PRELIMINARY AGENCY REVIEW DRAFT

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update Package

Prepared for

Asotin County, Washington

January 2018

999 W. Riverside Ave Suite 500
Spokane, WA 99201

Contents

Asotin County

2017 Solid Waste Planning Package

Tab 1: Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

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Acknowledgements

Asotin County wishes to acknowledge the following people who contributed their time and effort to the publishing of this 2017 update to the *Asotin County Solid Waste and Moderate Risk Waste Management Plan*.

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Jim Jeffords

Brian Shinn

Chris Suebert

Solid Waste Advisory Committee (SWAC) Members:

Name	Company/Affiliation
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Chelsea Cannard and Brady Woodbury	Asotin County Health District
Stephen Becker	Solid Waste Supervisor
Chris Davies, P.E.	City of Lewiston, Public Works Director
Kevin Poole	City of Clarkston, Public Works Director
Larrah Charlo	Naslund Disposal
Jason Heath	Pacific Steel & Recycling
Joel Ristau, P.E.	Lewiston Business/Clarkston Resident
Mark Lawson	Clarkston Resident
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Matthew Lynch, Asotin County Engineer Tech
Monika Lawrence, City of Clarkston Mayor

SWAC Meeting Dates (in which the *Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update* was discussed):

- July 11, 2017
- September 19, 2017

Mission/Vision Statement

The mission and vision of Asotin County's Solid Waste Division is to protect public health and the environment through efficient, effective, and fiscally responsible practices while also providing stable and affordable waste management services for the community and its solid waste partners.

The County's vision is to provide waste disposal services in a manner that will preserve the environment for future generations. This mission considers the three E's of sustainability, which reconcile environmental, social equity, and economic demands within Asotin County.

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Acronyms and Abbreviations

ACHD	Asotin County Health District
ACRL	Asotin County Regional Landfill
ADC	alternative daily cover (materials)
BOCC	Board of County Commissioners
C&D	construction and demolition
CESQG	conditionally exempt small quantity generator
CFC	chlorofluorocarbon (refrigerant gas)
County	Asotin County
Ecology	Washington Department of Ecology
GMA	Growth Management Act
HWMA	Hazardous Waste Management Act
IGA	intergovernmental agreement
MRW	moderate risk waste
MSW	municipal solid waste
N/A	not applicable
NR	not recorded
PWTF	Public Works Trust Fund
RCW	Revised Code of Washington (laws)
SWAC	Solid Waste Advisory Committee
SWMP	*Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update*
WAC	Washington Administrative Code (regulations)
WCS	Waste Characterization Study
WMMFA	Washington Materials Management and Financing Authority
WUTC	Washington State Utilities and Transportation Commission

Executive Summary

Introduction

This *Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update* (referred to for brevity as the SWMP) is an update to Asotin County's original *1973 Comprehensive Solid Waste Management Plan for Asotin County* and its addendums. The last approved plan was finalized in 2010. The SWMP establishes a waste management framework that will guide the County and its solid waste partners in the years ahead. This 2017 update has been prepared pursuant to Revised Code of Washington (RCW) Chapter 70.95, *Solid Waste Management—Reduction and Recycling*, and provides data through calendar year 2016.

Goals and Objectives

The goal of this planning effort is to develop a plan that is both financially and logistically achievable for its residents, while maximizing waste diversion and recycling and environmental sustainability. In addition to the overarching goal, this plan will also incorporate the objectives of the solid waste program, which are as follows:

- Maintain public health and safety and protect the environment.
- Provide reliable and sustainable waste collection, recycling, transfer, and disposal systems for management of solid waste.
- Support the recovery of reusable and recyclable resources from the waste stream.
- Maintain the Asotin County Regional Landfill (ACRL), a Subtitle D landfill, in accordance with applicable federal, state, and local health regulations.
- Control system costs and continue to keep disposal rates stable and affordable for the communities that are served by ACRL.

These fundamental objectives drive the planning for each facet of the ACRL solid waste program—from promotion of waste reduction and recycling to planning for long-term waste management. The primary emphasis in the SWMP is to build on the program's existing infrastructure and past successes to shape the future. This approach aligns nicely with two of the recommended strategies included in the 2015 State Solid Waste and Hazardous Waste plan, "Build on what's already working, such as maximizing the use of existing infrastructure" and "Take advantage of momentum and complementary actions."

While this plan presents a framework for the future, it is not intended to be a work plan for specific policies, rate setting, programs, or capital improvements. Implementation of specific recommendations provided in the plan will be accomplished through specific planning efforts at the County and waste partner's levels, which in some cases, depends on grant funding assistance. For example, the County is frequently reviewing and revising as necessary its strategic plan for future waste management options once ACRL is closed under its current, permitted configuration. That planning effort will help shape the framework for the future waste program in the County (and its waste partners) with consideration of permitting, design, and financial implications.

Summary of Recommendations

This SWMP update has been prepared to comply with *Solid Waste Management—Reduction and Recycling* (Chapter 70.95 RCW).

The current system for waste collection, transfer, waste exportation/importation, and disposal appears to be functioning adequately and should be continued. Special waste and moderate risk waste current processes should also be continued.

Asotin County and its waste partners have implemented several beneficial methods to curb waste from entering the waste stream and ultimately entering the landfill. The County and its partners have managed to reduce waste through curbside recycling, curbside yard waste pickup, ACRL's clean wood program, and centralized drop stations for recyclables. Additional source reduction, reuse, and recycling efforts should focus on utilizing existing infrastructure and programs and should also address some of the largest components of the disposed waste stream (organics, construction materials, and paper).

The landfill user tipping fee should continue to finance the operation of the waste disposal system and should be supplemented as possible by the sale of recyclable commodities and state grants. The County should continue with routine updates of the financial model to evaluate impacts on the operations account balance, accounting for planned and unplanned expenses and revenues, in-coming tonnages, price indices (tipping and hauling fees), contract conditions with regional partner the City of Lewiston, Idaho, and any other factor that would impact the financial status and outlook for the County.

SECTION 1

Introduction

1.1 Purpose

This *Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update* (referred to for brevity as the SWMP) has been prepared pursuant to Revised Code of Washington (RCW) Chapter 70.95 – *Solid Waste Management—Reduction and Recycling*, and provides data through calendar year 2016. The solid waste management act addressed in RCW Chapter 70.95 requires local governments in the State of Washington (such as Asotin County) to develop "comprehensive" solid waste management plans with periodic updates. This updated SWMP also aligns with current solid waste management practices and state laws, including the *Solid Waste Handling Standards,* Washington Administrative Code (WAC) 173-350, and the *Criteria for Municipal Solid Waste Landfills*, WAC 173-351. Additionally, the SWMP includes direction on how to update the plan that not only satisfies the statutory requirements, but also provides an effective framework for the operation and progression of local solid waste systems.

Since issuance of the last update in 2010, the Washington Department of Ecology (Ecology) has released a number of different documents that were consulted during the preparation of this document. In February 2010, Ecology published *Guidelines for the Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions, Publication #10-07-005* (Ecology, 2010). In June 2015, Ecology published the *State Solid and Hazardous Plan, Moving Washington Beyond Waste and Toxics* (2015 Beyond Waste Plan) (Ecology, 2015). In October 2016, Ecology published the *2015-2016 Washington Statewide Waste Characterization Study*, *Publication #16-07-032* (Ecology, 2016*).*

1.2 Participating Jurisdictions

The SWMP is intended to include the communities in Asotin County (City of Asotin, City of Clarkston, and unincorporated Asotin County) and its solid waste partners (City of Pomeroy and Garfield County in Washington, and the City of Lewiston and Nez Perce County in Idaho). Asotin County is responsible for providing solid waste disposal for both the Washington and Idaho partners and presently operates the Asotin County Regional Landfill (ACRL), which is a permitted Subtitle D municipal solid waste (MSW) landfill located within the County. The County is the lead entity for preparation of the SWMP update and all participants are included in its application. Asotin County has an intergovernmental agreement (IGA) with the City of Lewiston for disposal of MSW generated by the City of Lewiston. The IGA was renewed on October 1, 2016, and will automatically renew annually on October 1, unless terminated early, for nine additional one-year terms. There are no waste disposal contracts or IGAs currently in place with the other small service areas (Garfield County, City of Lapwai, and City of Pomeroy) outside of Asotin County.

1.3 Required Contents

Ecology and the Asotin County Health District have been involved with the development and review of this SWMP and it contains the required elements as defined in RCW 70.95.090, County and City Comprehensive Solid Waste Management Plans – Contents. Table 1-1 provides a summary of the required elements and their location in this SWMP.

Table 1-1. Required Plan Elements

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Required SWMP Elements (per RCS 70.95.090)	Location In SWMP
A detailed inventory and description of all existing solid waste handling facilities including an inventory of any deficiencies in meeting current solid waste handling needs.	Chapter 5: Solid Waste Transfer and Waste Importation/Export and Chapter 6: Disposal
The estimated long-range needs for solid waste handling facilities projected twenty years into the future.	Section 10.4: Financial Assurance
A program for the orderly development of solid waste handling facilities in a manner consistent with the plans for the entire county which shall: • Meet the minimum functional standards for solid waste handling adopted by the department and all laws and regulations relating to air and water pollution, fire prevention, flood control, and protection of public health; • Take into account the comprehensive land use plan of each jurisdiction; • Contain a 6-year construction and capital acquisition program for solid waste handling facilities; and • Contain a plan for financing both capital costs and operational expenditures of the proposed solid waste management system.	Chapter 6: Disposal and Section 10.4: Financial Assurance
A program for surveillance and control.	Section 10.3: Enforcement
A current inventory and description of solid waste collection needs and operations within each respective jurisdiction which shall include: • Any franchise for solid waste collection granted by the utilities and transportation commission in the respective jurisdictions including the name of the holder of the franchise and the address of his or her place of business and the area covered by the franchise; • Any city solid waste operation within the county and the boundaries of such operation; • The population density of each area serviced by a city operation or by a franchised operation within the respective jurisdictions; • The projected solid waste collection needs for the respective jurisdictions for the next 6 years.	Chapter 2: The Planning Area, Chapter 3: Waste Characterization and Generators, and Chapter 4: Solid Waste Collection
A comprehensive waste reduction and recycling element that, in accordance with the priorities established in RCW 70.95.010, provides programs that (a) reduce the amount of waste generated, (b) provide incentives and mechanisms for source separation, and (c) establish recycling opportunities for the source separated waste.	Chapter 7: Special Wastes, Chapter 8: Moderate Risk Waste Management Plan, and Chapter 9: Waste Reduction, Recycling, and Organics Management
Other information the county or city submitting the plan determines is necessary.	Chapter 3: Waste Characterization and Generators
An assessment of the plan's impact on the costs of solid waste collection. The assessment shall be prepared in conformance with guidelines established by the utilities and transportation commission. The commission shall cooperate with the Washington state association of counties and the association of Washington cities in establishing such guidelines.	Chapter 10: Administration, Enforcement, and Financial Assurance
A review of potential areas that meet the criteria as outlined in RCW 70.95.165.	Chapter 6: Disposal

Upon Ecology's final formal review of this plan, the SWMP will become approved either upon notification of approval, after addressing Ecology comments and resubmitting, or within 45 days if no formal notice is obtained.

1.4 Previous Solid Waste Plans and Relationship to Other Plans

On April 16, 1973, Asotin County adopted the *Comprehensive Solid Waste Management Plan for Asotin County*. An addendum was added to that plan on July 7, 1975, titled *Planning the Development of an Economical and Feasible Solid Waste System for Asotin County, Washington, Nez Perce County, Idaho Metropolitan Area*. The addendum was issued by the governments participating at that time. The following are the recommendations from that addendum and the extent to which the recommendations were implemented:

1. Main Entrance Platform scale (100-ton capacity)—implemented.
2. Incinerator—not implemented. Too expensive for the volumes generated.
3. Compost plant—not implemented. Insufficient area for volumes and too expensive.
4. Reclamation site—not implemented. Unrealistic for the volume versus expense.
5. Equipment shed—not implemented. Too expensive.

In February 1987, an updated SWMP was prepared by a group of graduate students at Washington State University but was not adopted by Asotin County at the time. Later versions of the SWMP updates were prepared, which incorporated many of the management and processing alternatives recommended in the 1987 SWMP.

Two chapter amendments (Chapter 3—Waste Reduction, and Chapter 4—Recycling and Composting) were added to the 1973 SWMP as a result of the Washington State *Solid Waste Management—Reduction and Recycling Act* (Chapter 70.95 RCW), which requires counties and cities to revise their comprehensive solid waste management plans to include a waste reduction and recycling element. This Act requires setting priorities for solid waste management in order to provide cost-effective solid waste management, to conserve resources and to reduce the need for landfilling waste. The Chapter 3 amendment provides discussion and evaluation of options for waste reduction programs to reduce waste disposal costs and their associated environmental impacts, improve economic performance and public image, and extend the landfill life. The Chapter 4 amendment outlines the existing recycling and composting programs in the County, and provides recommendations for supplementing these efforts in order to increase the diversion of reusable or recyclable materials from the MSW stream.

The planning document *Asotin County-Nez Perce County Moderate Risk Waste Management Plan* (Asotin County Public Works, April 1991) focuses on moderate risk waste (MRW), also known as household hazardous waste. These are wastes generated by households or businesses in quantities too small to be regulated by Ecology or the U.S. Environmental Protection Agency[1]. The *Asotin County-Nez Perce County Moderate Risk Waste Management Plan* was incorporated into the 2010 SWMP.

The 2010 SWMP update also incorporated the two chapter amendments (Chapter 3—Waste Reduction, and Chapter 4—Recycling and Composting). That update was prepared with consideration of other planning documents that have been developed and implemented in the County. Documents considered included:

[1] The ACRL MRW facility is permitted to collect hazardous wastes from residential households and commercial/businesses that meet the definition of conditionally except small quantity generators (CESQGs), which are exempt from the hazardous waste regulations.

- *Basic Policy Plan for Asotin County* - this plan established land classification and resource development; as well as policies that define the position, attitude, and long-term perspective of the County.
- The County adopted a Comprehensive Plan in August 1999, as mandated by the Growth Management Act (GMA) of Washington, which incorporates present and future development regulations, as well as other elements mandated by the GMA.

The 2010 update also reviewed information contained in the County's solid waste permit reissuance application for ACRL in 2007. In that application, the County provided an updated operations plan for the landfill that describes how ACRL is currently operated, and what environmental protection measures are in place for stormwater runoff control, leachate management, groundwater monitoring, and a gas control.

In this 2017 update, the chapters on recycling, reuse, and organics management were combined into one chapter. In addition, the implications of The County's latest long-term disposal plan (including updated information on ACRL's financial forecast) were included. Planning documents that were considered as part of this update included:

- *Permit to Construct Application letter for Cell D at the ACRL, November 20, 2012 and Permit to Construct Application Supplement, January 24, 2013* – containing design and alternative design evaluation details for construction of Cell D.
- The County's 2013 (revised in 2014) solid waste permit reissuance application for ACRL, which included an updated operations plan and post-closure plan.
- *Long-Term Solid Waste Disposal Strategic Plan – Phase 2: Preliminary Design of Preferred Alternative, May 2014* – this plan presents the preliminary design of the preferred alternative that is being proposed as the second phase of the strategic planning project. The preferred option consists of developing a new contiguous cell (Cell E) east of existing Cell D, realigning 6th Avenue, and relocating the landfill entrance and support facilities to the north side of old 6th Avenue (see Section 6.2 for additional discussion).
- *Asotin County Shoreline Master Plan, adopted February 2017*

County plans can be requested from the Asotin County Building and Planning department (call 509-243-2020).

1.5 Solid Waste Advisory Committee

After the Solid Waste Advisory Committee (SWAC) and the Asotin County Board of County Commissioners (BOCC) adopt the updated SWMP, it will be submitted to the other participants for adoption, as appropriate. SWAC members have worked with their respective communities and interest groups during the draft preparations of this SWMP update with the understanding that a resolution of adoption will need to be signed at the end of this SWMP update process.

The *Solid Waste Management – Reduction and Recycling Act* (Chapter 70.95.165 RCW) specifies the formation, roles, and membership of a SWAC. The SWAC provides a forum for the concerns and interests of constituents of the planning area to be heard and included in the planning process. The SWAC reviews and actively participates in preparation of the SWMP in an advisory capacity, and facilitates the adoption of the SWMP by jurisdictions and acceptance by the public. The SWAC may also review and comment upon proposed rules, policies, or ordinances prior to their adoption. The County has a SWAC made up of nine members, who are appointed by the county legislative authority. The SWAC represents a diverse balance of County officials and representatives from the incorporated municipalities, business, and industry, including the recycling industry and citizens at-large. The current membership is listed on the

Acknowledgment page of at the beginning of this SWMP. The committee meets quarterly or when a particular need arises.

1.6 Plan Goals and Objectives

The policies developed within the County for solid waste management should reflect the overall intentions of the SWMP. The objective of this SWMP is to develop and implement an environmentally sound, flexible, and cost-effective solid waste management system. Such a system will be consistent with the prudent management and constraints of physical, environmental, and financial resources as well as all applicable federal and state regulations (RCW 70.95 and WAC 173-351) and local health district (Asotin County Health District [ACHD]) policies. Also, the SWMP should ensure the availability of long-term solid waste disposal management for both Asotin County and the solid waste partners (see Section 2.2). Asotin County is currently evaluating long-term waste management alternatives and, as part of this, will be seeking long-term agreements with its stakeholders (communities of Asotin County and its waste partner City of Lewiston).

