste reduction and recycling plan.	✓		
G. The county will maintain updated lists on its Solid Waste Program website of private firms that recycle or reuse white goods.			2020-2024
H. Include recycling, reuse, and MRW education and outreach materials and programs in Spanish.			2020-2024

Management Actions	Implementation Timeframe: On-going Program Delivery	Annual SWAC Evaluation	New Program Year(s)
I. Emphasize the importance of avoiding potential contamination of recyclables through education and outreach programs.	✓		
J. Improve public awareness of moderate risk wastes in homes and businesses and educate on less toxic alternatives.	✓		
K. Monitor the latest recycling opportunities and update the county's solid waste management website.	✓		
L. Collaborate with other agencies, organizations, and the faith community to increase education and outreach resources.			2021-2024
M. Develop and implement a Contamination Reduction and Outreach Plan as required under the state's 2019 Sustainable Recycling Act for inclusion in the county's solid waste management plan. The CROP should be completed and adopted by the county by July 1, 2021 as required under RCW 70A.205.045(10).			2021
Section 11. Administration			
A. Maintain staffing for the Solid Waste Program through the Department of Public Services to plan, administer contracts, manage, and enforce the solid waste and recycling systems.	✓		
B. The Solid Waste Advisory Committee and the Solid Waste Program annually will evaluate its compliance with planning requirements under state law.		✓	
C. Recruit membership to the Solid Waste Advisory Committee from the municipalities, citizens, agriculture, business, and solid waste and recycling industries.		✓	
D. Review and amend, if necessary, the Solid Waste Advisory Committee by-laws.		✓	
E. Municipalities shall monitor their solid waste programs to ensure compliance with the Solid Waste Management Plan.	✓		
Section 11. Administration			
A. Continue to rely on the private sector to fund and finance large capital projects for the county solid waste system.	✓		
B. Inform state legislators of the importance of increasing Local Solid Waste Financial Assistance funding for rural counties.		✓	
C. Pursue grant funding from governmental and non-governmental entities for projects that implement the solid waste management plan.	✓		

Section 14. SWMP Amendments, Updates, & Revisions

Keeping the SWMP up-to-date is essential for effective program delivery, informed policy decisions, and grant eligibility. The Department of Ecology planning guidelines for solid waste management plans specify three procedures for plan maintenance: amendments, updates, and revisions.

14.1 SWMP Amendments

Amendments are changes made to the SWMP within the six-year planning cycle. Typically, these are minor adjustments to the plan such updating planning information, changing the list of designated recycled commodities, or adding emphasis to an existing management action to target grant funding.

Amendments do not create major structural changes to the county's solid waste program. Furthermore, a plan amendment does not alter the five-year requirement for review and update. The following procedures guide the amendment process:

1. Proposed amendments to the plan may originate from either the Solid Waste Program co-managers or the SWAC.

2. The SWAC will be responsible for reviewing all proposed amendments and forwarding a recommendation to the BoCC.

3. Upon receiving the SWAC recommendation, the BoCC may approve, approve with changes, disapprove, or remand it back to the SWAC for further consideration.

4. The county shall forward all approved amendments to the Department of Ecology within 45 days of adoption.

14.2 SWMP Updates

RCW 70A.205.075 requires solid waste management plans to undergo review and update every five years. This review process should begin far enough in advance to ensure an updated plan is in place at the beginning of year 6. For the next planning cycle, the county must adopt the updated SWMP by January 1, 2026.

The update process provides the county an opportunity to review the entire solid waste program holistically. This may include reviewing data on county waste generation, collection and diversion; evaluating progress in achieving SWMP management actions; analyzing changes in county social and economic conditions; and integrating changes related to new local and state laws.

The following planning process steps described below is a general guide for updating the SWMP.

1. Solid Waste Program staff and the Solid Waste Advisory Committee (SWAC) will:

    a. Update or include new data critical for evaluating the program;

    b. Identify past, current, and future key trends in county, state, and regional solid waste management; and

    c. Develop management actions that respond to trends and achieve the program's mission statement.

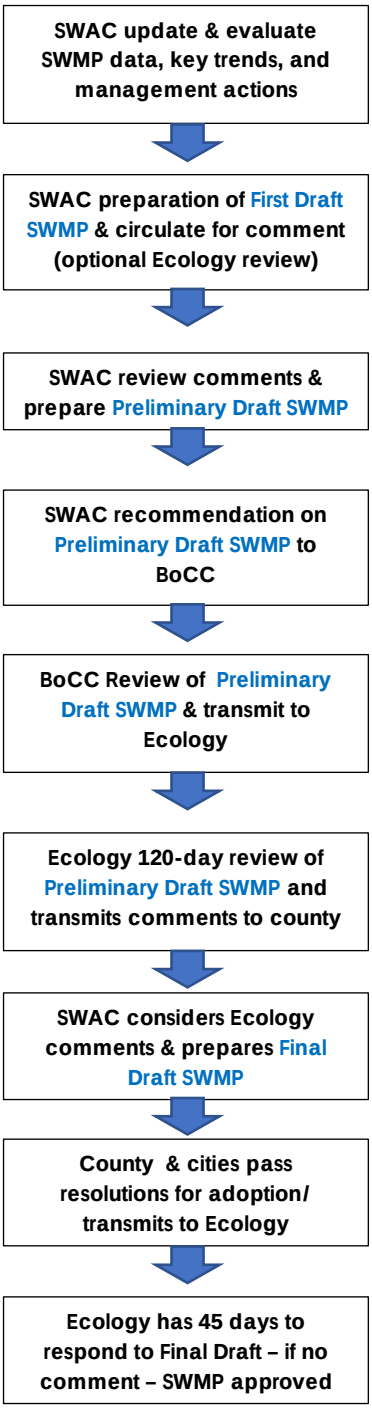
2. County Solid Waste Program staff will prepare a first draft SWMP with a Washington Utilities and Transportation (WUTC) Cost Assessment Form for review by the SWAC, the cities, and the public.

3. An optional informal review of the first draft SWMP by staff at the Department of Ecology (ECY) Solid Waste Management Program is beneficial for identifying and resolving potential issues before submittal of the preliminary draft.

4. County Solid Waste Program staff will incorporate appropriate changes based on the comments received on the first draft. This version of the document now becomes the preliminary draft.

5. The SWAC must prepare a recommendation on the preliminary draft SWMP for consideration by the Board of County Commissioners (BoCC).

6. The BoCC will consider the SWAC recommendation and the preliminary draft SWMP. The BoCC may approve, approve with changes, or send it back to the SWAC for further consideration. Once the BoCC is satisfied with the preliminary draft SWMP, the county then forwards it to the Department of Ecology to initiate their formal review.



7. A preliminary draft SWMP package to submit to the Department of Ecology minimally must include the following additional items:

    a. Transmittal letter requesting review of the preliminary draft;

    b. Washington Utilities and Transportation (WUTC) Cost Assessment Questionnaire;

    c. The interlocal agreement agreeing to joint solid waste planning through the SWMP;

    d. SEPA checklist and threshold decision;

    e. Minutes from the SWAC meeting recommending the preliminary draft SWMP to the BoCC for their consideration;

    f. SWAC bylaws and list of participants.

8. Upon receipt, the Department of Ecology, the WUTC, and the Washington State Department of Agriculture have 120 days to review and provide comments on the preliminary draft.

9. The Department of Ecology will forward its comments on the preliminary draft to the county. The county will then consider the comments (there is no time limit imposed on the county) and prepare a final draft and a submittal package that includes all items in Step 8, with the addition of the following items:

    a. Minutes from the meeting approving the final draft SWMP;

    b. Resolutions by the county and the cities adopting the SWMP; and

    c. A response summary to the comments to the preliminary draft.

10. There is a 45-comment period for the Department of Ecology to review the final draft SWMP and send notice to the county that it approves or denies the final draft. If the Department of Ecology does not respond, the final draft is approved.

11. If approved, there is no further action required of the county.

14.3 SWMP Revisions

A SWMP revision is necessary if there are unanticipated or significant changes in the operation and financial structure of the solid waste program at any time within the five-year planning cycle. The revision process mirrors the plan update process.

14.4 Update Management Action

A. Initiate the SWMP update process in January 2024 to ensure adoption by January 1, 2026.

Appendix A. Definitions

| A | B | C | D | E | F | G | I | L | M | O | P | R | S | T | U | W | Y |

A

TOP

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.

B

TOP

Best management practices (BMP)

Best management practices are effective, practical, structural or nonstructural methods that prevent or reduce the movement of sediment, nutrients, pesticides and other pollutants from the land to surface or ground water, or which otherwise protect water quality from potential adverse effects of land use activities.

Biomedical waste

Waste that contains infectious material or material that's potentially infectious. This definition includes waste generated by healthcare facilities like physician's offices, hospitals, dental practices, laboratories, medical research facilities, and veterinary clinics.

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.

Board of County Commissioners (BoCC)

The three elected officials that govern Grays Harbor County. Each commissioner is elected to a four-year term.

C

TOP

Capital improvement plan (CIP)

A capital improvement plan (CIP), or capital improvement program, is a short-range plan, usually four to ten years, which identifies capital projects and equipment purchases, provides a planning schedule, and identifies options for financing the plan.

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.