1.7 Process of Updating the Plan

This SWMP will be maintained in a "current condition" and reviewed and revised periodically in accordance with RCW 70.95.110. Upon each review and subsequent update, the planning horizon for the plan will be extended to capture long-range (20-year) needs for ACRL, and revised construction and capital acquisition programs for 6 years into the future. SWAC will have an opportunity to review and comment on the plan. SWAC comments will be considered and incorporated as appropriate. Each revised solid waste management plan will be submitted to Ecology.

1.8 Organization of the Plan

This SWMP is organized to guide the reader through the solid waste planning process. Note that all figures discussed within the body of the plan are compiled and provided at the end of the plan. Chapter 1 presents an overview of the planning process at the area government's level and assistance from the SWAC, an overview of the planning history in the area, the process of updating the plan, policies, and objectives. Chapter 2 provides the reader with background information on the general planning area and participants that are covered in this plan. Chapter 3 includes information on the current waste stream composition as well as waste quantity projections and 2015-2016 State-wide waste characterization results. Chapters 4 through 10 discuss the various facets of the solid waste program and are generally organized under each topic starting with a discussion of the existing conditions/practices, followed by the needs and opportunities, evaluation of options, and recommendation and implementation of the options.

Chapters 4 through 12 are titled as follows:

- Chapter 4—Solid Waste Collection
- Chapter 5—Solid Waste Transfer and Waste Importation/Export
- Chapter 6—Disposal
- Chapter 7—Special Wastes
- Chapter 8—Moderate Risk Waste Management Plan
- Chapter 9—Waste Reduction, Recycling, and Organics Management
- Chapter 10—Administration, Enforcement, and Financial Assurance
- Chapter 11—Summary of Recommendations and Implementation Schedule
- Chapter 12—References

SECTION 2

The Planning Area

2.1 Description of the Planning Area – General Area and Participants

The SWMP is intended to include the communities in Asotin County (City of Asotin, City of Clarkston, and unincorporated Asotin County) and its solid waste partners (City of Pomeroy and Garfield County in Washington, and the City of Lewiston and Nez Perce County in Idaho). Figure 2-1 shows the location of Asotin County in relation to its solid waste planning partners. As shown on Figure 2-1, Asotin County is located in the southeastern corner of Washington State with the Snake River forming the County's eastern boundary with Idaho and Nez Perce County located just on the other side of the river. The County is further bounded by Garfield County to the west and northwest, Whitman County to the north, and by Oregon to the south. Table 2-1 provides a summary of county size and population. Out of the three counties represented in this SWMP, Asotin County is the smallest and encompasses approximately 636 square miles of land but is also the second most populous of the group (U.S. Census Bureau, 2016a). As of 2012, farms make up 64 percent of total county acreage (U.S. Department of Agriculture, 2012.

Asotin County is 90 percent private land. Only 2 percent of the County's area is devoted to urban areas, such as the City of Clarkston and the City of Asotin. Five percent of the County (approximately 50 square miles) is owned by the federal government and is operated by the National Forest Service as part of the Umatilla National Forest. The remaining 3 percent of the land in the County is operated by the Bureau of Land Management, the Department of Natural Resources, and the U.S. Fish and Wildlife (U.S. Census Bureau, 2010).

Table 2-1. Relative Populations of Counties Represented in this Plan
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Location	Land Area (square miles)	Population (based on 2010 Census)	People per Square Mile
Asotin County	636.21	21,623	34
Garfield County	710.69	2,266	3.2
Nez Perce County	848.09	39,265	46.3

Source: U.S. Census Bureau, 2010.

Asotin County (the County) is responsible for providing solid waste disposal for both the Washington and Idaho partners and presently operates ACRL, which is a permitted Subtitle D MSW landfill located within the County. The landfill is located on the south section of County-owned Section 36 (one square mile) of Township 11 North Range 45 East (Figure 2-2).

SECTION 3

Waste Characterization and Generators

3.1 Waste Quantity Projections

The majority of MSW generated within Asotin and Nez Perce counties is disposed of at ACRL. Asotin County has a low population density of only 34 residents per square mile. According to the State of Washington, Asotin County is designated as "rural" (State of Washington Office of Financial Management, 2008). There are approximately 500 people in rural Asotin County that are not served by collection services or drop boxes. Most of the waste generated by these people is believed to be self-hauled to the landfill. There are also family farms that handle their own solid waste on-site in accordance with the health code standards. Other wastes disposed of on private property are primarily logging and wood processing wastes, which are produced in this region in large quantities.

The largest municipality served by ACRL is the neighboring City of Lewiston, Idaho, with an estimated population of 31,894 (U.S. Census Bureau, 2016b). Lewiston is not only the largest municipality served by the landfill but also the largest in Nez Perce County, Idaho. In comparison, according to the U.S. Census Bureau, the population of the entire Nez Perce County is 39,265 (U.S. Census Bureau, 2016b). Being the largest city in the county, Lewiston also produces the greatest quantity of waste. The city is served by curbside MSW collection by a private hauler as well as separate curbside yard waste and recycling collection. After collection, all of the MSW is taken to the City of Lewiston Transfer Station and then hauled to ACRL for disposal. The yard waste is collected and taken to the Clearwater Composting facility, located at 3956 Industrial Way, Lewiston, Idaho.

In 2016, the amount of MSW transported from the City of Lewiston Transfer Station to the landfill was approximately 26,450 tons. This number includes transfer haul from the transfer station and resident self-haul directly to the landfill (which likely includes self-haul from the City of Lapwai, since they are not permitted to take MSW to the transfer station). In 2016, the MSW generated by the City of Lewiston/ Nez County constituted nearly 50 percent of the total 52,834 tons of waste disposed of at the landfill for that year. Table 3-1 presents a summary of the participants and the quantity of waste each contributed over the last 7 years (2010 through 2016).

In addition to solid waste from Asotin and Nez Perce counties, a much smaller amount of MSW from Whitman County is disposed of at ACRL. Naslund Disposal, the franchised hauler for Asotin County, also services the Port of Wilma, located just across the county border in Whitman County, as part of its franchise service area. Because the landfill is a much closer disposal site for the Port of Wilma than the Whitman County Transfer Station (where it is long-hauled to Waste Management's Columbia Ridge Landfill in Arlington, Oregon), Naslund prefers to haul waste collected from the Port of Wilma to ACRL. Naslund estimates that the quantity of waste collected from the Port is no more than 20 tons per year, and is accounted for in the Unincorporated Asotin County category in Table 3-1.

In 1991, the Cities of Lewiston and Clarkston contracted with EKO Compost, Inc., a composting facility in Lewiston (adjacent to the City of Lewiston Transfer Station), where residents and the cities could dispose of yard waste. That contract ended June 30, 2014, and starting in February 24, 2014, Clearwater Composting began providing this service. To encourage use of these new recycling and composting programs, Clarkston has implemented a variable-can rate. Lewiston also operates a variable-can rate. Yard waste is collected curbside in Lewiston and Clarkston, and is no longer accepted at the City of Lewiston Transfer Station. Recycling is still accepted at the Transfer Station.

Table 3-1. Waste Disposal Quantities for Participants (2010–2016) (in tons)
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Year	City of Asotin[a]	Asotin County[b]	City of Clarkston	Lewiston/Nez Perce County[c]	Unincorporated Asotin County[a]	Pomeroy/ Garfield County[a]	Clearwater County Solid Waste	Total
2010	1,323	7,245	5,754	27,698	5,458	1,280	0	**48,758**
2011	1,057	6,563	5,883	27,711	5,902	1,271	0	**48,388**
2012	1,083	6,599	5,657	28,111	5,643	1,205	2,096	**50,394**
2013	1,048	6,568	5,559	25,963	6,145	1,174	4,413	**50,870**
2014	1,059	6,119	5,682	25,943	6,023	1,141	4,579	**50,546**
2015	1,098	6,767	6,136	26,110	5,589	1,113	4,620	**51,434**
2016	1,149	7,428	6,230	26,450	5,749	1,053	4,775	**52,834**

[a] Waste is picked up and hauled by Naslund Disposal (also includes Naslund Disposal pickup from Lapwai City).

[b] Majority of this waste category is contributed by private self-haulers. A small quantity is from commercial waste (such as construction contractors).

[c] Lewiston/Nez Perce Co. tonnages are a total of transfer haul from the transfer station and resident self-haul directly to the landfill. This likely includes self-haul from City of Lapwai since they are not permitted to take MSW to the transfer station.

The quantity of waste disposed of at ACRL is a function of the contributing population and the rate of recycling/diversion. The average annual increase of waste disposed of at ACRL has been approximately 1.7 percent for the last 6 years (2010 through 2016). However, during this period the incoming waste quantity spiked with an increase of 4.1 percent; during a period of higher economic performance. For the last 20 years (1996 to 2015), the annual waste growth rates have varied depending on the health of the local market and economy; the overall growth rate has averaged approximately 1.7 percent annually since 1995. It is assumed that annual trends of high and low growths will continue into the future but that the overall average growth rate will be on the order of 2 percent per year. Therefore, a growth rate of 2 percent is assumed for long-term future projections of the MSW disposed of at ACRL from 2015 and on, as discussed in this section.

Current waste projections indicate that the existing landfill Cells A-D will continue to be the primary cells in use until the first phase of the new Cell E is constructed. Cell E is scheduled to be designed and permitted in 2034 and constructed in phases starting in 2035, to have the first stage online in 2036 as waste disposal transfers from Cells A-D into new Cell E. Initial permitting for Cell E for expansion approval within State, County, or local requirements may occur in advance of 2034. Table 3-2 shows the projected Asotin and Nez Perce County solid waste quantities for 2017 to 2036.

Table 3-2. Asotin-Nez Perce Counties Projected Solid Waste Quantities (2017–2036)
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Years	Est. Total Annual Waste (tons)	Est. Total Annual Volume (cubic yard)[a]	Est. Cumulative Volume (cubic yard)[b,c]
2017	53,891	93,723	2,000,454
2018	54,969	95,598	2,096,052
2019	56,068	97,510	2,193,562
2020	57,190	99,460	2,293,022
2021	58,333	93,333	2,386,355
2022	59,500	95,200	2,481,555
2023	60,690	97,104	2,578,659
2024	61,904	99,046	2,677,705

Table 3-2. Asotin-Nez Perce Counties Projected Solid Waste Quantities (2017–2036)
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Years	Est. Total Annual Waste (tons)	Est. Total Annual Volume (cubic yard)[a]	Est. Cumulative Volume (cubic yard)[b,c]
2025	63,142	101,027	2,778,733
2026	64,405	103,048	2,881,780
2027	65,693	105,109	2,986,889
2028	67,007	107,211	3,094,099
2029	68,347	109,355	3,203,454
2030	69,714	111,542	3,314,996
2031	71,108	113,773	3,428,769
2032	72,530	116,048	3,544,817
2033	73,981	118,369	3,663,187
2034	75,460	120,737	3,783,923
2035	76,970	123,151	3,907,075
2036	78,509	125,614	4,032,689

[a] Total 2010-2015 waste tonnage is based on measured waste disposal quantities at the landfill. The subsequent years assume a 2 percent annual growth rate.

[b] The volume of waste assumes an in-place (effective) refuse density of 1,150 pounds per cubic yard through 2020 and 1,250 pounds per cubic yard from 2021 to 2036. This assumes that density will be increasing over the years as the waste decomposes and compresses.

[c] These projected waste quantities include construction and demolition (C&D) wastes; C&D wastes are now intermingled with MSW and co-disposed of at ACRL.

3.2 Waste Stream Composition

Prior to 2004, C&D wastes were placed in a separate unlined cell at ACRL. However, the current Solid Waste Handling Standards (WAC 173-350) govern the landfill requirements for inert and demolition wastes, and now require that materials when disposed be placed within a lined landfill cell. The County elected not to construct a separate lined disposal facility for C&D waste and as such is now co-disposing the waste in the lined MSW cell. Starting in November 2009, however, the County received grant funding to implement a wood waste diversion program (to collect and reuse clean organic yard and wood waste). That program is now completely funded by the landfill tipping fee and is available to all valley residents and customers. All of the wood waste collected through this program is taken to Clearwater Paper and used in their incinerator to generate power for their facility.

In addition, C&D is accepted at the Valley Waste Disposal site on Lewiston Hill. The landfill is permitted to accept demolition, construction, and other waste. Public may use the site Monday through Saturday.

Table 3-3 presents a summary of the waste composition for 2010 through 2016 collected and disposed of at ACRL. Refer to Table 8-2 for types and quantities of MRW collected and managed by Asotin County.

Table 3-3. Waste Stream Composition (2010–2016)

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Waste Type/Commodity	Total Collected 2010 (tons)	Total Collected 2011 (tons)	Total Collected 2012 (tons)	Total Collected 2013 (tons)	Total Collected 2014 (tons)	Total Collected 2015 (tons)	Total Collected 2016 (tons)
Disposables:							
Asbestos, nonfriable[a]	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported
Tires[a]	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported
Municipal Solid Waste[b]	48,758	48,388	50,394	50,870	50,546	51,434	52,834
Total	**48,758.35**	**48,388.31**	**50,393.69**	**50,869.64**	**50,546.01**	**51,433.57**	**52,834.32**
Recyclables[c]:							
Newspaper (and magazines)	264.64	270.95	256.53	261.86	252.78	264.48	210.3
Corrugate Paper (Cardboard)	219.38	230.46	205.1	208.1	219.02	241.34	256.02
Plastics	29.44	30.87	29.6	11.21	Not Collected	Not Collected	Not Collected
UBCs and Tin	33.22	34.79	32.27	19.64	4.93	5.48	0.39
Organic Yard and Wood Wastes	146.51	Not Reported	723.72[e]	1,151.78	1,815.05	2,142.08	2,810.98
White Goods (Appliances)	66.32	50.00	31.61	38.7	31.65	62.39	69.64
E-Wastes (Consumer Electronic Products and misc.)	45.38	50.94	48.9	68.26	75.24	41.54	63.42
Scrap Iron	Not collected	Not collected	Not collected	Not collected	Not collected	Not collected	Not collected
Total	**804.89**	**668.01**	**1,327.73**	**1,759.55**	**2,398.67**	**2,757.31**	**3,410.75**

Table 3-3. Waste Stream Composition (2010–2016)

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Waste Type/Commodity	Total Collected 2010 (tons)	Total Collected 2011 (tons)	Total Collected 2012 (tons)	Total Collected 2013 (tons)	Total Collected 2014 (tons)	Total Collected 2015 (tons)	Total Collected 2016 (tons)
Diverted Waste[d]:							
Used Oil	14.57	16.39	33.13	9.31	11.53	9.22	13.58
Other Moderate Risk Waste	40.96	27.08	26.64	24.61	25.22	22.64	22.49
Total	**55.53**	**43.47**	**59.78**	**33.92**	**36.76**	**31.87**	**36.07**
GRAND TOTAL	**860.42**	**711.48**	**51,781.20**	**52,663.11**	**52,981.44**	**54,222.75**	**56,281.14**

[a] Not reported for 2015.

[b] This includes incidentals such as animal carcasses and is all MSW delivered to ACRL.

[c] Recyclables totals in this table are from Asotin County only; does not include City of Clarkston totals.

[d] Diverted waste totals are from all facility users and are not limited to a certain jurisdiction.

[e] Data for May-December.

3.3 Comparison of Asotin County to State Study

3.3.1 Summary of State Study

In a recent 2015-2016 Waste Characterization Study (WCS) prepared for Ecology, the State of Washington was divided into six (6) Waste Generation Areas (WGAs). The six WGAs identified in the study were: Central, East, Northwest, Puget Sound, Southwest, and West. Asotin County (along with 11 other counties) was included in the East WGA. Out of the six WGAs, the East WGA disposed of the second most tonnage (second to Puget Sound).

Disposed waste composition results for the East WGA are based off sampling that was done for 2 of the counties in the WGA (Spokane and Franklin). Franklin County has a population density of approximately 40 people per square mile; compared to Asotin County's 34 people per square mile.

In the East WGA, the single largest component of the disposed waste stream was organics at 32.3 percent; followed by construction materials at 11 percent, wood wastes at 10 percent, and paper products at 9.5 percent (see Table 3-4 for a summary). Of the 32.3 percent organics, the largest components were "Yard and Garden Waste-Leaves & Grass" at 9.7 percent, "Inedible Food-Vegetative" at 7.4 percent, "Edible Food-Vegetative" at 5.7 percent, and "Animal Manure" at 4 percent. All other WGAs had organics as the largest component with wood waste in the top three for all.

Table 3-4. Summary of Disposed Material Composition Results for the East WGA from State WCS
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Type	Percentage
Organics	32.3%
Construction Materials	11%
Wood Wastes	10%
Paper Products	9.5%
Paper Packaging	8.1%
Plastic Packaging	7.8%
Consumer Products	7.4%
Metal	4.5%
Plastic Products	4.3%
Residues	2.9%
Glass	1.7%
Hazardous and Special Waste	0.6%

Source: Ecology, 2016.

3.3.2 Comparison of State and Local Waste Composition Results

Asotin County does not have a County-specific WCS. However, it does keep records of the types of materials that are recycled/reused (see Table 3-3). As can be seen in Table 3-3, Asotin County already

has recycling/reuse programs for three of the top four types of material found in the State WCS (Organics, Wood Waste, and Paper Products). This is validation that the County has focused on providing the right types of recycling/reuse services. However, without having more information on the composition of the materials that are disposed of at ACRL, the success of these programs is not known. Additional discussion on future opportunities to learn more about Asotin County's waste stream disposal is discussed in Chapter 9.