Comingled-recycling

Comingled-recycling refers to a system in which all paper fibers, plastics, metals, and other containers are mixed in a collection truck, instead of being sorted by the depositor into separate commodities, such as newspaper, paperboard, corrugated fiberboard, plastic, glass, etc., and handled separately throughout the collection process.

Compost

The controlled biological decomposition of organic material or the product resulting from such a process.

Conditionally exempt small quantity generator (CESQG)

A dangerous waste generator whose dangerous wastes are not subject to regulation under chapter 70A.300 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.

Construction, demolition, & land-clearing debris (CDL)

Waste that is generated from construction related activities and may include organic and non-organic materials, some of which may be reclaimed, reused or recycled.

Consumer Price Index (CPI)

A measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.

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

TOP

Dangerous wastes

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

Designated recyclable

Materials identified by the Solid Waste Advisory Committee for recycling.

Disaster debris management site

A location for the county will temporarily store, reduce, segregate, and/or process debris after a disaster before it is hauled to its final disposition.

Disposable containers

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

E

TOP

Electronic waste (E-waste)

electronics that contain hazardous materials, such as cathode ray tubes, computer monitors, televisions.

Emergency Management Plan

An emergency management plan is a course of action developed to mitigate the damage of potential events that could endanger an organization's ability to function. Such a plan includes measures that provide for the safety of personnel and, if possible, property and facilities.

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.

F

TOP

Facility

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

G

TOP

Garbage

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

Grays Harbor County Code (GHCC)

Codified ordinances and regulations adopted by the Grays Harbor County Board of County Commissioners that govern how the county government works.

Ground water

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

I

TOP

Incineration

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

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.

L

TOP

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 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 land clearing 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

TOP

Materials and waste exchange program

Materials and waste exchange programs are systems for distributing, buying, or selling reusable and recyclable commodities. Some programs include warehouses that advertise available commodities through printed catalogs, while others are simply Web sites that connect buyers and sellers. State and local governments coordinated some programs while others are wholly private, for-profit businesses. The exchanges also vary in terms of area of service and the types of commodities exchanged. In general, waste exchanges tend to handle hazardous materials and industrial process waste while materials exchanges handle nonhazardous items.

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 70A.305 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)

Hazardous waste generated in small quantities, by households or businesses.

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).

O

TOP

Organics

Yard debris, land clearing and food waste material.

P

TOP

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.

Pharmaceutical waste

Pharmaceutical waste includes expired, unused, spilt, and contaminated pharmaceutical products, drugs, vaccines, and sera that are no longer required and need to be disposed of appropriately. The category also includes discarded items used in the handling of pharmaceuticals, such as bottles or boxes with residues, gloves, masks, connecting tubing, and drug vials.

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.

Product stewardship

A policy which ensures that all those involved in the lifecycle of a product share responsibility for reducing its health and environmental impacts, with producers bearing the primary financial responsibility.

R

TOP

Recyclable materials

Those solid wastes separated for recycling or reuse, including, but not limited to, papers, metals, and glass, and 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.

Reuse

The return of a commodity into the economic stream for use in the same kind of application as before without a change to its identity.

Revised Code of Washington (RCW)

The compilation of all permanent Washington state laws now in force.

Rural areas

Areas within Grays Harbor County that lie outside of municipal boundaries. The term “unincorporated” also refers to rural areas

S

TOP

Sludge

Sludge is a semi-solid slurry that can be produced from a range of industrial processes, from water treatment,

wastewater treatment or on-site sanitation systems.

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 Advisory Committee (SWAC)

A Grays Harbor County appointed advisory group comprising nine volunteer members to review information and policy related to solid waste issues that provides feedback to staff and recommendations to the BOCC.

Source separation

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

Solid Waste Management Plan (SWMP)

A county document that identifies goals and policies for implementing, evaluating and modifying existing and future solid waste management programs as required by Washington State Public Health and Safety Chapter 70A.205.

T

TOP

Tipping fee

A charge levied upon a given quantity of solid waste received at the Grays Harbor Transfer Facility. The purpose of the fee is to offset the cost of receiving, transporting, and disposing of solid waste, including maintaining and eventually closing the facility.

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

TOP

Urban areas

Areas within the incorporated boundaries of the nine cities within Grays Harbor County.

Used motor oil

Used motor oil is oil that has been drained from the engine of a truck or vehicle, and then stored for reuse, recycling, or shipping offsite.

US Environmental Protection Agency (EPA)

An agency of the federal government that protects human health and the environment nationwide.

W

TOP

Washington Administrative Code

Administratively adopted, formally codified rules that define how state agencies implement the requirements of state laws (Revised Code of Washington).

Washington State Department of Ecology (ECY)

A department in the State of Washington that is tasked to protect, preserve and enhance Washington's environment, and promote the wise management of (the) air, land and water for the benefit of current and future generations.

Washington Utilities & Transportation Commission (WUTC)

A state agency that regulates the rates and services of private or investor-owned utility and transportation companies, including garbage haulers that have exclusive rights within defined areas of service.

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.

White goods

Discarded household appliances such as refrigerators, freezers, air conditioners, heat pumps, ovens, ranges, washing machines, clothes dryers and water heaters. Many white goods contain ozone-depleting refrigerants, mercury or compressor oils.

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.

Y

TOP

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.

Appendix B. WUTC Cost Assessment

Plan prepared for the county of: Grays Harbor

Prepared by: Mark Cox, Director, Utilities and Development Division

Contact telephone: (360) 249-4222 **Date:** October 31, 2019

Definitions

Throughout this document:

- YR.1 shall refer to: 2020
- YR.3 shall refer to: 2023
- YR.6 shall refer to: 2026
- "Years" refer to calendar year (Jan 01 – Dec 31)

1. Demographics

1.1. Population

1.1.1. Total population of Grays Harbor County

Year 1: 74,160 Year 3: 74,368 Year 6: 74,681

1.1.2. Total unincorporated population under jurisdiction:

Year 1: 74,160 Year 3: 74,368 Year 6: 74,681

1.2. References and Assumptions

1.2.1. Medium series 2017 GMA projections by one-year intervals, OFM (average annual increase of 0.14%, applied to the 2019 OFM estimate)

1.2.2. All county municipalities are parties to the SWMP

2. Waste Stream Generation

2.1. Tonnage Recycled

2.1.1. Total tonnage recycled in the base year and projections for years 3 and 6

Year 1: 6,190 Year 3: 6,567 Year 6: 7,176

2.2. Tonnage Disposed

2.2.1. Total tonnage disposed in the base year and projections for years 3 and 6

Year 1: 60,407 Year 3: 64,960 Year 6: 72,441

2.3. References and Assumptions

2.3.1. Recycling projections based on annual average increase of 3.0% (see Table 8, p 16)

2.3.2. Disposal projection based on annual average increase of 3.7% (see Table 8, p 16)

3. System Component Costs

3.1. Waste Reduction Programs

3.1.1. Implemented and proposed programs (includes reuse programs):

Implemented programs:

- Reuse programs (website, 2Good2Toss), p 32
- Moderate Risk Waste Facility operation and programs (MRW collection, used motor oil, materials-exchange, electronics disposal), p 42

Proposed programs:

- 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 construction, demolition, and land clearing (CDL) waste reduction and reuse, p33.
- Request technical assistance from Ecology 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, p33.
- Incorporate appropriate waste reduction strategies identified by the Solid Waste Advisory Committee, including product stewardship programs, into existing educational outreach efforts, p33.
- Support the transfer of common household items through exchanges, websites, and local businesses, p33.

- Encourage increases in state funding through the Local Solid Waste Financial Assistance to support expanded hours for the Moderate Risk Waste Facility at the Grays Harbor Transfer Station, p46.

3.1.2. Capital and operating costs for implemented and proposed programs

Note: GH County only provides staffing and disposal costs for the MRW facility; funding for the operation of the MRW and 2Good2Toss programs is through LSWFA and CLCP grants and the county share of tip fees.

LeMay, Inc. owns the MRW facility structure, which integrates all capital costs for the facility into the tip fee structure.

Implemented programs:

Year 1: $114,863 Year 3: $118,802 Year 6: $124,964

Implemented program cost is the total budget for the GH County Solid Waste Program. Projection calculated from Year 1 using the median YOY inflation rate of (1.7%) for years 2010 through 2018.

Proposed programs:

Note: Funding for all proposed programs dependent entirely upon the State of Washington increasing current funding levels for LSWFA.

Year 1: NA Year 3: NA Year 6: NA

3.1.3. Funding mechanism(s) for waste reduction programs

Implemented programs:

Year 1: Grants, tip fees Year 3: Grants, tip fees Year 6: Grants, tip fees

Proposed programs:

Note: Funding for all proposed programs dependent entirely upon the State of Washington increasing current funding levels for LSWFA.

Year 1: Grants, tip fees Year 3: Grants, tip fees Year 6: Grants, tip fees

3.2. Recycling Program

3.2.1. Implemented and proposed programs:

Implemented programs:

- Curbside recycling, p 28
- Glass drop boxes, p 29
- Education and outreach, p 53

Proposed programs:

- The Solid Waste Program will continue to promote recycling public education and information programs. The program will also explore new partnerships and techniques to deliver programs throughout the county, p55.
- The county will incorporate proper waste tire handling into the waste reduction and recycling educational program, p55.
- The county will maintain updated lists on its Solid Waste Program website of private firms that recycle or reuse white goods, p55.
- Emphasize the importance of avoiding potential contamination of recyclables through education and outreach programs, p55.
- Monitor the latest recycling opportunities and update the county's solid waste management website, p55.
- Collaborate with other agencies, organizations, and the faith community to increase education and outreach resources, p55.
- Include recycling, reuse, and MRW education and outreach materials and programs in Spanish, p55.
- Share information with visitors about which products are recycled locally and their proper disposal, p55.

3.2.2. Capital and operating costs for implemented and proposed programs

Note: GH County has no capital or operating costs associated with the recycling program within its Solid Waste Program. LeMay, Inc. operates the program and owns all capital facilities. LeMay, Inc. integrates these costs collected through its tip fee.

Implemented programs:

Year 1: $ NA Year 3: $ NA Year 6: $ NA

Proposed programs:

Note: Funding for all proposed programs dependent entirely upon the State of Washington increasing current funding levels for LSWFA.

Year 1: $ NA Year 3: $ NA Year 6: $ NA

3.2.3. Funding mechanism(s) for waste recycling programs

Implemented programs:

Year 1: Grants, tip fees Year 3: Grants, tip fees Year 6: Grants, tip fees

Proposed programs:

Note: Funding for all proposed programs dependent entirely upon the State of Washington increasing current funding levels for LSWFA.

Year 1: Grants, tip fees Year 3: Grants, tip fees Year 6: Grants, tip fees

3.3. Solid Waste Collection Program

3.3.1. Regulated Solid Waste Collection Program

WUTC Regulated Hauler: LeMay Enterprises, Inc.

G-Permit #000098

	YR 1	YR 3	YR 6
Residential			
- Number of customers	11,314	11,362	11,433
- Tonnage collected	6,496	6,523	6,564
Commercial			
- Number of customers	786	789	794
- Tonnage collected	2,236	2,245	2,260

3.3.2. Non-regulated Solid Waste Collection Programs

City of Aberdeen

Hauler Name: LeMay Enterprises, Inc.

	YR 1	YR 3	YR 6
Number of customers	5,544	5543	5541
Tonnage collected	8,632	8630	8628

City of Cosmopolis

Hauler Name: LeMay Enterprises, Inc.

	YR 1	YR 3	YR 6
Number of customers	669	672	676
Tonnage collected	915	919	925

City of Elma

Hauler Name: LeMay Enterprises, Inc.

	YR 1	YR 3	YR 6
Number of customers	1,045	1,065	1,095
Tonnage collected	1,100	1,121	1,153

City of McCleary

Hauler Name: LeMay Enterprises, Inc.

	YR 1	YR 3	YR 6
Number of customers	1,359	1,384	1,421
Tonnage collected	683	695	714

City of Montesano

Hauler Name: LeMay Enterprises, Inc.

	YR 1	YR 3	YR 6
Number of customers	2,794	2,824	2,870
Tonnage collected	1,234	1,247	1,268

City of Oakville

Hauler Name: LeMay Enterprises, Inc.

	YR 1	YR 3	YR 6
Number of customers	251	252	254
Tonnage collected	225	226	227

City of Ocean Shores

Hauler Name: LeMay Enterprises, Inc.

	YR 1	YR 3	YR 6
Number of customers	3,207	3,318	3,492
Tonnage collected	3,268	3,383	3,564

City of Westport

Hauler Name: LeMay Enterprises, Inc.

	YR 1	YR 3	YR 6
Number of customers	1,042	1,045	1,049
Tonnage collected	1,648	1,653	1,660

City of Hoquiam

Hauler Name: Hometown Sanitation, LLC.

	YR 1	YR 3	YR 6
Number of customers	3,065	3,034	3,028
Tonnage collected	4,699	4,700	4,700

Note: Projections based on average annual increase for years 2010 through 2019, see Table 1: Grays Harbor County Population, 2010 - 2019.

3.4. Energy Recovery & Incineration Programs – Not Applicable

3.5. Land Disposal Program – Not Applicable

3.6. Administration Program

3.6.1. Costs for administering the solid waste and recycling program

Note: Revenues for administrating the GH County solid waste program is based on 15% of the tip fee collected by LeMay, Inc. at the Transfer Station. Since the county does not specifically separate costs by program in this manner, the Budgeted Cost below is the same as in Section 3.1.2, which covers all Solid Waste Program costs.

Budgeted Cost:

Year 1: $114,863 Year 3: $118,802 Year 6: $124,964

Funding Source:

Year 1: Tip fees, grants Year 3: Tip fees, grants Year 6: Tip fees, grants

3.6.2. Cost components included in estimate:

- Staff salaries, wages, and benefits; supplies; professional services; permits; and other services and charges

3.6.3. Funding mechanism(s) for recovering cost of each component

- Revenue generated through tipping fees is the primary source; LSWFA and CLCP grants provide a much smaller amount.

3.7. Other Programs – None

4. Funding Mechanisms

4.1.1. Facility Inventory: *Note - The Grays Harbor County Transfer Station is a private facility owned by LeMay Enterprises and funded entirely through tipping fees.*

- Type of facility: transfer station
- Tip fee per ton: $104.85 (2019)
- Operation, transfer, and disposal : $89.12
- County administration: $15.73
- Transfer station location: North of Clemmons Rd-SR 12
- Final disposal location: Wasco County Landfill
- Total tons disposed: 55,037 (2018)
- Total revenue generated: Estimated at $ 5,770,629 (tip fee X tons)

4.1.2. Tip Fee Components

- Tip fee by facility: 100%
- Surcharge: 0.0%
- City tax: 0.0%
- County tax: 0.0%
- Operational and Transportation costs: 85%
- Administration cost: 15%
- Closure cost: 0.0%

4.1.3. Funding Mechanism

Program	Grant	Tip Fee
Education & outreach	ECY-LSWFA	X
Moderate Risk Waste Operation	ECY-LSWFA	X
Recycling	NA	X
Administration/planning	ECY-LSWFA	X

4.1.4. Tip Fee Forecast

	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6
GHC Transfer Station	$106.77	$110.40	$114.15	$118.04	$122.05	$126.20

Note: Estimate assumes a 3.4% increase annually; however, the fuel surcharge component of the GH County-LeMay, Inc. contract may increase if fuel prices rise.

4.2. Funding Mechanism by percentage

4.2.1. Funding Mechanism by Percentage – Year 1

Program	Grant	Tip Fee	Total
Education & outreach	75%	25%	100%
Moderate risk waste	75%	25%	100%
Recycling		100%	100%
Administration/planning	85%	15%	100%

4.2.2. Funding Mechanism by Percentage – Year 3

Program	Grant	Tip Fee	Total
Education & outreach	75%	25%	100%
Moderate risk waste	75%	25%	100%
Recycling		100%	100%
Administration/planning	85%	15%	100%

4.2.3. Funding Mechanism by Percentage – Year 6

Program	Grant	Tip Fee	Total
Education & outreach	75%	25%	100%
Moderate risk waste	75%	25%	100%
Recycling		100%	100%
Administration/planning	85%	15%	100%

4.3. References and Assumptions – 2020 Budget

401 Solid Waste Plan 2020 Budget

Revenues	
Beginning cash & investments	$ 741,326
WSDOE LSWFA	$ 50,000
WSDOE Litter Grant	$ 30,000
Budget & accounting services	$ 90,000
Consulting services	$ 680,000
Tipping Fee – Operations	$ 950,000
Investment interest	$ 5,000
Miscellaneous revenue	$ 500
Department Revenue Total	**$ 2,553,826**

Expenditures	
Ending cash reserves & investments	$ 425,564
Salaries and wages	$ 867,524
Personnel benefits	$ 375,014
Supplies	$ 84,000
Household hazardous waste facility	$ 20,000
Services	$ 2,066,887
Transfers out	$ 21375
Transfer out – landfill	$20,000
Department Expenditure Total	**$2,553,826**

117 Aberdeen Landfill Post Closure Fund

Revenues		
Beginning cash & investments		$ 956,272
Investment interest		$ 5,000
I/F Interest – fair		$ 6,000
Transfer in		$ 20,000
	Department Revenue Total	**$ 987,272**

Expenditures		
Ending cash & investments		$ 750,272
Landfill post closure care		$ 14,000
Professional services		$ 140,000
I/F professional services		$ 40,000
Maintenance		$ 50,000
Services		$ 230,000
	Department Expenditure Total	**$987,272**

4.4. Surplus Funds - NA

Appendix C. Interlocal Agreement

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 VARNESS, 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 Varness
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:
Donna Eaton
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 20th day of July, 2009.

CITY OF ELMA

David Osgood, Mayor

Attest:

City Clerk

Approved as to form:

Daniel Glenn, City Attorney

ADOPTED this 14th day of July, 2009.

CITY OF MONTESANO

Ron Schillinger, Mayor

Attest:

City Clerk

Approved as to form:

Daniel O. Glenn, City Attorney

ADOPTED this 23rd 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 13 day of JULY, 2009.

CITY OF OAKVILLE

Mitchell Smith, Mayor

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 ____ day of _____, 2009.

CITY OF ABERDEEN

Bill Simpson, Mayor

Attest:

City Clerk

Approved as to form:

Eric Nelson, Corporation Counsel

ADOPTED this 14th day of July, 2009.

CITY OF WESTPORT

Michael Bruce, Mayor

Attest:

Margo R. Tackett
City Clerk

Approved as to form:

Wayne D. Hagen, Jr., City Attorney

ADOPTED this 3 day of June, 2009.