SECTION 4

Solid Waste Collection

This chapter and the next seven chapters (Chapters 5 through 11) of this plan are generally organized into four sections as follows:

- Existing Conditions
- Needs and Opportunities
- Evaluation of the Options
- Recommendations and Implementation

Solid waste collection is discussed generally below in regard to the various types of solid waste collection that are available in the region. This includes curbside programs and self-haul recycling or yard waste drop off centers or facilities. Since recycling and organics management are discussed in further detail in another section, discussion of those programs in this chapter is somewhat limited.

4.1 Collection—City of Clarkston

4.1.1 Existing Conditions

The City of Clarkston operates a municipal collection service within the city limits that includes household garbage, yard waste and site-specific recycling bins. Residential solid waste collection is done Monday through Friday using two 25-cubic-yard rear-loading trucks. Commercial collection is performed on the same days for one-half of the day using the same trucks.

Commercial collection at larger facilities using onsite compaction systems are served by the City of Clarkston with a 22-foot-long rail hoist truck. The same truck is used for the collection and disposal of demolition waste using 10- and 20-cubic-yard containers. These containers can be rented from the City by the week or the month.

The City of Clarkston has a residential yard waste collection program that operates year-round. Yard waste is picked up from residents' curbside weekly on the designated garbage pickup day. This curbside service is available to all Clarkston residents at no extra cost. The residential yard waste is accomplished with a semiautomated system. The City provides 96-gallon rolling containers that work with the system to allow the protection of the crew and the ability to lift the heavy yard waste. Residential yard waste is collected with one or two trucks per route, depending on the time of year. Clarkston residents also are allowed to self-haul yard waste to the Clearwater Composting facility at no additional charge. Additionally, the City of Clarkston maintains an active recycling program and is in the process of considering additional opportunities to increase diversion. Three recycling drop box receptacles are conveniently located around the city for residents to drop off their recyclables. Additional recyclables are accepted at Pacific Steel and Recycling in North Lewiston.

For information on collection rates and container rental fees, contact:

City of Clarkston, Sanitation Department
830 5th Street
Clarkston, WA 99403
(509) 758-5541
website: www.clarkston-wa.com/

4.1.2 Needs and Opportunities

The City of Clarkston does not have a formal projection of future waste volumes; however, the average annual growth rate from 2010 through 2015 was approximately 1.2 percent[1]. The growth rate, however, hit a peak growth rate of 8 percent in 2015. The City of Clarkston expects the residential demand to remain relatively constant with a slight increase in commercial accounts. Future development plans within the city include continued expansion of the port area. As the population density in the city increases, the need for curbside recycling should continue to be evaluated. At the time this plan was written, the City of Clarkston was working on evaluating some potential changes to their recycling system. The results of that evaluation should be factored into make any system changes. If the City decides to implement a curbside recycling program, the ease of curbside versus drop box recycling will encourage recycling rates to increase in the city and divert more waste from the landfill.

4.1.3 Evaluation of the Options

Participation in existing recycling and yard waste composting programs provides a way for a household to use fewer garbage containers, and therefore enjoy a lower fee on the variable-can rate schedule. Overall revenues from the variable-can rates, however, must still cover the full costs of collection and disposal services, including the net costs of providing drop box collection for recyclables. Drop box locations currently only accept limited recyclables.

4.1.4 Recommendations and Implementation

The opportunities to expand recycling in the Clarkston area are limited by the lack of local markets for recyclables and the cost for transport and processing recyclables from the Clarkston area. Until Clarkston has more definitive plans for their future recycling program, they should continue operating and promoting the satellite recyclables drop-off facilities and yard waste collection program to reduce the amount of waste disposed of at the landfill. The City may want to consider options for expanding the list of commodities collected as well as offering additional drop-off locations. Additionally, as the population density grows in the city, the need for curbside recycling should continue to be evaluated to help encourage recycling.

4.2 Collection—City of Asotin

4.2.1 Existing Conditions

The City of Asotin is served by Carroll-Naslund Disposal Service, Inc., a private local operation commonly known as Naslund Disposal. The residential pickup is at curbside every Thursday, and customers are billed per can on a quarterly basis. Commercial customers are billed on a rental rate for the size of dumpster plus a per trip pickup charge, and include the town, which has two dumpsters in the park.

The rate schedule for disposal services includes an extra charge per can, above a single can. This cost helps to encourage some waste reduction and recycling in order to reduce the quarterly garbage bill.

For information on collection rates, contact:

Carroll-Naslund Disposal Service, Inc.
PO Box 418
Lewiston, Idaho 83501
(509) 758-5755
Website: www.naslunddisposalservice.com

[1] These rates are based on the annual disposal tonnages documented in Table 3-1.

The City of Asotin has a drop box receptacle (provided by the County) at the Courthouse Annex Building to collect recyclables as well as the others located throughout the county. Additional recyclables are accepted at Pacific Steel and Recycling in North Lewiston.

For information on collection rates and container rental fees, contact:

City of Asotin
Public Works Department
121 Cleveland Street
Asotin, Washington 99402
(509) 243-4411
website: http://cityofasotin.org/

4.2.2 Needs and Opportunities

Similar to Clarkston, the City of Asotin expects its demand for collection to remain relatively constant (although the average growth for 2010 to 2015 was slightly higher at 1.8 percent). There are centrally-located containers for drop-off of recyclable materials (only newsprint, magazines, catalogs, phone books, and cardboard are currently collected) at the Courthouse Annex in the city and two others in addition to the landfill within the County. The County may want to consider options for expanding the list of commodities collected as well as offering additional drop-off locations. There are currently no plans for initiation of curbside recycling services, although this service could potentially be implemented in conjunction with the nearby Lewiston program and any future Clarkston programs.

4.2.3 Evaluation of the Options

The current centrally-located drop-off center provides containers (Newsprint, magazines, catalogs, phone books, and cardboard) for limited kinds of recyclables. However, the range of options for types of recyclables collected is market dependent and is appropriate for a town the size of Asotin. This service is provided and managed by Asotin County and is funded through the landfill tipping fee.

The logistics of adding a curbside recycling program in the City of Asotin in conjunction with any future Clarkston program are complex and would need to be further evaluated later, once Clarkston has more definitive plans. Currently, Naslund Disposal has the franchise for collection in the City of Asotin. Any changes to the system would have to factor in how that could be done with Franchise haulers and how system changes would impact those involved.

4.2.4 Recommendations and Implementation

The opportunities to expand recycling in the Asotin area are limited by the lack of local markets for recyclables and the cost for transport and processing recyclables from the Asotin area.

The City of Asotin should continue to evaluate the need for both curbside recycling and yard waste pickup as the population density grows in the city. These programs could be interfaced with other nearby communities as an alliance (such as the City of Clarkston) to help justify the need for these programs on the basis of financial payback among other reasons.

Continued operation of the recycling drop station at the Courthouse Annex and the other nearby locations within Asotin County is recommended. Monitoring of recycle commodities and size of the drop boxes should continue, to optimize the existing program to the extent possible.

4.3 Collection—Unincorporated Asotin County/City of Pomeroy and Garfield County/Port of Wilma in Whitman County

4.3.1 Existing Conditions

A portion of unincorporated Asotin County, City of Pomeroy and Garfield County are also served by Naslund Disposal. Naslund's franchise territory is shown on Figure 4-1. Naslund Disposal has a permit with the Washington State Utilities and Transportation Commission (WUTC) that includes Asotin County (but not Clarkston). In addition to the City of Asotin, Naslund serves the majority of businesses in Clarkston Heights and approximately three-quarters of the County residents outside of, and adjacent to, Clarkston. Customers use dumpsters or one of the 96-gallon two-wheeled carts available to residents in the area.

The Port of Wilma in Whitman County also is serviced by Naslund Disposal. Fewer than 20 tons of solid waste per year is collected in containers at the Port of Wilma and disposed of at ACRL.

For information on collection rates, contact:

Carroll-Naslund Disposal Service, Inc.
PO Box 418
Lewiston, Idaho 83501
(509) 758-5755
Website: www.naslunddisposalservice.com

Asotin County residents who take their garbage directly to the landfill are charged on the basis of weight as part of an equitable system of tipping fees.

A unique situation exists at the Rogersburg area (also known as Hellers Bar) located at the mouth of the Grande Ronde River, and along the 25-mile stretch of Snake River shoreline between Asotin and Rogersburg. Rogersburg is a popular launching and take-out point for boaters using the Hells Canyon National Recreation Area. A sign is posted advising users to haul and dispose of their own trash. This does not always occur.

Along the Snake River shoreline between Asotin and Rogersburg are many popular beaches and informal camp sites. No litter barrels or dumpsters are provided at these sites. Signs have been posted to discourage illegal trash dumping and encourage users to pack their waste out. The Asotin County Litter Crew and the Youth Corps from Ecology perform summer trash clean-up along the shoreline in this area. These programs are funded by grants from Ecology. Several years ago, the Game Department installed trash collection dumpsters along this shoreline. However, the dumpsters were abused and, as a result of insufficient funding, the dumpsters were found to be impractical and were removed.

Unincorporated Asotin County also has three drop box receptacles, conveniently located around the County to collect recyclables (in addition to the site at the courthouse annex in the City of Asotin).

For information, contact:

Asotin County Regional Landfill
2901 6th Avenue, Clarkston, WA 99403
(509) 758-9230
email: ACRL@clarkston.com
website: www.co.asotin.wa.us/public_works_landfill.htm

4.3.2 Needs and Opportunities

The residents of southern and western Asotin County continue to have a need for some type of regular waste disposal service. Uncontrolled dumping may not appear to be a pressing issue, but it can present a real hazard to public health and safety, besides being unsightly. There were several well-established illegal dump sites at Grouse Flats and Anatone. Most long-term illegal dumping, however, has been eliminated through increased enforcement by ACHD. Although these sites have been cleaned up, no refuse or recycling bins and regular collection services have been provided at these sites to help prevent future dumping.

4.3.3 Evaluation of the Options

Several approaches could be taken to help discourage illegal dumping. An increased emphasis on prosecution could be made but would be expensive and of doubtful success. The official policy of Asotin County, like other recreational areas, is “Pack In, Pack Out.” That is, individuals who use these recreational facilities are required to be responsible for the hauling of their own waste out of the sites. Dumpsters or litter barrels might assist the County in enforcing this policy. However, residents themselves will be required to be diligent about collection of their own waste.

4.3.4 Recommendations and Implementation

As per the previous plan, it is recommended that the County enforce any applicable litter prevention laws. However, due to lack of resources, this has not been a priority and will likely remain low priority for the Sheriff.

4.4 Collection—City of Lewiston

4.4.1 Existing Conditions

The City of Lewiston contracts with a private waste disposal firm, Sunshine Disposal & Recycling (also known as Sanitary Disposal, Inc.). Residential and commercial collections are both performed by Sunshine Disposal & Recycling. Sunshine Disposal & Recycling uses semiautomated and fully-automated trucks for residential and commercial mobile cart service and semiautomated for other commercial services.

Residential and commercial customers eligible for mobile cart service may choose from a 32-gallon, 64-gallon, or 96-gallon cart service. The contracted service provider owns the mobile cart. However, residential and commercial customers may purchase and use their own cart so long as it is compatible with service provider’s equipment. Residential customers must contact the City (www.cityoflewiston.org/index.aspx?nid=307) to start or stop mobile cart service. Commercial customers must also contact the City to inquire if they are eligible for mobile cart service. Residential and commercial customers will be delivered a mobile cart upon receipt of request to start mobile cart service. The Lewiston City Council sets the rates for mobile carts and all sanitation services. The residential rates for mobile carts include solid waste and yard waste collection and curbside recycling. Commercial rates for mobile carts do not include yard waste collection or recycling.

The City of Lewiston also operates a residential yard waste collection program. This curbside service is available to all Lewiston residents at no extra cost. The collection is performed weekly on the same day as garbage collection. There is no limit on the number of approved containers that residents may put out for collection. Collection is year-round. From the last full calendar week in March through November, yard waste is collected one time per week on the garbage collection day. From December up to the last full calendar week in March, yard waste is collected once per month on the scheduled

garbage collection day. Plastic bag use is limited to November through March. Reusable disposal cans, with 20-32 gallons of capacity, are used year-round, as are 50-gallon paper bags.

Lewiston residents also are allowed to self-haul yard waste to the Clearwater Composting facility at no additional fee. Additionally, the City of Lewiston maintains an active recycling program. Biweekly curbside recycling service is available to all mobile cart users and some commercial can and dumpster users, depending upon location. Residents who subscribe to this voluntary program receive one 96-gallon blue bin to be used for recyclables. Eight commodities are collected in the program, including newspaper, cardboard, mixed waste paper, magazines/catalogs, aluminum cans, and steel cans. The program has about a 60 percent participation rate from the Lewiston community. Recycling drop off also is provided at the City of Lewiston Transfer Station (and the ACRL entrance facility) for those residents that self-haul their waste.

For information on collection rates and container rental fees, contact:

City of Lewiston, Sanitation Department
P.O. Box 617
Lewiston, ID 83501
(208) 746-1316
website: www.cityoflewiston.org/index.aspx?nid=307

4.4.2 Needs and Opportunities

Lewiston has a curbside recycling program that does include some multifamily, in addition to the curbside yard waste collection. The City continues to look for ways to improve their recycling services.

4.4.3 Evaluation of the Options

The curbside recycling and yard waste collection programs should be kept in service and encouraged to be used.

4.4.4 Recommendations and Implementation

The City of Lewiston should continue to encourage recycling and yard waste collection among the residents. Asotin County and the City of Lewiston should collaborate in the development of a comprehensive plan for encouraging participation in the recycling and yard waste collection programs. In the long term, weekly recycling pickup should be considered as more households begin to participate and recycle more materials. Additionally, single-stream recycling should also be considered to make recycling more convenient.

4.5 Collection—Nez Perce County

4.5.1 Existing Conditions

In Nez Perce County, as in Asotin County, solid waste collection is accomplished through contracts with the private sector. Latah Sanitation, Inc. and Sunshine Disposal & Recycling, Inc. both provide solid waste collection, depending on property location. Sunshine Disposal & Recycling also serves Nez Perce County residents through a system of County-owned dumpsters. The entire County is served by this system with the exception of the towns of Lapwai and Culdesac. Officials in these communities have contracted with haulers who take the waste to various neighboring landfills for disposal. Lapwai utilizes ACRL for disposal. Culdesac takes its refuse to a landfill in Grangeville (Idaho County). Additionally, Latah Disposal operates waste collection and recycling services (in coordination with Moscow Recycling) at sites in Sweet Water, Peck, and Myrtle Beach. Recycling in Nez Perce County also is offered at two drop box sites, in addition to the transfer station.

With ACRL serving three counties, a large part of the region lies a considerable distance from either the landfill or the City of Lewiston transfer station. Some Nez Perce County residents live 30 miles from the transfer station, and some Nez Perce County citizens reside more than 40 miles from the landfill. In the city impact areas of Nez Perce County, residents enjoy the convenience of garbage pickup at more than 10,000 driveways. This is a huge increase from the 1,500 that was reported in the 2010 SWMP. Other more remote areas in the county are served by bulky-waste site pickups, at either Sweetwater, Idaho on US-95 next to the grain elevators, or at Junction of US-12 and Cottonwood Creek. These facilities are open every other week, alternating between the two locations. Waste is picked up by Latah Sanitation and transported to the City of Lewiston Transfer Station. Recyclables also are collected at these bulky-waste disposal sites but not brought to the City of Lewiston Transfer Station.

For information, contact:

Latah Sanitation
P.O. Box 8036
Moscow, Idaho 83843
(208) 882-5724
http://www.moscowrecycling.com/58-2/latah-sanitation-inc

Sunshine Disposal & Recycling
PO Box 13369
Spokane Valley, Washington 99213
https://sunshinedisposal.com/about-us/

4.5.2 Needs and Opportunities

When lines at the transfer station are long, or whenever it is convenient, some city residents are known to deposit their refuse in the nearest available County-owned dumpster. Enforcement of the County-only use of these dumpsters is difficult and, therefore, almost nonexistent.

Nez Perce County currently owns the dumpsters. If costs of bin and site maintenance are substantial, there may be a cost advantage to the County if the dumpsters were privately owned. In that case, maintenance of the dumpsters would become the responsibility of the waste collector and maintenance of the sites could be transferred over as well.

There is a possibility that the communities of Lapwai and Culdesac could eventually be included in the collection system for waste disposal at ACRL. Approximately 1,400 residents reside in these two communities.

4.5.3 Evaluation of the Options

The County could step up enforcement efforts if use of County-owned dumpsters by city residents is perceived as a serious problem. This would likely expend resources without much reduction in illegal usage. Nez Perce County must determine what level of enforcement makes economic sense.

Private ownership and maintenance of the dumpsters might result in reduced cost to the County, particularly in a competitive situation. Cost reductions would likely result because the same crew emptying the dumpster could pick up litter and perform minor maintenance. The current situation requires the County to assign personnel to travel the same routes as the collection vehicles in order to service the dumpster sites.

There is no apparent advantage to the County of including Lapwai and Culdesac in the County system. Inclusion of these two towns would increase the amount of waste landfilled in Asotin County and utilize a small portion of its valuable capacity, which would otherwise be available to current users.

4.5.4 Recommendations and Implementation

Nez Perce County may wish to consider a cost study regarding private versus public ownership of the dumpsters and responsibility for site maintenance. This should be done at the convenience of the County, depending on the perceived need and potential cost savings.

SECTION 5

Solid Waste Transfer and Waste Importation/ Export

5.1 Solid Waste Transport

5.1.1 Existing Conditions

Transfer of wastes may be defined as waste collection at a central location and transfer from both transfer stations and drop boxes. In this SWMP, drop boxes are discussed in the previous section on collection. This section focuses on transfer stations. Transfer stations generally receive waste from public users or commercial collection vehicles, and then consolidate the wastes in large transfer trailers for haul to a landfill or another type of waste management facility.

One transfer station within the region transfers waste to ACRL. The City of Lewiston Transfer Station, which opened in 2001, serves the City of Lewiston and those residents in the Nez Perce County solid waste collection system. The transfer station is open daily (except Tuesdays) from 8:00 a.m. to 4:30 p.m.; Tuesday it is opened from 8:30 to 4:40 p.m. The transfer station is operated by the City of Lewiston. Residents can dispose of refuse at the transfer station in addition to recycling, at no additional charge. The facility is located at 560 Downriver Road. The transfer station facility also serves as a central collection point for the commercial haulers that collect garbage in the Lewiston/Nez Perce County solid waste collection system before it is consolidated and transferred to ACRL for disposal[1].

Recyclable materials also are collected at the transfer station. Certain household hazardous waste materials, such as used oil, latex paints, used antifreeze, and household and automobile batteries, are also collected at the facility, and are then transferred to the MRW facility at ACRL or collected directly by a certified waste hauler. The costs of operation of the transfer station are shared between the City of Lewiston and Nez Perce County, based on proportionate population. It is determined by cost sharing with Nez Perce County. No transfer stations are located in Asotin County.

5.1.2 Needs and Opportunities

There is presently no need or opportunity for a transfer station in Asotin County. The population density, haul distance, and waste loads at this time do not currently substantiate the need. Long-term plans include the development of a transfer station at the existing ACRL to facilitate future waste haul and dispose to other facilities once landfilling in the existing and future Cell E is completed.

The City of Lewiston Transfer Station does not have near-term plans for operational changes.

5.1.3 Evaluation of the Options

None required.

5.1.4 Recommendations and Implementation

It is recommended that the City of Lewiston continue to perform recycling operations at the transfer station, and continue to publicize satellite recycling and yard waste composting throughout Nez Perce

[1] Asotin County holds a service contract (expiring 2027 with a 10-year optional extension) with Lewiston for transferring waste from the transfer station to ACRL and disposing of the waste at the landfill.

County. Lewiston should also ensure that the transfer station provide the necessary capacity to receive and handle projected future solid waste quantities, and also comply with solid waste handling facility standards for the State of Idaho.

5.2 Waste Importation/Exportation

5.2.1 Existing Conditions

The transfer of waste from Lewiston/Nez Perce County to ACRL, although across the state line, involves only a short haul distance. The current practice of drop box pickup from more distant areas of Nez Perce County and (the assumed) implementation of drop box pickup from distant areas in south Asotin County might be considered long haul in a sense, but is more appropriately looked at in terms of normal waste collection and centralization pickup from less densely populated areas. Rural drop boxes and their role in collection activities are further discussed in Chapter 9.

No waste is exported out of either county, except for the small town of Culdesac that sends their waste to other Idaho counties for disposal. The choice of transporting wastes to other Idaho counties for this town rather than to the City of Lewiston transfer station in Nez Perce County is primarily determined by shorter haul distances and lower costs when using other available waste collection programs.

The City of Pomeroy and surrounding areas of Garfield County import their solid waste into Asotin County. They are served by Naslund Disposal, who collects approximately 1,000 tons of waste from the area per year. A small quantity of solid waste generated in Whitman County is imported into Asotin County. The franchise area of Naslund Disposal extends from Asotin County into Whitman County to include service to the Port of Wilma. Because the Whitman County Transfer Station is approximately 40 miles away from the Port, Naslund hauls the waste collected at the Port to nearby ACRL, which is only a few miles away. The quantity of waste from the Port is estimated to be no more than 20 tons per year.

5.2.2 Needs and Opportunities

The current collection and disposal practices that have evolved in the Asotin County region are the result of landfill availability, transfer and import/export costs, and tipping fees within the region. These may be viewed as market forces that will continue to shape haul practices in the region. A number of changes in local market forces, increased tipping fees due to substantial necessary upgrading of remaining landfills, and other potential changes, could affect waste disposal and import of more waste to ACRL. Changes that would lead to major export of wastes from the region are less likely to occur.

It is the view of most people involved in solid waste planning in the region that ACRL will remain open for many more years to come and that waste will continue to flow to the landfill from Lewiston and Nez Perce County[1].

Potential waste export options for the Asotin County region, in the event of a premature closure of the landfill, include long-haul transport options by road, rail, or barge to one of three large regional landfills, Columbia Ridge Landfill located near Arlington, Oregon, Roosevelt Regional Landfill in Klickitat County in south-central Washington, and Finley Buttes Landfill in Morrow County, Oregon (near Boardman, Oregon). However, it is expected that the cost of transport to, and disposal at any of these landfills will make waste export an expensive option by comparison.

[1] Asotin County's contract with Lewiston (and the other Nez Perce County participants) was recently renewed in 2016 to provide services through 2027.

5.2.3 Evaluation of the Options

There is no identified need for the current participants to change any major aspect of current transport and disposal operations or to consider long-haul disposal options.

Waste export would be more costly (likely on the order of $80 to $100 per ton or more), which includes tipping fee, transportation, and capitalization of the necessary waste receiving, loading, and transferring facilities. The cost of fuel is rising and is expected to continue in the future. This would not be a viable economic option for the County so long as the existing landfill is available for disposal.

If wastes from Lewiston and the other Nez Perce County participants were to be landfilled elsewhere, other than ACRL, the financial impact to the landfill could result in part-time operations of ACRL or the possible need to take refuse from other local communities.

5.2.4 Recommendations and Implementation

It is recommended that waste export not be considered as a regional disposal alternative unless changes occur that would preclude continued use of the existing landfill. The County should reevaluate waste export options in conjunction with other disposal alternatives, in the event that system changes occur that would seriously reduce use or service life of the landfill.

SECTION 6

Disposal

6.1 Existing Facilities and Practices

ACRL is the only permitted MSW landfill actively in operation in the Asotin County and Nez Perce County area. The landfill is located approximately 3 miles southwest of Clarkston and is adjacent to 6th Avenue, near the intersection with Evans Road (Figure 2-2).

The landfill is located in Section 36 of Township 11 North Range 45 East. The County purchased all of Section 36 from the Department of Natural Resources. Prior to this land acquisition, the landfill site was leased from the Department.

The 126.5-acre landfill site is bounded by farmland (wheat) to the north and west, and rural residential to the south and east. The landfill facility is comprised of the old closed landfill on the west side and the new modern active landfill on the east. The area currently permitted for waste fill in the new landfill area (Cells A-D) is approximately 30 acres. Future waste disposal is planned for a new landfill cell to be permitted in the future (Cell E) located east of existing Cells A-D. Access to the landfill is via an entrance road off of 6th Avenue. A site plan of the landfill is shown on Figure 6-1.

6.1.1 Facilities

The entire landfill facility is fenced. In addition to the landfill, the site has a MRW facility, organics wood waste area, and a recycling area. The site is opened from 8:00 a.m. to 4:00 p.m. Monday through Saturday. Since the last update to this SWMP (February 2011), the landfill has had a number of capital improvements including development of the Cell D lateral modern expansion cell and addition of a decant facility.

6.1.2 Equipment

Equipment located permanently at the landfill includes the following:

- 2004 Chevy half-ton pickup
- 1996 Ford three quarter-ton pickup
- 2004 Ford half-ton pickup
- 2007 Ford three quarter--ton pickup
- 2001 Ford three quarter-ton pickup
- 2010 International multi-lift truck
- 1999 International multi-lift truck
- Hyster 50 fork lift
- 2013 CAT 930k loader
- 2008 AlJon 500 compactor
- 2014 CAT 826 compactor
- 2004 D6R CAT crawler
- 2001 Cat 623-G elevating scraper
- 2001 1240 Massey Ferguson tractor
- 2005 CAT Water wagon

6.1.3 Utilities

Water, electricity, sewer, natural gas, and telephone services are provided at the landfill. Broadband wireless internet is also available at the landfill. Asotin County Fire District No. 1 provides fire protection service at the landfill.

6.1.4 Nuisance Control and Health Measures

Windblown dust is an occasional nuisance at the landfill during the summer. Sprinkling with the water wagon is the primary method of control. A commercial dust-suppressant is used on roadways. Vectors, flies, and birds have not been a problem. Noise is not a problem because of the relatively great distance to the nearest residences.

6.1.5 Environmental Controls

There are several environmental controls in place within the active landfill area (Cells A-D). These landfill areas are lined with a composite liner to collect and transmit leachate to a leachate pump station, where it is discharged to the sanitary sewer. Landfill gas also is actively collected from both new landfill areas and the old landfill, which is located west of Cell A. Horizontal gas collectors are positioned within the confines of the new landfill area waste profile, whereby blowers extract landfill gas and route it to the flare station to be thermally oxidized. Rainwater is segregated from leachate by use of interim cover soils. Stormwater runoff from the old landfill area and areas of the new landfill that are filled above the rim are collected and routed into the dry creek drainage area.

Routine groundwater monitoring began at the landfill site in 1997 and continues in accordance with the requirements of WAC 173-351.

In coordination with Ecology, groundwater remediation for the closed landfill occurred per Independent Remedial Action Chapter 173-340-515, WAC (via operation of the vapor extraction system and routine vapor and performance groundwater monitoring).

The landfill site is operating under the 1995 air permit, but the County is in the process of an update to support cell expansion and vapor extraction for closed landfill system.

6.1.6 Landfill Operations

The landfill uses the waste-fill lift method of operation. Public and commercial traffic is separated from transfer trucks hauling waste from the City of Lewiston Transfer Station. General public dump their waste in roll-off dumpster bins in the entrance area of the facility after passing over the scales (refer to Figure 6-1). Public haulers and commercial traffic are kept separated from one another for dumping.

ACRL is operated in accordance with the *2013 Operations Plan* (Chapter 3 of the permitting document package) and the Operations Permit. The plan is currently being updated, to reflect current operational practices. The new plan will be submitted to Ecology and ACHD for their reference and approval as part of permit renewals. The plan covers waste disposal operations, maintenance, personnel, general procedures, record keeping, environmental controls and monitoring, and safety. The 2013 (revised 2014) *Closure and Post-Closure Plan* (Chapter 6 of the permitting document package) also is being updated for the upcoming permit renewals.

6.1.7 Volume Reduction

ACRL employs typical waste compaction practices for landfills. These practices include using of a large trash compactor making several passes over the waste, limiting daily cover to a minimum to meet cover requirements, and controlling lift thickness. Additionally, MRW products, recyclables, and clean wood wastes are collected at the landfill entrance to divert these types of waste from the landfill. Other types of volume reduction technologies exist such as use of water addition, alternative daily covers (ADCs) to

limit the amount of nonwaste materials taking up airspace, and waste shredding and baling. Waste shredding and bailing technologies, however, tend to be relatively expensive in terms of equipment investment, maintenance, and labor. Often times, just employing good waste compaction at the working face with use of an ADC is the most efficient and cost effective means to achieve volume reduction in a landfill.

6.1.8 Waste Diversion/Recycling

The County maintains an active recycling, wood waste, E-Cycle, and MRW collection facility at the ACRL entrance. Customers are able to deposit their recyclables and MRW materials in the appropriate bins and drop-offs and dispose of certain wood waste free of charge. There is, however, no present yard (green) waste collection or recycling/composting at the landfill other than for clean woody debris that is recycled through the wood waste program. Those residents that do not live in Clarkston or Lewiston (where yard waste is picked up curbside) must self-haul their yard waste to Clearwater Compost for a fee if they choose to recycle/compost. Otherwise, yard waste is co-mingled with garbage and disposed of at the landfill.

6.2 Needs and Opportunities

ACRL is the only permitted site for disposal of MSW in the Asotin County and Nez Perce County region. While waste reduction/diversion and recycling programs reduce the volume of the waste stream, they do not eliminate the need for landfills. In-place compaction is necessary to achieve cost-effective disposal of MSW in the landfill.

There is a national trend toward stricter siting and design criteria for landfills as they have had a history of causing environmental problems such as contamination of groundwater and surface water resources. On the state level, WAC 173-351, *Criteria for Municipal Solid Waste Landfills* contains specific criteria for the siting of any new or expanded landfill facilities. These regulations require the use of available and reasonable technology in the planning, development, and final closure of solid waste facilities.

Current waste projections indicate that the existing landfill Cells A-D will continue to be the primary cells in use until the first phase of the new Cell E is constructed. Cell E is scheduled to be designed and permitted (taking into account any new State Siting Requirements) in 2034 and constructed in phases starting in 2035, to have the first stage online in 2036 as waste disposal transfers from Cells A-D into new Cell E. Initial permitting for Cell E for expansion approval within State, County, or local requirements may occur in advance of 2034.

The following five phases of development are planned to fully implement the future solid waste disposal option (see Figure 6-2) at ACRL:

1. Phase 1 – Develop Cell E1
2. Phase 2 – New Landfill Entrance/Support Facilities and 6th Avenue Realignment
3. Phase 3 – Develop Cell E2
4. Phase 4 – Develop Waste Transfer Building
5. Phase 5 – Final Closure of all Landfill Cells (and Post-Closure Care)

The landfill currently uses in-place compaction of MSW to achieve an average effective density of approximately 1,100 pounds per cubic yard. Although soil cover is readily available at the ACRL site, the use of an ADC material (such as, spray-on slurries) could be considered in coming years to help reduce the amount of landfill space taken up by soil covers, thus increasing the in-place effective density of the waste. As additional waste is placed, older waste will continue to consolidate and compress, as well as degrade biologically. As such, long term waste densities are projected to increase to for the landfill and effective unit weights are incrementally stepped up for waste volume forecast projections.

Asotin County should continue to evaluate the need for a yard waste collection (other than clean woody debris that are currently collected and chipped) at the landfill entrance. Currently, areas in the County outside of Clarkston have no means to recycle/compost yard waste other than self-haul to the Clearwater Compost facility and pay a disposal fee.

6.3 Evaluation of the Options

Asotin County has been using the ACRL site for disposal of MSW since the early 1970s. Based on current growth and recycling projections, and with the additions of Cell D and Cell E, ACRL in its current configuration is estimated to be in operation until 2058.

Waste baling and shredding technologies tend to be more reasonable when there is a lack of available landfill capacity. Shredding could provide somewhat higher in-place densities, but it also would require significant capital and maintenance expenditures. Baling also would have high start-up and operational costs and could provide even higher in-place densities than shredding. The cost of site preparation, baler, bale handling, and operating costs typically exceed in-place compaction of MSW. With adequate landfill capacity and good in-place waste compaction, neither shredding nor baling appear to be viable, volume-reducing techniques for ACRL.

Additionally, the need to use ADCs may not be realized until the cost of airspace rises. The current practice of applying daily soil cover, in accordance with the Operations Plan, is the most cost-effective means of covering the refuse in terms of operating costs. In the future as airspace becomes more valuable, the County should continue to think about alternative ways to cover the waste. In the interim, another option for the County to consider would be to peel off the daily cover material each morning and fill directly on top of the previously day's placed waste. Some of the cover soil would be lost as the soil fills the void space of the refuse, but the majority could be captured. This would require more operational effort (and cost), but in the long run could save on the order of up to 10 to 15 percent (by volume) of airspace. This alternative, however, could cause more odor and vector attractions (flies, birds) and would need to be weighed against the cost savings.

The County also should consider installing a yard waste (to expand the existing clean wood waste program) collection bin or stockpile area at the landfill entrance to encourage customers to divert these wastes from the landfill, pending funding. The County may also consider composting yard waste at ACRL, but should carefully evaluate this option weighing the costs and disadvantages against any advantages or money-making opportunities. Additional discussion of composting at the landfill is presented in Chapter 9.

6.4 Recommendations and Implementation

The County should continue to own and manage the landfill in accordance with federal, state, and local health department regulations. In order to satisfy the requirements of WAC 173 351, various environmental protection techniques are being performed at the landfill. These include groundwater monitoring, landfill gas control, leachate management, and operations that control vectors and provide for higher levels of safety for workers, the public, and environment. These systems need to continue to be operated in an optimal manner. The County should continue evaluating ADC options to help save airspace.

In addition to focusing on the disposal function of the landfill (which is the primary operation), ACRL should continue to implement the supplementary programs such as recycling, E-Cycle collection, yard and wood waste drop-off/recycling, and household hazardous waste collection that are subsidized with the tipping fees. Each of these programs is further described in subsequent chapters.