CITY OF COSMOPOLIS

Vickie L. Raines, Mayor

Attest:

Kathy Welch
City Clerk

Approved as to form:

Steve Hyde, City Attorney
WSB # 5204

ADOPTED this 30th day of June, 2009.

CITY OF MCCLEARY

Walt Bentley, Mayor

Attest:

City Clerk

Approved as to form:

Daniel Glenn, City Attorney

Appendix D. WSDA and WUTC Review Letters

STATE OF WASHINGTON

DEPARTMENT OF AGRICULTURE

Division of Plant Protection

P.O. Box 42560 • Olympia, Washington 98504-2560 • (360) 902-1800

March 4th, 2020

Mr. Mark Cox
Utilities & Community Development
Grays Harbor County
100 West Broadway; Suite 31
Montesano, Washington 98563

Mr. Peter Guttchen
Solid Waste Management Program
Ecology SW Regional Office
300 Desmond Drive SE
Lacey, WA 98506

Dear Mr. Cox and Mr. Guttchen,

After reviewing the preliminary draft of the *Grays Harbor County Solid and Hazardous Waste Management Plan*, our agency does not see any current conflicting compliance issues related to the apple maggot quarantine, as prescribed in Chapter 16-470-124 WAC.

Thank you for providing our agency with the opportunity to comment on the Grays Harbor County solid waste management plan. RCW 70.95.095 requires the Washington State Department of Agriculture to review preliminary draft solid waste management plans for any increased risks of introducing a quarantine plant pest or disease into a pest free area.

Regards,

Amy Clow

Amy Clow
Municipal Waste Specialist
WSDA Pest Program

cc:
Greg Haubrich, WSDA Pest Program Manager

STATE OF WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION
621 Woodland Square Loop S.E. • Lacey, Washington 98503
P.O. Box 47250 • Olympia, Washington 98504-7250
(360) 664-1160 • TTY 1-800-833-6384 or 711

March 26, 2020

Mark Cox, Director
Utilities and Community Development
100 West Broadway Suite 31
Montesano, WA 98563

RE: Grays Harbor County Solid Waste and Moderate Risk Waste Management Plan For Years 2020 to 2025
Supplement TG-200113

Dear Mr. Cox:

The Washington Utilities and Transportation Commission (Commission) has completed its review of the preliminary draft of the Grays Harbor County 2020 Solid Waste and Moderate Waste Management Plan (Plan).

The Plan proposes to increase tip fees for municipal solid waste (MSW) each year during the Plan period, 2020-2025. As a result of the current forecasted tip fees, there will be a rate impact to ratepayers served by regulated solid waste collection companies in Grays Harbor County. The table below illustrates projected disposal fees and rate increases between 2020 and 2025 based on forecasted tip fees.

	2020	*2021*	*2022*	*2023*	*2024*	*2025*	*Total*
Projected Disposal Fees							
Per Ton Disposal Cost	$106.77	$110.40	$114.15	$118.04	$124.45	$128.68	
Per Ton Increase	$1.92	$3.63	$3.75	$3.89	$4.01	$4.15	$21.35
Projected Rate Increases							
Residential							
Monthly rate for one 32-gallon can per week service	$0.14	$0.27	$0.28	$0.29	$0.30	$0.31	$1.59
Commercial							
Monthly rate for one-yard per pick up service	$0.73	$1.38	$1.42	$1.47	$1.52	$1.57	$8.09

Existing collection services for recyclable materials consists of drop-off stations (in the cities of Aberdeen, Cosmopolis, Elma, Hoquiam, McCleary, Montesano, Oakville, Ocean Shores, Westport, and Pacific Beach). These sites accept newspaper, cardboard, magazines, tin cans, aluminum cans, plastic bottles, plastic milk jugs, and glass bottles. Single-stream curbside collection is provided by Harold LeMay Enterprises Inc., d/b/a Harbor Disposal and Eastern Grays Harbor Disposal, (LeMay) on an every-other-week basis throughout its Commission-regulated area and contracted cities. Hometown Sanitation, LLC, provides service to the City of Hoquiam. Private and commercial recycling providers also operate within the County. The materials collected curbside consist of newspaper, cardboard, magazines, tin cans, aluminum cans, PETE (#1 plastic), and HDPE (#2 plastic). Glass is not accepted curbside, but is collected at drop-off sites.

Washington State law requires curbside recycling services to be provided in urban areas unless an alternative plan is approved by the Department of Ecology (Ecology). The requirements of the law appear to be met because curbside recycling is offered countywide by the certificated hauler or is covered in cities contracts for service.

The following list includes some of the recommendations the County has made for improving its recycling programs:

- The SWAC will regularly review recycling market conditions and update its list of designated recyclables collected through comingled or drop-box programs.
- The SWAC will continue to explore new ways to expand sustainable recycling opportunities and programs for the public. The SWAC will hold a solid waste review every April that will include an analysis of recycling activities over the past year and potential changes and improvements.
- The County encourages recycling and reuse through the educational component of the waste reduction and recycling plan.
- The County will provide information through its website about the recycling and reuse of white goods and e-wastes.
- Incorporate flexibility in curbside recycling programs to accommodate changes in the recycling market to determine which materials to collect or discontinue.

Staff has no further comments. Please direct questions or comments to Scott Sevall at 360-664-1230 or by email at scott.sevall@utc.wa.gov.

Sincerely,

/s/ Mark L. Johnson

Mark L. Johnson
Executive Director and Secretary

cc: Peter Guttchen, Department of Ecology, Regional Planner

Appendix E. Resolutions of Adoption for Plan Update

RESOLUTION NO. 2021-002

A RESOLUTION ADOPTING THE GRAYS HARBOR COUNTY SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025

WHEREAS, Chapter 70.95 RCW requires local governments to prepare local solid waste plans based upon state guidelines, and to update those plans on a regular basis; and

WHEREAS, the cities of Grays Harbor County have previously resolved to jointly plan with Grays Harbor County for future solid waste management, which plan was adopted by Grays Harbor County Resolution No. 2012-134; and

WHEREAS, the cities and the county have had the opportunity to review and provide input to the draft updated Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025 ("Plan"); and

WHEREAS, the Washington State Department of Ecology, the Washington Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan as to form and content; and

WHEREAS, the participating cities in Grays Harbor County have adopted the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 To 2025; and

WHEREAS, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025;

NOW THEREFORE, BE IT RESOLVED that the Board of Commissioners hereby adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025, which shall replace in its entirety the previous plan adopted by Resolution No. 2012-134.

The foregoing Resolution was adopted by the Board of Commissioners for Grays Harbor County, Washington, at a regular meeting this 5th day of January, 2021.

ATTEST:

Clerk of the Board

Jill Warne, District 1

Kevin Pine, District 2

Vickie L. Raines, District 3, Chair

City
of
Aberdeen

RESOLUTION No. 2020- 22

A RESOLUTION ADOPTING THE GRAYS HARBOR COUNTY SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025

WHEREAS, Chapter 70.95 RCW requires local governments to prepare local solid waste plans based upon state guidelines, and to update those plans on a regular basis; and

WHEREAS, the cities of Grays Harbor County have previously resolved to jointly plan with Grays Harbor County for future solid waste management; and

WHEREAS, the City of Aberdeen joined the plan pursuant to Resolution No. 2012-14 in 2012; and

WHEREAS, the cities and the county have had the opportunity to review and provide input to the draft updated Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025 ("Plan"); and

WHEREAS, the Washington State Department of Ecology, the Washington Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan as to form and content; and

WHEREAS, final adoption of the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 To 2025 by the Grays Harbor County Board of Commissioners and the Washington State Department of Ecology is contingent upon adoption of the Plan by the participating cities in Grays Harbor County; and

WHEREAS, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025.

NOW THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF ABERDEEN: that the City of Aberdeen hereby adopts the attached Grays Harbor County Comprehensive Solid Waste Management Plan for Years 2020 to 2025.

PASSED AND APPROVED this 28th day of October, 2020.

Pete Schave, Mayor

ATTESTED:

Patricia Soule, Finance Director

RESOLUTION 2020-03

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COSMOPOLIS, ADOPTING THE GRAYS HARBOR COUNTY SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025

WHEREAS, Chapter 70.95 RCW requires local governments to prepare local solid waste plans based upon state guidelines, and to update those plans on a regular basis; and

WHEREAS, the cities of Grays Harbor County have previously resolved to jointly plan with Grays Harbor County for future solid waste management; and

WHEREAS, the cities and the county have had the opportunity to review and provide input to the draft updated Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025 ("Plan"); and

WHEREAS, the Washington State Department of Ecology, the Washington Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan as to form and content; and

WHEREAS, final adoption of the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 To 2025 by the Grays Harbor County Board of Commissioners and the Washington State Department of Ecology is contingent upon adoption of the Plan by the participating cities in Grays Harbor County; and

WHEREAS, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025;

NOW THEREFORE, BE IT RESOLVED that the City of Cosmopolis hereby adopts the attached Grays County Comprehensive Solid Waste Management Plan for Years 2020 to 2025.

The foregoing Resolution was adopted by the City Council of Cosmopolis, Washington, at a regular meeting this 17th day of June, 2020.

SIGNED this 17th Day of June, 2020,

KYLE E. PAULEY, Mayor

ATTEST: JULIE POPE, Finance Director

RESOLUTION 679

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELMA , ADOPTING THE GRAYS HARBOR COUNTY SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025

1. Chapter 70.95 RCW requires local governments to prepare local solid waste plans based upon state guidelines, and to update those plans on a regular basis.

2. Elma, in association with the other cities of Grays Harbor County, has previously resolved to jointly plan with Grays Harbor County for future solid waste management.

3. Since making that decision Elma, the other cities and the County have had the opportunity to review and provide input to the draft updated Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025 ("Plan").

3. The Washington State Department of Ecology, the Washington Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan as to form and content.

4. As has been true previously, the final adoption of the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 To 2025 by the Grays Harbor County Board of Commissioners and the Washington State Department of Ecology is contingent upon adoption of the Plan by the participating cities in Grays Harbor County.

5. City staff have reviewed the draft plan and have reported that it is their opinion that the information contain therein is basically consistent with the activities of the areas within the City.

6. Thus, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ELMA:

The City of Elma hereby adopts the attached Grays

County Comprehensive Solid Waste Management Plan for Years 2020 to 2025.

Adopted by the City Council of Elma, Washington, this 8th day of September, 2020.

CITY OF ELMA

JAMES SORENSEN MAYOR

ATTEST:

Diana Easton

DIANA EASTON, CLERK-TREASURER

APPROVED AS TO FORM:

Dan Glenn by Diana Easton

DANIEL GLENN, CITY ATTORNEY

RESOLUTION NO. 2020 - 08

A RESOLUTION adopting the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025.

WHEREAS, RCW 70.95 requires local governments to prepare local solid waste plans based upon state guidelines; and

WHEREAS; the cities and county have previously resolved to jointly plan with Grays Harbor County for future waste management; and

WHEREAS, the cities and the county have had the opportunity to review and provide input to the draft Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025; and

WHEREAS; the Washington State Department of Ecology, the Washington State Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan as to form and content; and

WHEREAS, final adoption of the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025 by the Board of Commissioners and the Department of Ecology is contingent uon adoption by the participating cities in Grays Harbor County; and

WHEREAS, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025,

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF HOQUIAM, WASHINGTON, IN REGULAR MEETING DULY ASSEMBLED, AS FOLLOWS:

SECTION 1. The Grays Harbor County Comprehensive Solid & Hazardous Waste Management Plan for Years 2020 to 2025 is hereby adopted in its entirety.

ADOPTED by the Mayor and City Council on July 13, 2020.

Ben Winkelman – Mayor

ATTEST:

Corrine Schmid – Finance Director

RESOLUTION NO. 732

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MCCLEARY ADOPTING THE GRAYS HARBOR COUNTY SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025.

RECITALS:

WHEREAS, RCW 70.95 requires local governments to prepare local solid waste plans based upon state guidelines, and to update those plans on a regular basis; and

WHEREAS, the cities and the county have previously resolved to jointly plan with Grays Harbor County for future solid waste management; and

WHEREAS, the cities and the county have had the opportunity to review and provide input to the draft updated Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025; and

WHEREAS, the Washington State Department of Ecology, the Washington Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan to form and content; and

WHEREAS, final adoption of the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025 by the Grays Harbor County Board of Commissioners and the Washington State Department of Ecology is contingent upon adoption of the Plan by the participating cities in Grays Harbor County; and

WHEREAS, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS BY THE CITY COUNCIL OF THE CITY OF McCLEARY, THE MAYOR SIGNING IN AUTHENTICATION THEREOF:

SECTION I: The City of McCleary hereby adopts the attached Grays Harbor County Comprehensive Solid Waste Management Plan for Years 2020 to 2025.

PASSED THIS 12th DAY OF August, 2020, by the City Council of the City of McCleary, and signed in authentication thereof this 12th day of August, 2020.

CITY OF McCLEARY:

BRENDA ORFFER, Mayor

ATTEST:

WENDY COLLINS, Clerk-Treasurer

APPROVED AS TO FORM:

CHRISTOPHER JOHN COKER, City Attorney

RESOLUTION - 2
07/13/2020
CJC/mb

CITY OF McCLEARY
100 SOUTH 3RD STREET
McCLEARY, WASHINGTON 98557

RESOLUTION NO. 961

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MONTESANO ADOPTING THE GRAYS HARBOR COUNTY SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025.

R E C I T A L S:

WHEREAS, RCW 70.95 requires local governments to prepare local solid waste plans based upon state guidelines, and to update those plans on a regular basis; and

WHEREAS, the cities and the county have previously resolved to jointly plan with Grays Harbor County for future solid waste management; and

WHEREAS, the cities and the county have had the opportunity to review and provide input to the draft updated Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025; and

WHEREAS, the Washington State Department of Ecology, the Washington Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan to form and content; and

WHEREAS, final adoption of the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025 by the Grays Harbor County Board of Commissioners and the Washington State Department of Ecology is contingent upon adoption of the Plan by the participating cities in Grays Harbor County; and

WHEREAS, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025.

NOW, THEREFORE, BE IT RESOLVED the City of Montesano hereby adopts the attached Grays Harbor County Comprehensive Solid Waste Management Plan for Years 2020 to 2025.

This Resolution shall take effect from and after its date of adoption.

PASSED THIS 25th DAY OF August, 2020, by the City Council of the City of Montesano, and signed in authentication thereof this 26th day of August, 2020.

CITY OF MONTESANO:

VINI E. SAMUEL, Mayor

ATTEST:

ARNEL BLANCAS, CFO/City Clerk

APPROVED AS TO FORM:

CHRISTOPHER JOHN COKER, City Attorney

RESOLUTION - 2
CJC

CITY OF MONTESANO
112 MAIN STREET NORTH
MONTESANO, WASHINGTON 98563

CITY OF OAKVILLE
RESOLUTION NO. 425

A RESOLUTION ADOPTING THE GRAYS HARBOR COUNTY SOLID & HAZORDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025

WHEREAS, RCW 70.95 requires local governments to prepare local solid waste plans based upon state guidelines; and,

WHEREAS, the cities and the county have previously resolved to jointly plan with Grays Harbor County for future solid waste management; and,

WHEREAS, the cities and the county have had the opportunity to review and provide input to the draft Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 To 2025; and,

WHEREAS, the Department of Ecology, the Washington Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan to form and content; and,

WHEREAS, final adoption of the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 To 2025 by the Board of Commissioners and the Department of Ecology is contingent upon adoption by the participating cities in Grays Harbor County; and,

WHEREAS, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 To 2025;

NOW THEREFORE BE IT RESOLVED that the City of Oakville hereby adopts the revised Grays County Comprehensive Solid Waste Management Plan, August 2012.

The foregoing Resolution was adopted by the City Council of Oakville, Washington, at a regular meeting this 10th day of August, 2020.

PASSED THIS 10th DAY OF AUGUST, 2020, by the City Council of the City of Oakville, and signed in approval therewith this 10th day of August, 2020.

Angelo m Cilluffo

Angelo Cilluffo, Mayor

Attest:

Amy Durga, City Clerk/Treasurer

Approved as to Form:

Chris Bates, City Attorney

CITY OF OCEAN SHORES, WASHINGTON

RESOLUTION NO. 805

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OCEAN SHORES, WASHINGTON, ADOPTING THE GRAYS HARBOR COUNTY SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025

WHEREAS, Chapter 70A.205 RCW (formerly 70.95 RCW) requires local governments to prepare local solid waste plans based upon state guidelines, and to update those plans on a regular basis; and

WHEREAS, the cities of Grays Harbor County have previously resolved to jointly plan with Grays Harbor County for future solid waste management; and

WHEREAS, the cities and the county have had the opportunity to review and provide input to the draft updated Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025 ("Plan"); and

WHEREAS, the Washington State Department of Ecology, the Washington Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan as to form and content; and

WHEREAS, final adoption of the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 To 2025 by the Grays Harbor County Board of Commissioners and the Washington State Department of Ecology is contingent upon adoption of the Plan by the participating cities in Grays Harbor County; and

WHEREAS, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025;

NOW, THEREFORE, BE IT RESOLVED the City Council of the City of Ocean Shores hereby adopts the Grays County Comprehensive Solid Waste Management Plan for Years 2020 to 2025.

PASSED AND ADOPTED by the City Council of the City of Ocean Shores, Washington, at a regular, open public meeting on this 28th day of September 2020.

Crystal L. Dingler, Mayor

ATTEST:

Sara D. Logan, City Clerk

CITY OF WESTPORT
RESOLUTION NO. 932

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WESTPORT ADOPTING THE GRAYS HARBOR COUNTY SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025.

WHEREAS, Chapter 70.95 RCW requires local governments to prepare local solid waste plans based upon state guidelines, and to update those plans on a regular basis; and

WHEREAS, the cities of Grays Harbor County have previously resolved to jointly plan with Grays Harbor County for future solid waste managements; and

WHEREAS, the cities and the county have had the opportunity to review and provide input to the updated draft Grays Harbor County Solid & Hazardous Waste Management Plan for years 2020 to 2025; and

WHEREAS, the Washington Stated Department of Ecology, the Washington Utilities and Transportation Commission, and the Washington State Department of Agriculture have reviewed and approved the draft Plan as to form and content; and

WHEREAS, final adoption of the Grays Harbor County Solid & Hazardous Waste Management Plan for years 2020 to 2025 by the Grays Harbor County Board of Commissioners and the Washington State Department of Ecology is contingent upon adoption of the Plan by the participating cities in Grays Harbor County; and

WHEREAS, it appears to be in the best public interest to adopt and implement the Grays Harbor County Solid & Hazardous Waste Management Plan for years 2020 to 2025;

NOW THEREFORE BE IT RESOLVED BY THE WESTPORT CITY COUNCIL THAT it adopts the Grays Harbor County Comprehensive Solid & Hazardous Waste Management Plan for years 2020 to 2025.