SECTION 7

Special Wastes

Some wastes generated in the region such as used tires, refrigeration units/chlorofluorocarbons (CFCs), electronics, biohazardous wastes (medical wastes), and grit material from nearby wastewater treatment plants are dealt with separately from the general MSW waste stream, either because of their impact on the system or because their nature creates additional problems. MRWs also fit into this category but are addressed separately in Chapter 8. Tires, refrigeration units, and white goods require additional handling at the landfill. These items are not only expensive to handle, but in some cases, occupy a greater amount of landfill space. Asotin County will continue to work with the SWAC to assess the methods and costs of handling these special wastes. Proper management of these special wastes supports the following priorities from the statewide 2015 Beyond Waste Plan (Ecology, 2015):

1. Move upstream by increasing focus on manufacturing and use, not just end-of-life issues
2. Reduce toxic threats in products and industrial processes.

Specific special waste types are discussed further below.

7.1 Tires

7.1.1 Existing Conditions

Littering, fire hazards, and problems with mosquitoes and other vermin are associated with improper disposal of tires. Compaction of tires in the landfill also presents some complications that the County would rather not deal with. Fortunately, there are local alternatives for tire management already in place. These exist in the form of Tire Take-Back programs.

To discourage tire disposal at ACRL, the County has implemented a higher tipping fee for tire disposal as compared to other MSW waste materials. This elevated tipping fee has been in place for several years. Since implemented, the landfill has not received a lot of tires and increased illegal dumping has not been observed. This is largely a result of having existing disposal/recycling options (tire take-back programs).

Most of the tires sold in Asotin County come from larger retailers that participate in some form of tire take-back program. For example, both Les Schwab and Perfection take tires back for their tire customers. Tires bought from the Les Schwab are taken back for free. Tires purchased elsewhere are taken for a fee ($3 for car tires and $6 for truck tires). Les Schwab transports these tires to a variety of different sites/reuse options, including grinders for high-school tracks, burning for a nearby cement plant, and “various” recycle centers. Perfection takes back both their own and other used tires at a flat rate of $5 per tire (regardless of size or brand). Their used tires get containerized and are transported to regional recycling facilities. These types of programs are excellent examples of how product stewardship programs can better manage hard-to-handle products.

Because of the magnitude of the tire management need, Washington State has passed a variety of legislation to address this area of concern. In 2005 the State passed House Bill 2085 to create a Waste Tire Removal Account (similar to the program that ended in 1994) that is funded by a $1 per replacement tire fee for all tires sold in Washington. In 2009, SB 5976 was passed to transfer revenue from this program to the Department of Transportation (every other year) starting in 2011. The Waste Tire Removal account is used for cleanup of unauthorized piles, as well as working on solutions for prevention, and improved product stewardship (Ecology, 2016).

In addition, RCW 70.95.545, requires, “The department of Ecology, in conjunction with the appropriate private sector stakeholder, shall track and report annually to the legislature the total increase or

reduction of tire recycling or reuse rates in the state for each calendar year and for the cumulative calendar years from June 13, 2002." The 2012 report, which was the most recent report (at the time this plan was written), shows these trends from 2002 to 2010. Disposal trends have increased and decreased during this timeframe, the 2010 disposal quantities (23,275) are slightly greater than the 2002 (21,273). Recycled tires have also increased and decreased. The 2010 quantities (26,775) for recycled tires is less than the 2002 quantities (27,102). The trends in reused tires (retreaded and baled) and tires used for fuel have shown an overall increase (from 1,170 reused tires in 2002 to 10,834 in 2010 and from 2,817 tires used for fuel in 2002 to 18,121 in 2010).

7.1.2 Needs and Opportunities

Tires in the landfill neither compact well nor stay buried, but tend to float to the surface, causing handling problems. Disposal alternatives include: reuse, recycling, and use as fuel. Reuse includes retreaded tires and tire bales (used in place of fill materials on construction projects). Recycling involves grinding and remolding into other products/purposes such as groundcover and running tracks or cut/punched/ stamped into products like mat, shoe soles, and more. While the ground rubber market has shown the most growth in recent years, there are other factors such as unknown health impacts that are under evaluation and may ultimately impact markets (the U.S. Environmental Protection Agency is currently evaluating such factors). Owing to their high heating value, tires can be burned/used as an alternative to other fuel types. In Washington, this is currently done in only one cement kiln.

Ecology and the Washington State Recycling Association as well as national nonprofits (like the Product Stewardship Institute) continue to look into new product stewardship possibilities.

Use of existing reuse and recycling opportunities can be encouraged by use and promotion of take-back programs such as Les Schwab and Perfection Tire.

Another option includes tire shredding and use of the material for cover or perforated drainage materials (for example, at the landfill). Bioreactor landfills, for example, that require a large number of leachate and landfill gas control lines have used shredded tires in place of drain rock material. This alternative has not yet been proven and still has several concerns with strength and biological fouling to name a few.

7.1.3 Evaluation of the Options

ACRL does not receive enough tires to make purchasing a tire shredder or using the shreds feasible. There are existing alternatives to disposal, such as the take-back programs offered by Perfection and Les Schwab. Utilizing these existing programs provides the best opportunity for reuse or recycling of tires. There is only one facility in Washington that utilizes tire-derived fuel. Stringent air quality standards in Washington State make tire incineration costly, primarily because the equipment needed is expensive. Shipping tires to neighboring jurisdictions with less stringent air quality standards is not a cost-effective option. An additional problem with incineration is that the ash may be classified as a dangerous waste.

7.1.4 Recommendations and Implementation

The County should continue to use a high tipping fee for tires to discourage disposal at ACRL. In addition, information about the local take-back programs should be included on the ACRL website and other future program information.

7.2 Refrigeration Units/Chlorofluorocarbons

7.2.1 Existing Conditions

The *1990 Amendments to the Clean Air Act* established programs to regulate the use and disposal of substances, including CFCs, which are harmful to the ozone layer. The prohibition on releasing of refrigerants into the atmosphere went into effect on July 1, 1992. Landfills that accept air conditioners, freezers, or refrigerators (any refrigeration unit) must recover all CFCs before disposal (or recycling). The landfilling of any refrigeration unit with refrigerants still in the system is considered an illegal release and is punishable by law.

Refrigeration units are accepted at the landfill. The refrigerants can be recovered and recycled by ACRL certified refrigerant removal technicians. Solid waste haulers collect refrigeration units, subsequently separated for processing at the landfill. An ACRL operator hauls all refrigerants and appliances to a local recycler, Pacific Steel.

7.2.2 Needs and Opportunities

No needs or opportunities exist in addition to the current practice.

7.2.3 Evaluation of the Options

CFCs are extracted and recovered. Bottles of recovered CFCs are sent to a recycler who reclaims the CFCs.

7.2.4 Recommendations and Implementation

The County should continue to process refrigeration units that contain CFCs, or direct the public to use the services of a refrigeration service center.

7.3 Electronics

7.3.1 Existing Conditions

Many electronics, especially TVs and computers, contain toxic materials such as lead, cadmium, and mercury. Reuse and proper recycling keeps these toxic chemicals out of our landfills and incinerators and recovers valuable resources. The E-Cycle Washington program is an extended producer responsibility program paid for by electronics manufacturers. This program provides responsible recycling for unwanted consumer electronic products such as TVs, computer monitors, desktop computers, laptop computers, tablets, e-readers, and portable DVD players. These types of products are referred to by the state as covered electronic products. As of January 1, 2009 (RCW 70.95N), manufacturers in Washington are required to provide recycling services for this equipment at no cost to households, small businesses, charities, schools, and small governments in Washington State. Many other electronic products (such as cell phones and electronic games) can also be recycled. Some collectors who participate in the E-Cycle Washington program will recycle other electronic items, but may charge a fee. ACRL has an E-Cycle drop-off location that is operated by a state contracted vendor. It is located west of the Household Hazardous Waste Facility and has been in operation since the inception of the E-Cycle Washington program. This location accepts CPUs (towers, laptops, computer monitors, and televisions) from Washington residents and Washington businesses only. The ACRL E-Cycle collection site does not accept peripherals or accessories. Additional information regarding locations to recycle these type of materials can be found by visiting http://1800recycle.wa.gov or calling 1-800-RECYCLE.

Peripheral items such as keyboards, printers, toner cartridges, and cell phones are accepted at various retailers (for example, Best Buy, Staples, and RadioShack) for no charge; however, it is recommended to call ahead to verify what they are currently accepting. This is not part of the Washington E-Cycle program.

Electronic equipment collected through this program will be disassembled into separate materials including glass, plastic, metal, and toxic chemicals. All processing is done according to the "*preferred performance standards*" established by Ecology.

This program is required under a Washington State law (Chapter 70.95N RCW) and has been in operation since January 2009. The law is an example of *Producer Responsibility,* where the company that makes a product is responsible for minimizing the product's environmental impact throughout all stages of the products' life cycle, including end of life management. The law requires that manufacturers set up a recycling program, but gives them flexibility to figure out how best to do so. The Washington Materials Management and Financing Authority (WMMFA) is the organization that sets up and runs the recycling program on behalf of the 200 member manufacturers that sell their computers and TVs in Washington State. The WMMFA negotiates with collection sites throughout the state to provide recycling services. Collection sites are required, at a minimum, in every county and every city in the state with a population of 10,000 or more, including Asotin County.

For more information on this program, users are encouraged to visit Ecology's website (www.ecy.wa.gov/programs/swfa/eproductrecycle/).

Before disposing of e-wastes, a consideration for repair or reuse should be made. There are several ways to pass on electronic items for reuse by:

- Contacting charities or nonprofits in your area to see if they would be able to use or resell your electronic piece of equipment.
- Calling your local solid waste or public works office to find out what options are available in your community for donating or reuse.
- Selling your item through local classifieds or use an online website.
- Asking if a participating E-Cycle Washington collector will donate or resell your item.

For more information on opportunities for reuse of electronic equipment, users are encouraged to visit Ecology's website (http://www.ecy.wa.gov/programs/swfa/eproductrecycle/reuse.html).

7.3.2 Needs and Opportunities

No needs or opportunities exist in addition to the current practice.

7.3.3 Evaluation of Options

No additional options exist beyond the current practice.

7.3.4 Recommendations and Implementation

The County should continue implementing the *E-Cycle Washington* program by providing the ACRL E-Cycle collection site and by also working closely with Ecology for reporting and future expansion of the program to include other e-waste types. In addition, the County should help promote use of retail stores for collection of peripheral items.

7.4 Biohazardous and Wastewater Treatment Wastes

7.4.1 Existing Conditions

At the present time, only minor amounts biohazardous wastes (medical wastes) are being accepted for disposal in the landfill if certain conditions are met. Hospital wastes in the area are contracted through private providers for disposal.

All sharps are to be placed in special plastic disposal containers. Human tissue from hospitals is not being disposed of at the landfill, but animal tissue is being received. There is a $5 tipping fee (each) for medium and small carcasses (for example, dogs, cats, and pigs) and a $20 tipping fee (each) for large carcasses (for example, cows, horses, and hogs).

Sludges in the region are generated from lagoon systems, septic tanks, wastewater treatment plants, and industry. Since January 1991, Lewiston and Clarkston have contracted with EKO Compost, Inc., and later Clearwater Composting (starting in 2014) to co-compost their sludge (biosolids) with yard waste. The grit materials from the Lewiston and Clarkston treatment plants, however, are disposed of at ACRL.

7.4.2 Needs and Opportunities

Disposal of biohazardous waste from hospitals needs to continue to follow current standards, to not pose risks to landfill workers.

7.4.3 Evaluation of the Options

No other options are under consideration for the disposal of biohazardous wastes at this time. If current biohazardous waste disposal practices require modification, training and education for both the public and landfill workers could be provided.

Grit material should continue to be tested on a routine basis as nondangerous waste before it is disposed of in the landfill. Grit is not accepted by Clearwater for composting as it is a raw, putrescible material.

7.4.4 Recommendations and Implementation

The following actions will lessen the risks of processing biohazardous waste at ACRL:

- Provide updated blood-borne pathogen training and vaccinations for landfill workers.
- Provide training to landfill workers in identification of improperly disposed biohazardous waste.
- Provide links on the ACRL website that discuss proper disposal techniques.
- Provide handouts to local pharmacies, clinics, and hospitals regarding safe disposal of sharps. However, this is outside the realm of ACRL responsibility, and would need to be done at the State level.

The County would need assistance from Ecology and the ACHD to develop public outreach and training programs.

Composting of the wastewater treatment plant sludge is the best option for both wastewater treatment plant sludge and residential septage. The County and ACHD should work together to assure that wastewater treatment plants continue to contract with Clearwater Composting to co-compost their sludge with residential yard waste. The City of Lewiston should also consider expanding their contract with Clearwater to include their grit chamber waste material.

SECTION 8

Moderate Risk Waste Management Plan

8.1 Introduction

8.1.1 Regulations

Local governments are required by the Washington State Hazardous Waste Management Act (HWMA, Chapter 70.105 RCW) to address MRW management in their jurisdictions. MRWs are hazardous wastes produced by households (household hazardous waste), and by businesses and institutions in small quantities that do not exceed conditionally exempt small quantity generator (CESQG) state regulatory limits as follows:

- 220 pounds (100 kilograms) of dangerous waste per month or per batch
- 2.2 pounds (1 kilograms) of acute or extremely hazardous waste per month or per batch

Businesses or institutions producing or accumulating hazardous wastes above the quantity exclusion limits are required to meet a more stringent set of regulations when storing, handling, and disposing of their hazardous wastes. In addition, these fully regulated waste generators must comply with extensive waste tracking and reporting requirements. CESQGs must meet certain requirements for identifying and managing their MRWs, but are exempt from most all of the waste tracking and reporting requirements.

In response to the HWMA and local needs, the original MRW Plan was completed and was adopted in April 1991 by Asotin County and Nez Perce County, and each municipality within the counties. The MRW Plan was designed to improve the management of MRW, thereby promoting better regional protection of public health and the environment. The MRW Plan contributed to the Legislature's goal "…to establish a comprehensive statewide framework for the planning, regulation, and management of hazardous waste…"as outlined in the HWMA (RCW 70.105.007). The 2010 SWMP update included a Moderate Risk Waste Management Plan and replaced the original 1991 MRW Plan. The 2017 update also incorporates the MRW Plan into the SWMP. The MRW Plan proposes a comprehensive program for household and business education and technical assistance, MRW collection, and disposal compliance. Asotin County prepared this MRW Plan with the guidance and assistance of Asotin County's consulting engineering staff, technical and management staff from county and municipal departments, the Asotin County SWAC, local elected officials, and interested citizens.

8.1.2 MRW Management Goals

MRW management goals are to:

- Satisfy state priorities for waste management, which emphasize waste reuse and reduction over disposal.
- Maintain MRW monitoring and regulatory procedures that include tracking the types and quantities of MRW disposed and recycled.
- Provide for efficient collection and transfer of MRW, including opportunities for competition to reduce costs of collection, transfer, and processing; and promote MRW recycling and associated businesses. Establish guidelines and strategies for managing specific MRW types.
- Continue public outreach and education efforts regarding MRW reuse, reduction, and disposal.

8.2 Existing Conditions

This section summarizes the various MRW management programs underway in Asotin County and Lewiston (and Nez Perce County), municipalities, and private businesses. Furthermore, the CESQG program is discussed including education, collection, assessment, and transporters in Asotin County.

8.2.1 Moderate Risk Waste

Asotin County primarily has responsibility for MRW management within Asotin County and Lewiston; however, the U.S. Department of Agriculture has sponsored special collection events for area rural farmers to promote and encourage MRW diversion from the MSW waste stream.

8.2.1.1 Asotin County Moderate Risk Waste Program

Asotin County Education Program. Asotin County provides MRW education for residences and businesses located in Asotin County and Nez Perce County through a variety of approaches.

Residents often have questions concerning the management of household hazardous wastes, particularly used motor oil, batteries, and paints. Information and education about hazardous waste is received primarily by telephone calls and customer visits at the landfill. Callers are given assistance over the phone, and a hazardous waste brochure is given to landfill customers. Approximately 15-20 brochures are distributed each month to customers and approximately 5 telephone calls per day at the landfill are hazardous waste related. Waste reuse, recycling, and MRW components are integrated within Asotin County's education program. That is, whenever general educational information is presented by Asotin County staff, every topic regarding waste and disposal is conveyed at the same time. Information on the MRW program is also provided on the County's landfill website (http://asotincountyregionallandfill.com/).

Asotin County Moderate Risk Waste Collection Events. Asotin County to-date has not sponsored any MRW specific collection events for general household residents. All MRW received at the fixed-MRW facility at the landfill is self-hauled by residents of Asotin County and Lewiston (and Nez Perce County).

8.2.1.2 Asotin County Fixed Facility Collection Site

In 1993, Asotin County constructed a permanent MRW fixed facility at ACRL and opened the facility in 1994. This made MRW disposal significantly more convenient for citizens. The MRW fixed facility was upgraded in late-2008. The upgrades provided total enclosure of the facility including the main handling area and the back storage area, installation of overhead sectional doors, ventilation, cooling and heating, lighting, and flammable gas monitoring. Additionally, the old emergency shower/eye wash station was removed and a new one installed inside of the facility with heated water (served by a hot water heater in a new enclosure on the backside of the building).

The MRW facility is open Wednesdays of each week and also the first and third Saturdays of each month, except on major holidays. The facility receives all types of MRW. Radioactive wastes (except smoke detectors) are excluded, along with explosives and critically unstable materials. At the time this document was prepared, accepted materials include all types of batteries, all types of paint and adhesives, used motor oil, antifreeze, gasoline, other flammable materials, cleaners, aerosols, herbicides, pesticides, fertilizers and other poison materials, pool chemicals, and mercury thermometers, switches, and thermostats. Refer to the ACRL website for a current list of MRW materials that are accepted at the ACRL fixed MRW facility (http://www.asotincountyregionallandfill.com/HouseholdHazardousWaste.html).