Passed by the City Council of the City of Westport at its regular meeting this 18th day of June, 2020.

Robin Bearden
Robin Bearden, Mayor

ATTEST: Margo R Tackett
Margo R Tackett, Clerk-Treasurer

Appendix F. Response Summary

Grays Harbor County submitted to the Washington State Department of Ecology the preliminary draft "Solid & Hazardous Waste Management Plan for Years 2020 To 2025" on February 14, 2020 for preliminary review.

Mr. Peter Guttchen forwarded Ecology's preliminary draft review letter to the county on May 15, 2020. This letter requested minor wording revisions and data additions to the preliminary draft that did not change the substance of the plan. The county adopted each of the requested revisions as proposed by Ecology.

Beginning on the next page is the May 15, 2020 letter that details those requested changes. Also included is the email to SWAC members asking for their final review and comments on Section 5, Waste Diversion. There were no requests for changes by SWAC members.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call (877) 833-8641

May 15, 2020

Mr. Mark Cox
Utilities & Community Development
Grays Harbor County
I 00 West Broadway; Suite 31
Montesano, Washington 98563

Dear Mr. Cox,
Ecology has completed its review of the preliminary draft of Grays Harbor County's Solid and Hazardous Waste Management Plan for Years 2020 to 2025 (Plan). The results of this review are included below.

We were impressed with the thoughtful and thorough approach you and your SWAC took to updating your Plan. We also appreciated your willingness to partner with us and to provide us sections of the Plan to review during the process. Because of this approach, all major issues and questions had already been addressed before you submitted your preliminary Plan for formal review. And, as a result, we found no deficiencies in your Plan that will be need to be addressed before it can be approved by Ecology once all the required documentation is assembled. Our comments only include recommendations to make relatively minor changes for clarity or to correct typos.

The next step is for you to review and address our comments and then assemble your final submittal packet and to send your Plan to us for review and approval. There is no deadline for you to submit your final draft Plan. However, to ensure your Plan remains current, we encourage you to assemble your final packet and submit it as soon as is feasible for you. Once we receive your packet, we will send you formal notification of receipt of your Plan and will take action to approve or disapprove it within 45 days. If we do not notify you of our decision within 45 days, your Plan will be considered approved as submitted.

Below is a list of what you should include in your final submittal packet:

- **A transmittal letter formally requesting final Plan review.**
- **An electronic version of your Plan. Please assemble all required documents into one PDF.**

These documents should include:

- ✓ **Your UTC cost assessment** – *already submitted with your preliminary draft.*
- ✓ **All SEPA documentation** – *already submitted with your preliminary draft.*
- ✓ **Copies of all interlocal agreements** – *already included with your preliminary draft.*
- ✓ **Copies of your WSDA and UTC review letters** – *already provided to you.*
- ✓ **Resolutions of adoption from all participating jurisdictions** – *We've sent you copies of these resolutions from your 2013 Plan as examples of what is required. New resolutions need to be adopted by each jurisdiction and included with your final draft Plan.*

- ✓ **A response summary indicating how you addressed Ecology's preliminary draft Plan comments** – *The simplest way to do this is to note in the comments below how each of our comments was addressed in your final draft Plan. Because most of the changes are minor, simply stating that the change was made would be adequate. And because none of the changes are required for us to approve your Plan, it is fine to note that you did not think the change was necessary or you decided to address it in a different way.*

- ✓ **Evidence that your SWAC reviewed the Waste Reduction and Recycling element of your final draft Plan before it is submitted for final review and approval by Ecology. In your plan this element is included Section 5 - Waste Diversion.** – *RCW 70.95.167(3) requires that after the waste reduction and recycling element of the Plan is approved by the local legislative authority, but before it is submitted to Ecology for approval, the SWAC must hold another meeting to review the element. This requirement can be met by sending an email to your SWAC members to ask them to review Section 5 of your Plan and including a copy of that email with your final Plan submittal.*

Please contact me if you have any questions. We look forward to receiving your final submittal packet.

Stay safe and stay well.

Sincerely,

Peter Guttchen
Statewide Lead Planner
Department of Ecology
Solid Waste Management Program

cc: Peter Lyon, Department of Ecology

GRAYS HARBOR COUNTY SOLID & HAZARDOUS WASTE MANAGEMENT PLAN FOR YEARS 2020 TO 2025

May 18, 2020 – Washington State Department of Ecology Preliminary Review Comments

Peter Guttchen – Ecology SW Planner – 360-407-6612 – pgut461@ecy.wa.gov

In completing this review, we primarily used the following references:

1. **Guidelines for Development of Local Comprehensive Solid Waste Management Plans and Revisions** https://fortress.wa.gov/ecy/publications/documents/1007005.pdf. On page 109 of this document is Appendix K: Checklist of Required Planning Elements which I have shared with you and your SWAC. I use this a guide to ensure your Plan is complete.

2. **RCW 70.95.090** that defines what's required in local Solid Waste Management Plans https://apps.leg.wa.gov/RCW/default.aspx?cite=70.95.090

3. **RCW 70.95.165(3)** which defines the composition and responsibilities for a SWAC https://app.leg.wa.gov/RCW/default.aspx?cite=70.95.165

Suggested revisions and minor edits

Section 1 – Background of the Planning Area

Page 3 - 1.2 Population

Update this section to include 2019 data – this will make this section consistent with the data in Table 1 on Page 5. Edits are noted below.

The ~~2018~~ 2019 Office of Financial Management (OFM) population estimate for Grays Harbor County was ~~73,610~~74,160, the 19th most populous county in Washington State. Between 2010 and 201~~98~~, the entire county grew by 1,363 ~~813~~ people, a growth rate of 1.87~~12~~ percent. This was the second lowest growth rate among the 39 counties during this period.

Most of the county population, 61~~.5~~ percent, resides within the incorporated cities, although the unincorporated area has the single highest population. Aberdeen, Hoquiam, and Cosmopolis alone account for 36.5~~7~~ percent of the county population.

Section 3- Waste Generation

Page 16 – Section 3.1 - Disposal Quantities and Trends

minor edits in second paragraph and below Table 9.

Grays Harbor County and LeMay Enterprise, Inc. maintain records of total tonnage of solid waste brought to the Grays Harbor County Transfer Station for export and recycling.

Over the past five years, the overall total solid waste tonnage per person has been increasing at a slightly greater pace than the annual estimated population growth rate. Recycling rates, however, have fluctuated widely but ~~has~~ have been relatively stable since 2015.

Table 1: Tons of Solid Waste Generated Per Capita, 2012-2019

	Tons Generated per Capita							
	2013	2014	2015	2016	2017	2018	2019	Average
Exported for land disposal	0.66	0.67	0.70	0.71	0.74	0.75	0.79	0.72
Collected through recycling	0.08	0.07	0.08	0.08	0.08	0.07	0.08	0.08
Total tons generated per capita	0.73	0.77	0.80	0.82	0.85	0.82	0.87	0.81

Since 2013, per capita generation of solid waste has increased by 280 pounds or 19 percent.

Page 20 – Section 3.4 - Key Trends
revise second bullet for clarity...

- ~~However, there is a growing trend in public preferences for using products with lighter or reusable packaging. There is also a change within industry to start using more sustainable, lighter packaging materials, such as coated cardboard drink containers as opposed to aluminum or glass.~~

- There is a growing shift toward the use of multi-layered packaging for products like juice and soup that combine layers of paper, plastic, and metal. This type of packaging is more environmentally friendly in some ways than the more traditional metal, glass and plastic packaging it replaced because it is lighter in weight and increases product shelf life. However, because these newer types of packaging are made of multiple materials they are, in many cases, more difficult and expensive to recycle.

Section 4 – Waste Collection and Disposal

Page 21 – last paragraph on page Unincorporated and Tribal Collection Programs section
On the Quinault Indian Reservation, the Quinault Indian Nation provides collection service for its tribal members within the villages of Taholah in Grays Harbor County and Queets in Jefferson County. ~~which the latter is in Jefferson County.~~ LeMay Enterprises, Inc. services most of the remaining part of the reservation.....

Page 22 – top of page – end of Unincorporated and Tribal Collection Programs section
The Confederated Tribes of the Chehalis Reservation relies on LeMay Enterprises, Inc. of Centralia for curbside collection service in Chehalis Village under WUTC established rates. However, solid waste and recyclables collected on the reservation by LeMay Enterprises, Inc. go to the Thurston County ~~Station.~~Waste and Recovery Center in Lacey.

Page 24 – top of page – end of Grays Harbor Transfer Station section
Waste ~~connections~~ Connections retains responsibility for the original transfer station located at 4201 Olympic Highway that closed in 2019.

Section 5 – Waste Diversion

Page 29 -Table 2: List of Designated Recyclables and Collection Method as of January 2020
Change Commingle to Commingled curbside....