Trained staff operate the collection program at ACRL. The program is paid for in part by solid waste tipping fees and grant funding by Ecology.

Staff accept, sort, and bulk MRW delivered by the public. The fixed facility has three separated concrete compartments to keep wastes separate: flammable material, poisonous material, and corrosive material. Within each compartment, chemicals are stored on shelves, and up to five 55-gallon drums are placed for lab packing, loose packing, or bulking. Also within the fixed facility, waste oil is stored in an above-ground storage tank. There is also a storage locker inside the facility for flammable materials. Antifreeze is collected and stored on a spill pallet in the MRW facility itself (enclosed and under control), and auto batteries are stored on a spill pallet located outside of the facility. Many of the MRW materials collected are ultimately recycled or used as fuels. Waste management methods are evaluated periodically and are subject to change.

In addition to the ACRL MRW facility, the City of Lewiston Transfer Station offers another location for Lewiston and Nez Perce County residents. At the time this document was prepared, accepted materials include: latex paint, used motor oil, used antifreeze, common household batteries and automobile batteries. Refer to the City of Lewiston Transfer Station website for **a current list** of MRW materials that are accepted at the City of Lewiston Transfer Station (www.cityoflewiston.org/index.aspx?NID=336).

Asotin County MRW Collection Participation. Since the original Moderate Risk Waste Management Plan was published in 1991, citizen participation in the MRW program has generally had a slight increasing trend (excluding 2010, which was a peak year, and 2016, where the participants decreased). Table 8-1 shows the participation from 2010 through 2016.

Table 8-1. Participation Over Time at Asotin County Fixed MRW Facility
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Year	Users
2010	1,504
2011	1,228
2012	1,306
2013	1,384
2014	1,428
2015	1,498
2016	1,323

Records have been kept of the types and quantities of waste handled through the fixed MRW collection facility, Table 8-2 summarizes the quantities of materials handled from 2010 through 2016.

Table 8-2. Types of MRW Collected and Quantities in Tons
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Type of MRW	2010	2011	2012	2013	2014	2015	2016
Antifreeze	1.0	1.3	0.9	1.0	1.2	1.2	1.5
Automobile Batteries	8.28	3.47	2.59	0.99	1.01	1.84	0.69
Corrosives	0.45	0.24	0.25	0.42	0.77	0.44	0.40
Alkaline Batteries	NR	NR	NR	NR	NR	NR	NR
Flammables	5.28	4.15	3.35	4.69	5.06	3.27	4.08
Pesticides/Poisons	1.25	1.08	1.19	0.93	1.17	1.00	1.16

Table 8-2. Types of MRW Collected and Quantities in Tons
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Type of MRW	2010	2011	2012	2013	2014	2015	2016
Latex Paint	15.37	11.52	11.94	9.59	9.79	8.97	8.51
Used Oil	14.6	16.4	33.1[a]	9.3	11.5	9.2	13.6
Gasoline	1.02	0.59	1.26	0.60	1.08	0.94	0.99
Oil Paint	7.26	3.39	3.97	4.90	3.88	3.46	3.83
Adhesives	0.69	0.97	0.81	1.09	0.85	0.88	0.91
Aerosols	0.40	0.32	0.34	0.36	0.42	0.63	0.39
Total	**56**	**43**	**60**	**34**	**37**	**32**	**36**

[a] Total from ACRL and Lewiston Transfer Stations

Notes:

NR = not recorded; recent recommendations by Ecology is to dispose of alkaline batteries in the landfill rather than collect them at the MRW facility based on cost-benefit evaluations. The exorbitant cost of transport and processing for recycling alkaline batteries far outweighs the environmental benefit; alkaline batteries contain very low levels of hazardous waste. Latex paints in household containers from this point forward will also be disposed of at ACRL at the recommendation of Ecology.

As indicated by the above quantities, used oil and latex paints account for the largest portion of the total MRW stream. Based on available information, these waste streams are being managed well through existing private and public-sector efforts.

Universal Wastes. According to WAC 173-303-573, universal wastes (including mercury batteries, lamps, thermostats and other like equipment and materials) must be handled separately from the MSW stream. Mercury waste can be found in the residential waste stream in the form of mercury thermometers, light ballasts (including low-energy, compact fluorescent lights), or other waste. Asotin County presently allows residents to bring waste products with mercury (such as mercury thermometers or thermostats) to the MRW facility for management.

In 2010, an extended producer responsibility law was passed in Washington that covers mercury-containing lights. On January 1, 2015, the LightRecycleWashington program (RCW 70.275) began operation. This program includes mercury-containing lights such as: fluorescent tubes, compact fluorescent lights, and high-intensity discharge lights and helps to keep these items out of the landfill. Additional information on the program can be found at: www.lightrecycle.org/

Users of the Asotin County Fixed MRW Facility can bring source-separated mercury-containing lights to the facility. These are collected, boxed, and shipped off as part of the LightRecycleWashington program. In addition, mercury-containing thermostats are collected at the facility and recycled through the Thermostat Recycling Corp.

8.2.1.3 Asotin County Services to Neighboring Cities/Counties

Asotin County has a contract with neighboring Lewiston to dispose of MRW. Lewiston (and Nez Perce County) residents may deliver wastes to the Asotin County MRW fixed facility for bulking, lab-packing, and shipment. This service, provided by Asotin County at no additional cost to users, helps encourage proper management MRW in the region. Citizens of Lewiston (and Nez Perce County) may also drop off more standard types of MRW at their transfer station.

8.2.1.4 Asotin County Health and Safety Program

Asotin County has developed an in-house employee training program, prepared for solid waste facility personnel as well as for MRW facility technicians. Full-time hazardous waste technicians responsible for supervision and specialized waste handling receive HAZWOPER 40-hour training. These staff members are involved in lab-packing certain wastes (such as poisons, corrosives, and oxidizers) and bulking other wastes. The technicians receiving 40-hour training must also receive an annual 8-hour refresher course in hazardous materials training to maintain certification.

Part-time hazardous waste personnel complete a 24-hour hazardous materials training course. The course includes instruction on a variety of topics, including hazard determination, hazard communication, physical and health hazards of chemicals, use of personal protective equipment, hygiene, work procedures, basic chemistry and toxicology, information on blood borne pathogens, waste characterization, medical monitoring, emergency response, decontamination, and storage and handling of incompatible or reactive wastes.

All solid waste employees receive first aid and emergency response training as needed to maintain certification.

8.2.1.5 Asotin County Compliance and Enforcement

During implementation of the MRW Plan, emphasis has been given to expanding collection opportunities, as well as providing education and technical assistance to businesses in Asotin County and Nez Perce County, to improve MRW management. If serious or imminent threats to public health or the environment are identified through complaints or onsite visits to businesses, Asotin County will refer such problems to the appropriate regulatory agencies.

A primary focus of Asotin County's compliance effort has been to assure the quality of the waste stream arriving at the landfill and the MRW fixed facility. A load inspection program has been established to identify unacceptable wastes, including asbestos, regulated quantities of hazardous waste, infectious waste, large containers, recyclables, large quantities of liquids, contaminated soils, and sludges. All scale operators, landfill equipment operators and MRW facility technicians are trained to identify unacceptable wastes at the scale, at the filling areas of the landfill, and at the MRW facility. If unacceptable wastes such as hazardous waste are discovered through load inspection, an effort is made to identify the source of the waste. Responsible parties will be notified, if possible, and arrangements will be made for proper waste disposal.

The quality control program also includes an emergency response plan. The plan identifies procedures for response to injuries, fires and explosions, hazardous material spills, and release of toxic gases. As described in the preceding section, training on first aid and emergency response procedures is provided to all landfill employees.

8.2.1.6 Asotin County Program Evaluation

Asotin County tracks and reports expenditures, activities, and accomplishments associated with the MRW management program. Reports are routinely provided to Ecology and the ACHD. Asotin County also compiles detailed information on its MRW and CESQG waste collection programs on a quarterly basis for grant funding reimbursement and annually as required by Ecology.

8.2.2 Conditionally Exempt Small Quantity Generator (CESQG)

8.2.2.1 CESQG Education

CESQGs are assisted in minimizing the production of hazardous waste and properly managing wastes that are produced. Information and disposal options are provided to CESQGs primarily by a telephone

call or by a visit to the landfill to discuss hazardous waste management at their business, and are available on the County's landfill website (http://asotincountyregionallandfill.com/).

8.2.2.2 CESQG Hazardous Waste Collection

CESQG waste is accepted at the Asotin County MRW fixed facility by appointment only. Businesses bring their waste to this facility for proper management. The businesses pay Asotin County for disposal based on the type and quantity of waste, and receive a record showing that they are properly managing their hazardous waste. Services are provided to CESQGs with minimal workload for MRW staff, and at little cost to Asotin County.

The CESQG waste collection program had 6 participants in 2016 and delivered a total of approximately 0.9 tons of hazardous waste. These are lower numbers than were reported in the 2010 plan, but this was due to the program being new and taking some time to make sure the right customers were being tracked as part of the CESQG. Table 8-3 shows the tonnages collected from 2010 through 2016. Note that these tonnages are included in the total MRW for the facility, as summarized in Table 8-2.

Table 8-3. Conditionally Exempt Small Quantity Generator Hazardous Waste Collection Count
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Asotin County Fixed	2010	2011	2012	2013	2014	2015	2016
Quantity (tons)	1.6	0.3	3.0	0.2	0.5	1.3	0.9
Participants	7	8	8	17	12	13	6

8.3 Key Issues

The *Guidelines for the Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions* (Ecology, 2010), specifically address reducing the toxicity of the waste stream. The guidelines require that each jurisdiction plan and implement programs in six areas of toxicity reduction. These required program areas are:

- Household and public education
- Moderate risk waste collection
- Business technical assistance
- Business collection assistance
- Enforcement
- Used Oil

Additionally, the 2015 Beyond Waste Plan (Ecology, 2015) places additional emphasis on reducing toxics in the waste stream. The plan includes State goals for reducing the type and volumes of toxics in processes and products (see Plan goals for Reducing Impacts of Materials and Products), goals for measuring progress, and goals for providing outreach and education.

8.4 Alternatives and Recommendations

As discussed above, reduction of toxicity has been a focus for the State for many years. To support this, the following legislation and laws have been passed that focus on reducing or eliminating toxics:

- The Toxics in Packaging law, 1991 (RCW 70.95G)
- The Children's Safe Product Act, 2008 (RCW 70.240)
- The Better Brakes law, 2010 (RCW 70.285)
- Lead wheel weights, 2009 (lead ban) (RCW 70.270)

- Bisphenol A, 2010 (ban from children's cups and sports bottles)
- Polybrominated diphenyl ether, 2007 (ban of flame retardants from certain uses)
- Copper boat paint, 2011 (RCW 70.300)
- Coal tar sealant, 2011 (RCW 70.295)
- PCBs in Products, State Purchasing, 2014 (RCW 39.26)

In addition to these laws and legislation, the 2015 State Beyond Waste Plan provides information about existing programs and resources that can be utilized to support the reduction of toxics in the waste stream. This document should be referenced for details on specific programs of interest.

Options for reducing the toxicity of disposed wastes within Asotin County are presented within the six areas of toxicity reduction that are included in the 2010 Guidelines (*Guidelines for the Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions, Publication #10-07-005* (Ecology, 2010) and summarized as follows:

- Household and public education
- Household hazardous waste collection
- Business technical assistance
- Business collection assistance
- Enforcement
- Used Oil

8.4.1 Household and Public Education

8.4.1.1 Expanded Public Education

For education, current household hazardous waste efforts appear to be comprehensive, although these efforts need to be continued on an ongoing basis to reach new residents. The MRW brochures could also be posted on the ACRL website (which the County plans to update and make more user friendly) to provide another avenue of public education.

Asotin County plans to work with haulers that service the various regional partners to explore the addition of a billing insert to their invoice. The billing insert would provide information about ACRL, the MRW facility, and waste reuse/recycling opportunities at ACRL and within the region.

8.4.1.2 Education on Alternative Products

The MRW brochure not only has information about proper disposal of household hazardous waste, but also includes information about giving the unused portion to someone else to use and alternative products to use instead of using hazardous household products. Asotin County should review these brochures periodically to see if there is any additional information that could be included. Much of this type of information can be found on the Washington Toxics Coalition's Home Safe Home Program website. The Home Safe Home Program has produced a series of fact sheets that identify hazards with various types of products and suggest alternatives. More information available at: http://www.watoxics.org.

8.4.2 Universal Waste Education and Outreach

Asotin County should continue to provide education and outreach to residents on the risks associated with mercury laden wastes, and the availability of MRW collection sites and recycling businesses for the alternate methods of processing along with proper handling and disposal of this waste. These educational outreach efforts can be included with other waste reduction efforts described in Chapter 9.

8.4.3 Household Hazardous Waste Collection

Expanded collection capabilities and increased collection events may help extend opportunities for proper disposal to more rural residents. However, the economic feasibility must be weighed against the increase in participants/collection of household hazardous materials (also referred to as MRW).

8.4.3.1 Collection Opportunities and Events

The MRW fixed facility for disposal is open each Wednesday and the first and third Saturday of the month. Out of the 76 open-days, there were 1,323 users of the facility in 2016. This equates to approximately 17 users per day. Based on this usage, it is not recommended that opening the facility on additional days would be economical.

In addition to the fixed facility's normal hours, the U.S. Department of Agriculture sponsors a collection event once a year at ACRL (during one of the facility's closed days). The Department of Agriculture advertises, organizes, and runs this event. Mostly agricultural type businesses and farmers participate in this event. Additional events of this type could be scheduled if determined to be warranted.

8.4.3.2 Use Mobile Collection Centers to Target Rural Areas

In addition to permanent collection facilities, many communities use mobile facilities that travel to areas where residents do not have easy access to permanent facilities. Residents can bring their household hazardous waste to the mobile facility when it is in their community. Often communities will place a limit on the amount of waste that may be brought in by an individual, usually 5 gallons or 50 pounds total per vehicle per trip. This service is typically expensive, but with grant funding assistance, Asotin County could consider offering this type of service in the rural areas of the county.

8.4.4 Business Technical Assistance

Asotin County currently provides free technical assistance to businesses wanting to learn how to reduce and manage hazardous waste and has developed an educational brochure. However, the opportunity exists to provide additional educational materials to businesses, as well as local government agencies, to foster markets for used oil and provide recognition for businesses for their environmental achievements.

8.4.5 Business Collection Assistance

Asotin County currently provides for collection of wastes generated by CESQGs. Asotin County should continue to provide these services.

8.4.6 Enforcement

With respect to businesses generating hazardous wastes, Asotin County has relied primarily on educational efforts and collection opportunities to obtain compliance with state laws. Asotin County also uses a load inspection program to identify wastes at the scale and wastes that are received at the MRW fixed facility for disposal. Asotin County should continue with these efforts.

8.4.7 Used Oil

The MRW fixed facility collects used oil that accounts for the largest portion of the total MRW stream. Based on available information, this waste stream is being managed well through existing private and public-sector efforts.

SECTION 9

Waste Reduction, Recycling, and Organics Management

State regulations relating to solid waste stress the importance of reducing the amount of waste generated and increasing waste recycling activities. The State *Solid Waste Management — Reduction and Recycling Act* (RCW 70.95) lists the following solid waste management priorities in descending order:

1. Waste reduction
2. Recycling, with source separation of recyclable materials as a preferred method (which includes organics management techniques such as composting)
3. Energy recovery, incineration, or landfilling of separated wastes
4. Energy recovery, incineration, or landfilling of mixed wastes

This state act requires that solid waste management plans recommend options that are available to the County for meeting these priorities. As indicated by these priorities, the intent is to reduce the waste stream and have an environmentally sound waste management system. This goal will be addressed from the aspect of how it will influence planning for the future solid waste handling and disposal needs of Asotin County.

The state act also requires Ecology to develop and update a state solid waste and hazardous waste plan. In June 2015, Ecology published the 2015 Beyond Waste Plan. This plan provides goals and actions for Ecology as well as other stakeholders, such as local governments, organizations, and the private sector. The 2015 Beyond Waste Plan discusses the following four priorities:

1. Move upstream by increasing focus on manufacturing and use, not just end-of-life issues
2. Reduce toxic threats in products and industrial processes.
3. Increase efficiency of recycling (including organics processing) systems, and maximize effectiveness of existing solid and hazardous waste infrastructure.
4. Mitigate climate change

Table 9-1 shows how each of the four 2015 Beyond Waste Plan priorities is addressed in this section. The column titled "How Addressed in this Plan" identifies the subsection in which examples of priorities are addressed and then a quote of how that is an example, based on the 2015 Beyond Waste Plan.

Table 9-1. How this Plan Supports the 2015 Beyond Waste Plan
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

2015 Beyond Waste Plan Priority	How Addressed in this Plan
Move upstream by increasing focus on manufacturing and use, not just end-of-life issues	• Reuse stores: "Enable more reuse of materials and products" • Tire take-back programs: "Enable more reuse of materials and products"
Reduce toxic threats in products and industrial processes.	• Tire take-back programs: "Encourage product stewardship programs for toxic and hard-to-handle products" • E-Cycle and other electronics: "Encourage product stewardship programs for toxic and hard-to-handle products"

Table 9-1. How this Plan Supports the 2015 Beyond Waste Plan
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

2015 Beyond Waste Plan Priority	How Addressed in this Plan
	• Moderate risk waste: "Increase local partnerships to work on toxics source control"
Increase efficiency of recycling (including organics processing) systems, and maximize effectiveness of existing solid and hazardous waste infrastructure	• Variable-can- rate systems: "Increase capacity and diversity of recycling" • Recycling: "Increase capacity and diversity of recycling" • Yard and wood waste (reuse and recycling): "Increase capacity and diversity of recycling"
Mitigate climate change	• Food donation: "Prevent food waste" • Yard and wood waste (reuse and recycling): "Increase reuse, recycling, and waste reduction"

Source: Ecology, 2015.

As shown in Table 9-1, there are a variety of existing waste reduction and recycling programs and resources that are available and function within the region.

Waste reduction and recycling activities go hand in hand. While the ultimate goal of waste reduction is to reduce the amount of waste generated (or the toxicity of the waste generated as discussed in Chapters 7 and 8); secondary goals can be accomplished by reducing the amount of waste that enters the solid waste stream. Waste sources include households, small businesses, industry, recreational facilities, and any other entity that puts materials into the waste stream. This chapter describes existing waste reduction and recycling (which also includes organics management) practices in Asotin County, identifies key issues with respect to waste reduction and recycling, and presents recommendations and options that will help meet waste reduction and recycling goals.

Asotin County has established the following objectives for waste reduction and recycling:

- Reduce landfilling of solid waste through waste reuse or reduction
- Reduce the amount and toxicity of disposed waste, either by avoiding generation, reusing materials, or recycling (also includes proper management of household hazardous materials as discussed in Chapter 8).
- Support the implementation of waste reduction measures on the national and state levels, and promote such measures on a local level.
- Provide cost-effective opportunities for all Asotin County citizens to recycle
- Collect and process recyclable commodities in a fashion that will enhance marketability
- Enhance the public information program to increase awareness of recycling opportunities
- Encourage the recycling of economically viable materials
- Encourage the recycling of green waste (compostable waste from yards)

9.1 Existing Conditions

As discussed in Section 3.3, a recent 2015-2016 WCS prepared for Ecology, found that in the East WGA (where Asotin County is), the single largest component of the disposed waste stream was organics at 32.3 percent; followed by construction materials at 11 percent, wood wastes at 10 percent, and paper products at 9.5 percent. Of the 32.3 percent organics, the largest components were "Yard and Garden

Waste-Leaves & Grass" at 9.7 percent, "Inedible Food-Vegetative" at 7.4 percent, "Edible Food-Vegetative" at 5.7 percent, and "Animal Manure" at 4 percent.

Based on the data from the State WCS, it seems logical to focus efforts on addressing the materials that are found in greatest quantity in the disposed waste stream. Asotin County already has reuse/recycling programs for three of the top four types of material found in the State WCS (Organics, Wood Waste, and Paper Products). Due to lack of local markets, there is not currently any Construction Materials reuse or recycling programs.

Unfortunately, composition data is limited to the total amount disposed and the amounts of various materials that are diverted. Specific composition data of the disposed stream would help to determine the effectiveness of the current reuse/recycling programs. Asotin County should consider coordinating a local WCS with the State's next study (occurs every 4 to 6 years). This study could help the County make sure they are making good use of their limited funds.

Despite limited County funds, there are currently a variety of local municipal programs that encourage and provide opportunities for waste reduction, waste reuse, recycling, and composting. These existing programs utilize existing infrastructure and programs to address priorities listed in the 2015 Beyond Waste Plan. Each of these programs is further discussed in the subsections below.

9.1.1 Reuse Stores

Reuse of used goods is a common form of waste reduction. There are currently a few organizations within the plan area that accept used goods, these include (but may not be inclusive):

- St. Vincent De Paul – 609 3rd St., Clarkston, WA
- Goodwill – 3134 5th Street, Lewiston, ID
- Salvation Army – 1835 G St., Lewiston, ID
- Second Chance Thrift –708 Main St., Lewiston, ID

Residents can utilize these organization to donate to or buy from, ultimately reducing the waste stream.

9.1.2 Variable-Can-Rate System

Variable-can rates are implemented in Clarkston and Lewiston as part of the curbside garbage collection service. Variable-can rates provide economic incentives to reduce the amount of waste set out for collection. A small container is charged the lowest rate, with additional or larger containers charged at a higher rate. This type of rate schedule provides a powerful economic incentive to reduce the amount of waste set out for collection. Curbside yard waste collection in Lewiston and Clarkston Recycling and drop boxes in the County complement the variable disposal rate, by providing an acceptable way for consumers to reduce the amount of waste needing disposal.

No other locations within the plan area provide variable-can rates.

9.1.3 Recycling

There are several municipal recycling operations and two private recycling companies that are currently available in the Lewiston-Clarkston area. The City of Lewiston accepts recyclables at the transfer station, as well as providing curbside recycling and yard waste collection. The private recyclers and their addresses are listed below, as well as the types of material they accept. As markets shift and change with the commodity market, the types of recyclable materials collected also change regionally and locally. As such, users are encouraged to call the recycling companies or log onto their respective websites, if available, for a current list of recyclables that are accepted, and business hours.

Lewis Clark Recyclers, Inc.
0334 3rd Street
Lewiston, ID 83501
(208) 746-1187
website: http://www.lcrecyclers.net/index.html

- Wastepaper items: cardboard, cartons, liner board, newspaper, magazines, telephone directories, catalogs, discarded mail and envelopes, white and/or colored writing and typing paper, post-it notes, computer paper, packing paper, paper cores, old documents, file folders, bound records and books.
- Plastic items: bottles and jugs only, #1-and #2-coded containers with dispenser openings less than 2 inches in diameter (curbside collection only), and #1 - #7-coded containers if dropped off at the Lewis Clark Recyclers, Inc., facility. Containers must have been used to contain food, condiments, beverages, body soaps, shampoos or lotions, laundry detergents, fabric softeners or bleach, and plastic buckets (with handles removed. All containers must be residue and lid free.
- Metal items: open aluminum and tin beverage and food containers up to one gallon in size. Containers used for paint, fuel, aerosols, pesticides, herbicides, or explosive will NOT be accepted.

Pacific Steel & Recycling
604 12th Street North
Lewiston, ID 83501
(208) 743-2181
website: http://www.pacific-recycling.com/Locations/Branches/Idaho/Lewiston/index.html

- Nonferrous Items: aluminum cans, miscellaneous cans, brass, copper, stainless steel, radiators, lead, electric motors
- Ferrous Items: automobiles, automobile parts, iron, tin, lawn mowers, machinery (small and large), appliances (washers/dryers, refrigerators/freezers, air conditioners/stoves)
- Fiber Products: cardboard, newspaper/magazines, white paper, shredded paper
- Plastic Products: milk jugs, water bottles

Several satellite recycling drop box facilities service the Lewiston/Nez Perce County and Asotin County area along with fixed recycling facilities at ACRL and the City of Lewiston Transfer Station. The satellite recycling drop box locations are all unmanned.

<u>Drop Box Location within City of Clarkston:</u>

- First Presbyterian Church Parking Lot: 11th Street and Diagonal Street
- Dollar Store: 3rd Street and Fair Street
- Arnold Park: Maple Street and Burns Street

For more information, contact:

City of Clarkston, Sanitation Department
830 5th Street
Clarkston, WA 99403
(509) 758-5541
website: http://www.clarkston-wa.com/

<u>Drop Box Location within City of Lewiston/Nez Perce County</u>:

- Sweetwater, ID on US 95 next to the grain elevators
- Junction of US 12 and Cottonwood Creek
- City of Lewiston Transfer Station

For more information, contact:
City of Lewiston, Sanitation Department
P.O. Box 617
Lewiston, ID 83501
(208) 746-1316
website: http://www.cityoflewiston.org/

Drop Box Location within Asotin County:

- Clarkston Heights: 2036 4th Avenue and Appleside Boulevard (behind the Asotin County Library on Appleside Boulevard)
- City of Asotin Courthouse Annex Building: 2nd Street and Cleveland
- Lewis Clark Saddle Club: 13th Street and Pound Lane
- Asotin County Regional Landfill: 2901 6th Avenue, Clarkston Heights

For more information, contact:
Asotin County Regional Landfill
2901 6th Avenue, Clarkston, WA 99403
(509) 758-1965
email: acrl@clarkston.com
website: http://asotincountyregionallandfill.com/

The materials accepted at each recycling facility varies, depending on current market prices and contracts. Some recyclers are, however, storing certain materials that they collect until the market improves. Contact the local recycling agencies and governments for a current list of recyclables (and MRW materials) that are accepted.

Recycling at ACRL currently includes appliances (through Pacific Steel and Recycling), TV Guides/ catalogs, telephone books, paperback books, magazines, office paper, cardboard, E-Cycle materials (CPUs, laptops, computer monitors, and televisions). Signs at the entrance of the landfill encourage users to recycle before disposing their waste in the landfill, and a drop box at the facility allows residents to drop off recyclables before passing over the scales and into the landfill.

9.1.4 Yard and Wood Waste Recycling/Reuse

In November 1990, Lewiston and Clarkston contracted with EKO Compost, Inc., and later with Clearwater Composting in 2014 to receive and co-compost their yard waste with sewage sludge. Clearwater Composting accepts leaves, grass clippings, garden waste, tree limbs and bark, hay, straw, manure, and lawn and garden bark. It does not currently accept food waste. Clearwater Composting also assumed the sewage sludge disposal contracts for the Lewiston and Clarkston wastewater treatment plants. These contracts will expire in December 2034. Additionally, Clearwater Composting handles the sludge for the wastewater treatment facilities from the cities of Asotin, Julietta, Lewiston, Clarkston, Plummer, Grangeville, and Uniontown.

For more information, contact:

Clearwater Composting
3965 Industrial Way
Lewiston, ID 83501
208- 413-6020
http://www.clearwatercomposting.com/

In Lewiston, residents have the option to either put yard waste out for curbside collection or to self-haul to the composting facility. Residents are encouraged to use the program, because Lewiston no longer

accepts yard waste at the transfer station. Lewiston residents may leave unlimited amounts of yard waste out for curbside collection in either bags or separate cans. The yard waste is picked up in a separate truck on the same day as garbage pickup. The City of Lewiston also hauls yard waste from its own property (for example, city parks) to the composting facility. Collectively in 2015, a total of approximately 8,450 tons of yard waste were received at Clearwater Compost from the City Lewiston, which includes direct haul from the City and its residents, and residential curbside-collected yard waste.

The City of Clarkston also has curbside pickup for yard waste. In 2015, the City of Clarkston reportedly sent approximately 1,380 tons of city yard waste, curbside-collected yard waste, and self-hauled waste to the Clearwater Compost composting facility. The self-haul program is funded by the per-can solid-waste fees.

Residents outside of cities of Lewiston and Clarkston are allowed to self-haul yard waste to the Clearwater Compost facility on a per use fee. Although use by such residents is not tracked, the yard-waste contribution that these residents make to the facility is believed to be minimal. Most of these residents are rural (outside of the City of Asotin) and live on farms or small acreages on which they can dispose or compost their own yard waste, making it impractical or unnecessary for them to haul their yard waste over the long distances to the composting facility.

ACRL also has a yard and wood waste recycling/reuse program. This program was put into place in November 2009 and was funded with grant money from Ecology to support alternatives to open burning (and divert these types of wastes from the landfill). Under this program Asotin County, City of Clarkston, and City of Asotin residents (and other nearby Washington State residents) may dispose of certain organic yard and wood waste materials at ACRL at no charge. Acceptable wastes are tree limbs and branches (at the time this plan was written, ACRL was accepting limbs and branches that are 24 inches or less in diameter and 8 feet or less long), shrubs and bushes, and clean wood pallets. Users are encouraged to also call ACRL if they have a question on acceptable or unacceptable wood wastes. At this time, unacceptable wastes are treated lumber, C&D wastes, grass clippings and leaves, food waste and any MSW. All of the wood waste collected through this program is taken to Clearwater Paper and is used in their incinerator to generate power for their facility.

9.1.5 Food Donation

Food donation is an effective way to accomplish the second highest tier of Washington State's Organics Management Hierarchy (Feed People). Donating edible food feeds hungry people while also reducing the quantities of organics that are disposed of in a landfill.

The Asotin County Food Bank was established in 1983. It accepts all food items except home-canned goods and is located at:

1546 Maple Street
Clarkston, WA 99403
Phone: (509) 758-7085

9.1.6 E-Cycle and Other Electronics Recycling

Washington now has a free, convenient, and environmentally responsible recycling program for computers, monitors, laptops, televisions, and other electronic products with the new E-Cycle Washington program. Asotin County has adopted this program at ACRL and has a collection site that is located at ACRL, west of the Household Hazardous Waste Facility (operated by a state-contracted vendor). Some retail stores will accept peripheral items that are not accepted in the E-Cycle program.

Information on electronic waste and other special wastes recycling (such as tires and biohazard materials) is provided in Chapter 7.

9.1.7 Tire Take-Back Programs

There are two tire companies within the region that will take back tires and then transform them so they are reused or recycled in some fashion. These programs are doing a sufficient job of promoting sustainable product stewardship and reuse and recycling. Information on these programs is provided in Chapter 7.

9.1.8 Moderate Risk Waste

MRW (also known as household hazardous waste) management is offered by Asotin County, whereby MRW from households and small businesses that meet certain exceptions under the state dangerous waste rules are allowed to drop off wastes at the fixed-MRW facility at ACRL. More information on the MRW management program is provided in Chapter 8.

9.2 Needs and Opportunities

In its 1989 *Waste Not Washington Act*, the State of Washington established a recycling goal of 50 percent of the solid waste stream. In addition, the State has a goal to, "Eliminate residential or commercial yard debris in landfills by 2012 in those areas where alternatives to disposal are readily available and effective." In order to support these goals, Asotin County and the cooperating municipalities have made efforts toward providing cost-effective area-wide recycling opportunities, composting opportunities, education, and outreach programs. In Asotin County, the composting and recycling programs are funded entirely out of landfill funds. The financial plan's priority and goal is to focus on the landfill operations. Any additional recycling options that individual entities want to do over and above what the County is already doing is encouraged.

At this time, there are opportunities to achieve additional collection and disposal savings, heighten public awareness, and comply with Chapter 70.95 RCW. The County's financial plan's priority and goal is to focus on the landfill operations. Any additional recycling options that individual entities want to do over and above what the County is already doing is encouraged. It is recommended that Asotin County focus on improving the effectiveness of existing programs and in particular programs that involve the most prevalent materials in the disposed waste stream (as discussed in Section 3.3).

9.3 Evaluation of the Options

The following options are discussed in further detail below:

- Public Education Programs
- Expansion of Organics Management Efforts
- Construction Materials Program
- Reduce Contamination at Drop Box Locations

Note, additional recycling options for materials such as electronics, tires, and household hazardous waste were addressed in Chapters 7 and 8 and are not addressed in this chapter.

9.3.1 Public Educational Programs

The first level of waste reduction should be public information and education. Individuals and businesses can reduce the amount of waste generated by choosing to purchase durable (nonthrowaway) products, buying commodities in bulk, and choosing products that are not excessively packaged. Consumers can also influence the type of packaging materials used by choosing bags or containers that are more amenable to recycling or reuse, less resource intensive, more degradable, or of otherwise less impact on the environment when disposed. Additionally, consumers can use their own bags that are durable enough for reuse, to lessen the need for plastic bags when shopping. An information/education program

makes individuals and businesses aware of the affect their waste has on the existing solid waste systems, what they can do to reduce that impact and the benefits to them of waste reduction.

The County currently has a program that produces flyers with information promoting waste reduction and recycling. These flyers are distributed at the landfill and other public places within the County.

The County could consider updating these flyers with the results of the State WCS for the East WGA and show the top-disposed materials (yard and garden waste, construction materials, wood waste, food, manure, and paper products and include local programs for addressing these materials. The County should also consider adding links to Ecology's online Beyond Waste educational resources to further implement its public educational program.

Asotin County plans to work with haulers that service the various regional partners to explore the addition of a billing insert to their invoice. The billing insert would provide information (similar to the flyers) about ACRL, the MRW facility, and waste reuse/recycling opportunities at ACRL and within the region.

This information is also available on the ACRL website at http://asotincountyregionallandfill.com/. The County plans to update their website to make it more user friendly and inclusive and will explore adding links to other reuse and recycling providers in the regions.

9.3.2 Expansion of Organics Management Efforts

There are currently a few different programs that encourage organics reuse and recycling. The City of Lewiston and the City of Clarkston both have curbside programs. In addition, Clearwater Composting accepts a variety of yard and garden waste. ACRL has a yard and wood waste program that is offered free of charge.

These programs are excellent ways to increase the reuse and recycling of organic materials. However, none of these programs includes food.

Since neither the ACRL organics program nor Clearwater are permitted to accept food, one step that could decrease the amount of disposed food is to promote source reduction and food donation. There are numerous online resources available that discuss the source reduction of food. The Asotin Food Bank is an existing resource that should be promoted more.

The County may also consider performing a WCS in coordination with the next State study to better understand the quantities of organics remaining in the disposed stream and then use that information to adjust programs as appropriate.

A waste study/pilot program could be implemented at the landfill entrance area by tracking yard waste quantities (other than clean woody debris that is currently recycled as part of the wood waste recycling program) that could be diverted from the landfill simply by having customers deposit the materials in designated roll-off containers or stockpiles before entering the scale. Funding of this program (for both infrastructure and operations) would need to be supplemented with either state grant money or the tipping fee.