Recyclable	Collection Method
Cardboard (corrugated boxes, paper towel tubes)	Commingled curbside, drop-off containers
Chipboard food and shoe boxes	Commingled curbside, drop-off containers
Glass	Drop-off containers
Magazines, phone books, brochures & catalogs	Commingled curbside, drop-off containers
Moderate risk waste	Moderate Risk Waste Facility
Newspaper and office paper	Commingled curbside, drop-off containers
Plastic #1PET and #2 HDPE	Commingled curbside, drop-off containers
Steel (tin) and aluminum cans	Commingled curbside, drop-off containers
Used oil	Drop-off containers

Page 32 - County Recycling Trends – 3rd full paragraph

Current ~~co-mingled~~ comingled recycling practices within Washington State and elsewhere do not meet this threshold. Recent estimates of recycled material collected regionally contain approximately 10 percent or more in contaminants. Recycling programs either need to reduce their contamination levels or search for new markets in other less restrictive countries. In the meantime, local recycling efforts will need increased public education as well as further subsidization. For the time being, sporadic landfilling of recyclable materials will happen whenever accumulations become too large.

Page 35 – Key Trends - 1st bullet

Glass is now costing $30 to $45 a ton to recycle. Recycling glass has become problematic due to transportation costs (weight) and contamination with other materials. Glass is being replaced with lighter-weight packaging materials and markets for glass collected for recycling are limited in the northwest. ~~because of its propensity to break and mix in color and type. However, glass does have markets if isolated by color and type.~~

GHC Solid Waste Management Plan - Final Review of Section 5

MM

Maggie McDougall <AMcDougall@co.grays-harbor.wa.us>

Reply | Reply All | Forward | ...

To 'rogers@wasteconnections.com'; 'Brian Smith'; Dan Teuteberg; 'Koehler, Christian R'; 'Delroy Cox'; 'cole_construction@hotmail.com'; 'MIKE MYERS'; 'pwd@ci.westport.wa.us'; 'Gina and Robert rawlings'

Cc 'John Kliem'; Mark Cox; Chuck Cunningham; Jeff Nelson; Rob King; Traci Bradshaw; 'Pater, David (ECY)'

Thu 1/7/2021 12:46 PM

SWMP Final Draft - Section 5.pdf
.pdf File

Dear SWAC members,

Grays Harbor County is nearing completion of the adoption process for the 2020-2025 SWMP. All participating jurisdictions have adopted resolutions and there is one remaining step to complete. This is your final review of Section 5, Waste Diversion.

The May 15, 2020 letter from the Department of Ecology that provides final instructions for submitting the SWMP to the agency states:

Evidence that your SWAC reviewed the Waste Reduction and Recycling element of your final draft Plan before it is submitted for final review and approval by Ecology. In your plan this element is included Section 5 - Waste Diversion. – *RCW 70.95.167(3) requires that after the waste reduction and recycling element of the Plan is approved by the local legislative authority, but before it is submitted to Ecology for approval, the SWAC must hold another meeting to review the element. This requirement can be met by sending an email to your SWAC members to ask them to review Section 5 of your Plan and including a copy of that email with your final Plan submittal.*

To comply with this requirement, we are asking you to review this section one last time. If you have any new comments or objections to Section 5, please send them to the Maggie McDougall (AMcDougall@co.grays-harbor.wa.us) by Wednesday, January 13, 2021. I have attached a copy of Section 5 from the SWMP final draft to facilitate your review.

If we receive any comments or objections, we will need to schedule a SWAC meeting to address them before forwarding the SWMP to the Department of Ecology for final review.

Thank you for assistance in this matter.

John M. Kliem
Creative Community Solutions, Inc.
jmkliem@comcast.net
(360) 790-6225

Maggie McDougall
Utilities Office Coordinator
Grays Harbor County
Utilities & Development
100 W. Broadway, Ste. 31
Montesano, WA 98563
Phone (360) 249-4222
Fax (360) 249-2152

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

GRAYS HARBOR COUNTY
1854

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

STATE ENVIRONMENTAL POLICY ACT

DETERMINATION OF NON-SIGNIFICANCE (DNS)
Case 2020-0179

Description of Proposal: 2020 Update of the Solid Waste & Hazardous Waste Management Plan (SWHWP) for the years 2020-2025.

Proponent: Grays Harbor County Utilities and Development Division, Attn: Mark Cox, 100 W. Broadway, Suite 31, Montesano, WA 98563.

Location of Proposal: This is a non-project action affecting solid and hazardous waste management in Grays Harbor County.

Lead Agency: Grays Harbor County.

Required Permits: The SWHWP must undergo review and approval by the Washington Department of Ecology. The Board of County Commissioners and participating municipalities will adopt the plan by resolution.

The lead agency for this proposal has determined that the proposed project does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This DNS is issued under WAC 197-11-350; Grays Harbor County will not act on this proposal for 15 days from the date below. Comments on this SEPA Determination must be submitted by: 4:30 p.m. on March 12, 2020.

Responsible Official: Jane W. Hewitt
Position/title: Principle Planner
Telephone: 360-249-4222.
Address: 100 W. Broadway Ave. #31, Montesano, WA 98563.
Date: February 27, 2020

Appeals of this determination shall be made as set forth in the laws of the State of Washington RCW 43.21(C)

Appendix H. Contamination Reduction & Outreach Plan

H.1 Introduction

The Contamination Reduction & Outreach Plan (CROP) is an appendix to the Grays Harbor County Solid Waste and Hazardous Waste Management Plan and augments Section 5.1, Recycling.

The CROP is a requirement under RCW 70A.205.045(10) that became law in 2019. This statute requires the state and the county to adopt a CROP that:

1. Includes actions for reducing contamination in recycling programs for single-family and multiple-family residences, commercial locations, and drop boxes;
2. Provides a list of key contaminants within the recycling stream;
3. Discusses the problem of how these contaminants impact the collection system;
4. Analyzes the costs and other impacts associated with contaminants in the recycling stream; and,
5. Adopts an implementation schedule and details how the county Solid Waste Program will conduct an outreach program.

The Department of Ecology prepared the Washington State Recycling Contamination Reduction and Outreach Plan in September 2020.[15] This document includes a Statewide Action Plan and a variety of resource links for reducing contamination in the recycling stream.

The organization of the Grays Harbor CROP first provides context behind the CROP and its overall approach. It concludes with a Five-Year Implementation Work Plan and Schedule.

H.2 The Grays Harbor County Recycling Stream

In Grays Harbor County, LeMay Enterprises, Inc., and Hometown Sanitation LLC operate curbside collection programs for residential and commercial customers. The current list of designated recycled materials include:

- Cardboard;
- Plastic #1 PET and #2 HDPE;
- Newspaper and office paper;

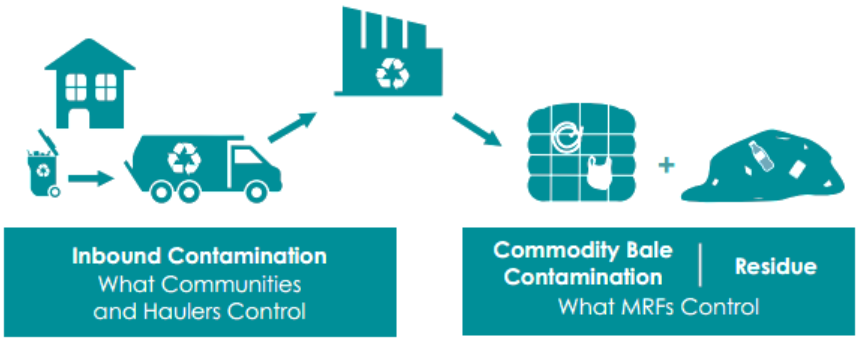
[15] Washington State Recycling Contamination Reduction Outreach Plan

- Magazines, phone books, brochures, and catalogs;
- Chipboard food and shoe boxes; and
- Steel/tin and aluminum cans.

The curbside programs co-mingle materials while most commercial accounts recycle only cardboard and office/mixed paper. Approximately 70% of the recycling stream collected in the county is from residential accounts.

In addition, both companies offer drop-box opportunities for glass at various locations in the county. There are also drop-boxes at the Grays Harbor County Transfer station for all designated recyclables.

All recycled materials collected in county accumulate at the Transfer Center operated by LeMay Enterprises, Inc., a Waste Connections subsidiary. Eventually, these materials ship either to Pioneer Recycling Services or Waste Management JMK Fibers in Tacoma. These two material recovery facilities (MRFs) sort, bale, and market materials to domestic and international processors who prepare them for reuse.



H.3 Contamination in the Recycling Stream

Recycling contamination happens when residences and businesses place materials in their recycling containers that is not on the list of accepted items. Contamination also occurs when some recyclables become too wet or dirty to process into new materials, such as plastic bags.

Interviews with Pioneer Recycling Services and JMK Fibers (May 2021) found that the most common contaminants found in the recycling stream were:

according to a recent report by were:

- Film[16], such as plastic bags;
- Tanglers, such as rope, cords, chains, and hoses;
- Food and liquids;
- Shredded paper;
- Car parts and other non-designated metals;
- Bagged garbage;
- Non-program plastics; and,
- Hypodermic needles.

The Recycling Partnership in a report published in 2019 found similar materials contaminating the recycling stream.[17]

H.4 Cost Impacts from Contaminated Recycling

The value of sorted and processed recycled materials for MRFs declines significantly with contaminants. Contaminated materials:

- Slow down the sorting and processing of materials;
- Result in costly shutdown downs;
- Damage collection, processing, and remanufacturing equipment;
- Cause serious injuries to collection and processing staff;
- Reduce the quality and market value of secondary material feedstocks; and,
- Require costly disposal at landfills.

Both Pioneer Recycling Services and JMK Fibers report their contamination rates to range from 8½ to 10 percent of the total inbound recycling stream. This is far better than the nationwide average contamination rate for MRFs at 20 percent.[18]

Part of the success with having lower contamination rates reflect investment in specialized upgrades to equipment that reduce stoppages from ubiquitous film materials. JMK Fibers also reported that they conduct periodic audits for their top ten providers to evaluate the efficacy of recycling programs. This allows public education programs to make critical adjustments to their recycling messaging.

---

[16] Plastic film is typically defined as any plastic less than 10 mil thick. Most plastic films are made from polyethylene resin and are readily recyclable if the material is clean and dry.
[17] The-Recycling-Partnership_WCCI-Report_April-2020_Final.pdf
[18] https://recyclingpartnership.org/wp-content/uploads/2020/04/The-Recycling-Partnership_WCCI-Report_April-2020_Final.pdf, page 10.

The cost recovery by MRFs for contamination management means passing these expenses down to the haulers, the county, and ultimately higher collection rates for customers.

H.5 Understanding the Reasons for Contamination

The responsibility for recycling contamination falls on many shoulders for a variety of reasons. Individuals and their decisions about what to put in their recycling containers is one aspect of the problem. At another level, the structure of a local collection and drop box program may not promote appropriate recycling habits. Finally, and on a larger scale, many manufacturers and producers create confusion for consumers by marking and using materials for packaging that is not locally recyclable yet mistakenly end up in collection bins.

Addressing the reasons for why recycling contamination persists in Grays Harbor County begins with understanding the unique local conditions that contribute to the problem. This will include assessing:

- Current contamination issues within residential, commercial, and drop-box collection programs;
- The level of "recycling awareness" in the community regarding accepted recyclables;
- How current collection methods help or hinder local "recycling awareness;"
- The general financial and environmental costs of contamination; and
- The limitations inherent in the county's Solid Waste Program and local collection services in the ability to address contamination issues.

Focusing on collecting information about these reasons and drawing key conclusions is a critical first step in developing an effective program that combats contamination in the county's recycling stream. This will comprise Step One in the CROP Work Plan.

H.6 Approaches to Public Outreach for Reducing Contamination

With the information collected in Step One, the CROP Work Plan for Step Two will entail developing approaches for public outreach appropriate for Grays Harbor County residents and businesses that addresses recycling contamination.

Currently, Grays Harbor County and its two local private haulers primarily rely on sharing information about recycling and recycling contamination through their websites. However, because of limited funding and dedicated staffing, these sites provide limited and even out-of-date information. Increased funding resources, such as through the

Local Solid Waste Financial Assistance program, will be important in increasing public outreach efforts.

Effective public outreach is about finding the "right ways" to share information with different stakeholders in the community. Stakeholders can vary by:

- Single- versus multiple-family residences;
- Type and scope of businesses;
- Age groups;
- Residents and visitors;
- Non-English speakers; and
- Preferences for communication and learning styles.

There are many established best management practices for public outreach that address contamination. Some of these practices can include:

- Moving toward uniformity in cart and container colors (or at least lids);
- Visual, easy-to-understand signage using photos and universal pictures and symbols;
- Cart-tagging and cart rejection;
- On-site assistance and outreach at drop-off sites;
- Up-to-date, and easy-to-find and access websites with clear, consistent messaging;
- Social media posts, campaigns, mailings, brochures, and other communications;
- Online apps for residents and businesses to get answers to their recycling questions;
- Community presentations, tabling, and activities at community events;
- School presentations and activities focused on "recycling right;"
- Using educational materials and campaigns to ensure recycling information is clear to all audiences; and
- Social marketing campaigns to effectively promote long-term behavior change.

Some of these practices reach out to multiple stakeholders while others target specific groups. However, whichever methods the Solid Waste Program choose to employ, keeping outreach messages simple and clear is of paramount importance.

H.7 Exploring and Making Program Changes

The final Step in the CROP Work Plan may involve evaluating current collection methods and proposing alternatives methods that are more effective at reducing long-term costs and contamination levels. Some examples include:

- Using bins or carts for specific recyclables rather than a single co-mingled cart;
- Increased frequency of collection;
- Different fee schedules for service;
- Contracting outreach services to another public or private entity; and,
- Integrating new curbside standard operating procedures in collection contracts, such as counting cart set outs, random quality checks, and tagging and tracking carts with contamination.

It will be important to thoroughly evaluate these alternatives for their efficacy in their ability to substantively reduce contamination as well as whether their ability to deliver long-term savings for consumers.

Furthermore, the county needs to stay current with MRFs regarding which materials should be on the list of designated recyclables. For example, both Pioneer Recycling Services and JMK Fibers now accept and recycle polypropylene (#5) plastics due their strong market value.

H.8 Reaching Out to Regional Partners

There may be times that addressing recycling contamination solely at a local level may not always be the best approach. Grays Harbor County should explore opportunities to join with neighboring jurisdictions and entities to find regional solutions that can deliver greater cost and program efficiencies.

Solid Waste Program staff should stay active in regional and statewide networks to cultivate opportunities that aim at:

- Developing and implementing joint public outreach methods and campaigns;
- Working collectively to create common contract provisions that benefit counties as well as haulers and MRFs;
- Advocating for product bans or restrictions at the state and national level; and
- Sharing information about best management practices and innovative efforts that have shown proven results.

H.9 CROP Work Plan Process Check

As each step of the CROP Work Plan moves forward, it is important to review the Solid Waste and Hazardous Waste Management Plan to ensure there are no inconsistencies between the two. When conflicts do arise, the planning process may need to consider necessary adjustments to either the CROP or the Solid Waste and Hazardous Waste Management Plan.

Eventually, the CROP itself also may need revisions over time. Updates to the CROP may occur during periodic SWMP revisions or during the required five-year revision process. For more information on this process, consult Sections 14.2 and 14.3 in the Solid Waste and Hazardous Waste Management Plan.

H.10 Five-Year Implementation Work Plan and Schedule

Year 2021

Task 1: The Solid Waste Program staff will update the county's website to ensure consistent messaging regarding which recyclable materials local haulers and other recyclers are collecting.

Task 2: The Solid Waste Advisory Committee (SWAC) will invite representatives from material recovery facilities (MRFs) to pinpoint local recycling contamination issues and identify priority recycling streams.[19]

Task 3: The SWAC will develop a survey tool for residential and commercial accounts that will gauge public awareness regarding recycling contamination; identify community groups, events, and resources to distribute the survey.[20]

Task 4: The county Solid Waste Program will ask Ecology's Solid Waste Management Program to begin coordinating a regional network comprised of counties, haulers, and MRFs to focus on reducing recycling contamination.

Year 2022

Task 5: The SWAC and Solid Waste Program staff will coordinate the distribution, collection, and collation of a public awareness survey.

[19] Ask MRFs to complete survey to share at meeting: https://therecyclingpartnership.app.box.com/s/bljq8dkzdf61tcatznyonomhqn6z80c5

[20] A sample resident survey is available at https://recyclingpartnership.org/wp-content/uploads/dlm_uploads/2020/04/West-Coast-Contamination-Initiative-Addendum-06.22.20.pdf beginning on page 23.

Task 6: Solid Waste Program staff and the SWAC will review and identify key conclusions from the survey results.

Task 7: The SWAC and Solid Waste Program staff, in consultation with Ecology's Solid Waste Management Program, will design and conduct a recycling audit commensurate with available funding and resources.

Year 2023

Task 8: The SWAC will assess current recycling methods considering key conclusions from the survey and recycling audit results.

Task 9: The SWAC will weigh how recycle contamination affects the county's solid waste program budget and how implementing alternative collection approaches potentially could reduce costs and contamination levels.

Task 10: The SWAC will identify and invite community stakeholders to a series of facilitated focus groups to gain insight on appropriate outreach techniques and messaging for reducing contamination in curbside and drop box recycling.

Task 11: The SWAC will work with information gleaned from community stakeholders to develop an outreach program, including identifying the resources necessary for its implementation.

Year 2024

Task 12: The SWAC will explore potential program changes (such as curbside operating procedures) and the resources necessary for reducing contamination in the county's recycling stream.[21]

Task 13: The SWAC will consider the adoption of potential performance measures that evaluate progress in reducing contamination in the recycling stream.

Task 14: The SWAC will discuss with local haulers their receptivity to integrating new curbside operating procedures into their services, including how such changes would affect contracts.

Year 2025

Task 15: Integrate the CROP into the next Solid & Hazardous Waste Management Plan update.

[21] See https://therecyclingpartnership.app.box.com/s/1ebegxj82pihlkey5na14w65qbb7jrmf

H.11 Funding for Implementation

The Grays Harbor County Solid Waste Program initially will fund implementation of the CROP with Local Solid Waste Financial Assistance grant funds. By Program Year 2023, the county likely will need additional grant funding to design and perform recycling audits. The amount of grant funding needed will not be known until the county begins the audit design process.