9.3.3 Construction Materials Program

There is currently no program for the reuse or recycling of construction materials. Valley Waste Disposal (208-746-8243) is a C&D landfill in Lewiston. However, this is strictly for disposal.

According to the State WCS, construction materials are the second largest component in the disposed waste stream within the East WGA.

The 2010 Guidelines contains links to various resources that have been identified to support recycling and reuse of construction materials. However, many of these resources cover areas that do not include Asotin County.

9.3.4 Reduce Contamination at Drop Box Locations

Currently, drop box locations offer recycling for paper products. All drop box locations are currently unmanned and have historically had problems with contamination at these sites.

Increased signage at these facilities may reduce unintentional contamination.

9.4 Recommendations and Implementation

9.4.1 Public Educational Programs

Asotin County should update their existing waste reduction flyers with the results of the State WCS for the East WGA and show the top-disposed materials (yard and garden waste, construction materials, wood waste, food, manure, and paper products and include local programs for addressing these materials. The County should also add links to Ecology's online Beyond Waste educational resources to further implement its public educational program.

Asotin County would also be interested in exploring partnerships with regional partners to boost local public education programs (for example, in schools).

9.4.2 Expansion of Organics Management Efforts

Since organics were found to be the single largest component in the disposed waste stream in the 2015-2016 State WCS, Asotin County should make efforts to determine what percentage of organics are still in the disposed stream of ACRL.

Based on the results, Asotin County and its waste partners should adjust their existing organics management program. Additionally, Asotin County should promote source reduction of food waste and food donation.

9.4.3 Construction Materials

There are currently not local markets that support recycling or reuse of construction materials. Additionally, based on limited available County funds, it is not feasible to start a new program. However, the County should continue to monitor the State's progress on improving local markets and reducing disposal of Construction Materials.

9.4.4 Reduce Contamination at Drop Box Locations

There are multiple drop box locations that are situated in Asotin County and in other nearby locations. Efforts should be made to improve the current operation. In particular, additional signage should be added to increase public awareness, which in turn should reduce contamination levels at these site.

SECTION 10

Administration, Enforcement, and Financial Assurance

The operation of any solid waste program requires coordination between the operator and the users. There should be communication between the County (and its participant users), franchised haulers, contractors, other users, and regulators to ensure that the needs of customers and applicable regulations are considered in any major decisions. The SWAC can enhance this communications process by maintaining an active role in the planning of solid waste programs.

Under the requirements of WAC 173-351, Asotin County is required to provide financial assurance for ACRL closure and post-closure care. This chapter also provides information on the financial assurance program with updated construction and capital acquisition programs for 6 years into the future in accordance with RCW 70.95.110.

10.1 Disposal System Administration

10.1.1 Existing Conditions

The Asotin County Public Works Department administers the County's solid waste disposal facilities. The public works director and solid waste supervisor report to the BOCC on all solid waste issues.

10.1.2 Needs and Opportunities

There are no needs and opportunities for disposal system administration.

10.1.3 Evaluation of the Options

There are no disposal system administration options to evaluate.

10.1.4 Recommendations and Implementation

The County should continue to administer the landfill, recycling, and MRW waste programs.

10.2 Solid Waste Advisory Committee

By law, the SWAC must represent a balance of interests including public interest groups, business, the waste management industry, local elected officials, and citizens-at-large. The role of this diverse group is to assist in the development of programs and policies concerning solid waste handling and disposal. Although solid waste programs are regulated by the ACHD, the WUTC, and Ecology, an additional role of SWAC is to review and comment upon proposed rules, policies, or ordinances, prior to their adoption. It is important that decisions regarding rules and policies be reviewed by the SWAC.

10.2.1 Existing Conditions

The establishment of a SWAC is required by law (RCW 70.95.165) and is defined as follows, "Each county shall establish a local solid waste advisory committee to assist in the development of programs and policies." The regulation further states that, "Such committees shall consist of a minimum of nine members and shall represent a balance of interests including, but not limited to, citizens, public interest

groups, business, the waste management industry and local elected public officials." The prescribed membership for the Asotin County SWAC includes the entities shown in the front of this plan.

10.2.2 Needs and Opportunities

The SWAC has been involved with various reviews of the initial draft of this updated SWMP. The group has convened on the following dates to discuss the plan:

- July 11, 2017
- September 19, 2017

10.2.3 Evaluation of the Options

The SWAC will continue to evaluate ways to meet more frequently.

10.2.4 Recommendations and Implementation

It is recommended that the SWAC be actively involved in the development and direction of solid waste programs in Asotin County, and with the participants that are disposing of waste at ACRL. The next update of the SWMP should begin early in the fourth year after the adoption of this plan, so that the update is completed in a timely manner.

The SWAC should continue to meet regularly and make recommendations to the BOCC.

10.3 Enforcement

10.3.1 Existing Conditions

The enforcement of solid waste regulations in Asotin County is the joint responsibility of Ecology, ACHD, and the Asotin County Sheriff's Department.

Ecology is responsible for setting standards for solid waste facilities (both design and operation), and making recommendations on permit applications and permits issued by the ACHD.

ACHD is responsible for inspection of solid waste facilities for compliance with permit conditions regulations and the operating plan, determining the need for monitoring programs, providing funding for the enforcement programs, and for granting permits and variances, with the approval of Ecology.

ACHD also issues the operations permit for the landfill. It is the responsibility of the ACHD to ensure that the solid waste permit conforms to the approved solid waste management plan and all applicable laws and regulations. It inspects the site annually to determine if the permit should be renewed. If the site is in violation of the regulations, the department may enforce the regulations by suspending or declining to renew the permit. The site must also comply with state and local fire, zoning, water and air pollution, nuisance, and aesthetics regulations. Control of littering is the responsibility of the agency or persons transporting waste to the landfill site. A county-wide ordinance for unsecured loads on the roadways was passed, but due to limited County resources, enforcement is limited.

Illegal dumping is a misdemeanor under RCW 70.95.240, but enforcement of this regulation in the past in southern Asotin County has proven difficult.

10.3.2 Needs and Opportunities

The primary enforcement need in Asotin County concerns compliance with regulations at the landfill. Regulations require the landfill site to comply with WAC 350 and WAC 351.

A final enforcement need concerns the budget and staffing of the health department. At present, the health department consists of two employees, the health inspector and solid waste enforcement officer.

The health inspector has responsibility for both Garfield and Asotin counties. The solid waste enforcement officer has the responsibility for solid waste inspection and enforcement. The health inspector has the responsibility for inspection and enforcement activities for schools, water supply systems, septic tanks, restaurants, taverns, and grocery stores.

10.3.3 Evaluation of the Options

ACHD has several options to improve solid waste handling; however due to limited County resources, it is unlikely that many of these options are feasible. The County could add information to the ACRL website or provide Public Service Announcements to help educate the public and local industry on proper handling and disposal methods. If additional funds were available, the County could monitor illegal dumping through the complaint and could also investigate reports of illegal dumping. Furthermore, it can control solid waste handling by the methods described in the next subsection.

10.3.4 Recommendations and Implementation

It is recommended that the County focus on educating the public and local industry on proper handling and disposal methods.

ACHD should communicate regularly with the SWAC to address general solid waste handling issues.

Asotin County and ACHD need to work together to educate residents on proper disposal of MSW. Public Service Announcements with local radio stations may be used to devise a public awareness campaign to encourage responsible disposal of solid waste and increase reporting of illegal dumping. ACRL should add additional information to their website.

10.4 Financial Assurance

10.4.1 Existing Conditions

The existing structure of solid waste fees and grants provide adequate resources to maintain a successful solid waste program at ACRL. Agreements with the City of Lewiston, which sets the tipping fee for all users, were recently updated and provide for a fixed annual tipping fee to be approved annually by the City, through a 10-year contract period (2027).

10.4.2 Needs and Opportunities

A stable source of financing is necessary to protect the environment by providing reliable and affordable solid waste disposal. Financial resources are necessary to provide for the continuation of recycling and hazardous waste diversion programs and for complying with new and more stringent rules and regulations governing solid waste management. These resources may be provided by taxes, solid waste tipping fees, grants, or any combination of these sources.

10.4.3 Evaluation of the Options

Waste reduction, recycling, MRW diversion, and solid waste planning can be partially funded by grants that are available from Ecology. The County works closely with Ecology to secure grant funding where possible. As examples of this is funding that ACRL received for improvements to their MRW facility in 2008 and funding to support the organic and yard waste program in 2009/2010.

The majority of the of the solid waste tipping fee goes toward paying for the day-to-day operating costs of the landfill, including the cost of the recycling program and the handling and disposing of MRW. The small remaining amount of the tipping fee is set aside for new construction, closure, and post-closure costs of landfill cells and future landfill management services and incidentals. WAC 173-351 requires that landfills

have accounts or trust agreements established to ensure that the closure and post-closure operations are adequately funded. Financing for solid waste disposal traditionally has come from user fees at the landfill.

10.4.4 Financial Evaluation

The last financial model update was done in late-2016. The results of this latest modeling are provided herein through the required 6-year planning horizon (2016 through 2021) as specified by RCW 70.95.110. This evaluation includes forecasts of ongoing administrative and operating activities, contract operations, closure and post-closure care funds, and planned major capital expenditures at the landfill.

10.4.4.1 Limitations

The engineering consultant, CH2M HILL Engineers, Inc. (CH2M), assisting in this SWMP update has used generally accepted professional consulting principles and practices in the development of costs and economic evaluations presented in this section. The services were performed consistent with the agreement with Asotin County and with County provided and endorsed data and information. This report is solely for the use and information of Asotin County and its constituents. Any reliance by an outside third party is at such party's risk.

Economic evaluations were prepared based on County input of their account status, finances, and goals. Cost estimates are rough order-of-magnitude (ROM) in April 2014 dollars, unless otherwise noted, and are considered Class 4 estimates as defined by the American Association of Cost Engineering. Class 4 estimates have a typical accuracy of -30 to +50 percent. The cost estimates have been prepared for guidance in project evaluation and implementation from the information available at the time of the estimate. Actual construction and engineering services costs will depend on competitive market conditions, actual labor and material costs, actual site conditions, productivity, project scope, final design and schedule, and other factors. As a result, the final project costs will vary from the estimates presented. Because of this, project feasibility and funding needs must be carefully reviewed prior to making specific financial decisions to help ensure proper project evaluation and adequate funding. It should be recognized that material prices are highly subject to variation as a result of shortages resulting from natural disasters, the economy, and other influential factors. Certain construction material commodities continue to increase or escalate in material pricing and are subject to market volatility. No other warranty, express or implied, is made.

10.4.4.2 Financial Inputs and Assumptions

Table 10-1 presents the key financial inputs and assumptions used in the evaluation.

Table 10-1. Financial Inputs and Assumptions
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

		Source
Interest Rate on Invested Funds:		
Operations	1.5%	County
Closure and Post-Closure	1.5%	County
Inflation Rate for Operations	2.4%	Congressional Budget Office, Consumer Price Index
Adjustable Service Fee Rates:		
Tipping (Disposal) Fee:[a]	$48/ton	Effective 2017, does not include refuse tax
	$53/ton	Effective 2027, does not include refuse tax
Disposal Growth Rate	2.0%	CH2M, based on historical data

Table 10-1. Financial Inputs and Assumptions
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

		Source
Public Works Trust Fund (PWTF) Loan (existing)	$113,066	2016 Payment
PWTF Loan (new)	$531,211	First year payment on new loan that starts in 2036 for New Landfill Cell Construction; assumed 20-year term and 0.5% interest rate with payment schedule matching current PWTF loan.
Closure Fund Collection	$1.82/ton	From 2017-2026
Post-Closure Fund Collection	$1.70/ton	From 2017-2026
Capital Outlay Reserve Fund Collection	$4.00/ton	From 2017-2026
Enterprise Fund Estimated End-of Year 2016 Account Balance	$3.7 million	County

[a] This is the disposal rate based on the current contract with Lewiston.

10.4.4.3 Financing of Major Construction Projects (Future)

Table 10-2 presents the costs and financing assumptions for the major construction project expected to occur during the economic evaluation period:

- Development of Cells E1a and E1b
- New Entrance/support Facilities
- Cell E2 development
- New WTB

The table shows the engineer's opinion of cost in November 2014 dollars and in year of expenditure dollars where costs have been escalated at a rate of 2.4 percent per year for inflation. It is assumed that the County will pay for these capital improvements out-of-pocket when possible[1].

Table 10-2. Financing of Major Construction Projects
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Description	2014$	Year of Expenditure	Year of Expenditure Cost
Cell E1a Development			
Engineering	$600,000	2034	$964,000
Construction w/Sales tax	$4,382,780	2035	$7,212,000
Cell E1b Development			
Engineering	$85,000	2038	$150,000
Construction w/Sales tax	$223,336	2039	$404,000
New Entrance/Support Facilities			
Engineering	$970,223	2041	$1,841,000

[1] The County would like to retain the option of applying for and receiving a PTWF in case of unexpected changes in cash reserves. The debt service for these loans is typically over a 20-year term at an interest rate of 0.5 percent. Typically, municipalities need to provide a down payment of at least 20 percent to qualify for these loans. Another option is to receive a bank loan for the municipality at an assumed rate of 5 percent for a 20-year term.

Table 10-2. Financing of Major Construction Projects
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Description	2014$	Year of Expenditure	Year of Expenditure Cost
Construction w/Sales tax	$5,390,125	2042	$10,471,000
Cell E2 Development			
Engineering	$360,000	2042	$699,000
Construction w/Sales tax	$3,432,528	2043	$6,828,000
New WTB			
Engineering	$1,251,900	2057	$3,471,000
Construction w/Sales tax	$6,955,000	2058	$19,747,000

10.4.4.4 Closure and Post-Closure Fund Contributions

Separate financial fund models were developed for closure and post-closure care to meet financial assurance requirements under the stated rules. Closure and post-closure care cost estimates were updated for this evaluation in November 2014 dollars. Fund balances accrued at an assumed annual rate of return of 1.5 percent.

Contributions are calculated so that the fund balance is built to provide sufficient funds to pay for post-closure activities when the landfill closes and through the 35-year post-closure care period. The post-closure fund also has been setup for annual contributions every year through full development of the landfill. In the event that a premature closure was to happen, the $4.5 million balance in the post-closure fun would be sufficient to cover 35 years of post-closure costs: in other words, the post-closure fund is fully funded at this time. This assumes that current annual contributions of $1.50 per ton to the post-closure fund will increase to $1.70 per ton starting in 2017.

Forecast closure and post-closure cost summaries for the landfill are shown in Table 10-3. The current closure account has been set up to fund closure of Cells A-D (the current cells that are open), in the event the landfill needs to prematurely close. Premature closure funding has been set up to occur 2015, without any further account contributions between now and then.

The final closure system assumed for this economic evaluation update is the standard, prescribed composite cover system. The County will continue to pursue the possibility of using an alternative [evapotranspiration (ET)] cover in lieu of the standard cover. Any potential costs savings of using an alternative cover will be evaluated as discussions for use of the alternative cover system progress with the regulatory agencies.

Table 10-3. Closure and Post-Closure Care Costs
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

	Cost Estimate	Year of Expenditure	Year of Expenditure Cost
Closure:			
Full Landfill Buildout (Cells A-D)	$9,831,930 (2014$)	2059	$28,513,000
Annual Account Contributions:			
Initial Year:	---	2015	$0
Final Year:	---	2058	$809,834

Table 10-3. Closure and Post-Closure Care Costs
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

	Cost Estimate	Year of Expenditure	Year of Expenditure Cost
Post-Closure[a,b]:			
Annual Account Contributions:			
Initial Year	$189,000 (2014$)	2060	$576,182
Final Year	$114,000 (2014$)	2094	$778,397

[a] Premature closure is included as it relates to closing ACRL prematurely (early) under its current development extent (Cells A-D). The closure account balance at the end of 2015 was approximately $4.5 million. It is anticipated that this balance will grow with interest to more than $25 million in the year of the proposed expenditure (2059), and therefore, no additional closure fund contributions are scheduled until after Cell D is opened and starts filling with waste in 2016.

[b] Post-Closure costs are in 2014$ for two separate periods: Years 1-20 and 21-35. Oversight and monitoring are assumed to decrease after the first 10 years of post-closure care.

10.4.4.5 Financial Forecast Summary

A summary of the financial forecast through 2021 is presented in Table 10-4. The forecast projects actual revenues and expenses per year.

10.4.5 Recommendations and Implementation

Financing of the solid waste system should continue to be through user fees at rates that will support current and future development, in accordance with this plan. These fees should be supplemented through any available grants and sale of recyclable commodities.

In summary, it is recommended that the County continue with routine updates of the financial model to evaluate impacts on the operations account balance, accounting for planned and unplanned expenses and revenues, in-coming tonnages, price indices (tipping and hauling fees), contract conditions with their regional partner Lewiston, and any other factor that would impact the financial status and outlook for the County. Routine annual updates to the model are recommended.

The solid waste disposal system is supported by revenues from user fees. The County will continue to apply for grant monies to support solid waste management activities such as recycling, MRW diversion, litter programs, and community education programs, where applicable. Continue discussions with regional solid waste partners for setting rate schedules that will allow the next phase of development (Cells E1 and E2). The funding for the new development is assumed to be financed by the solid waste account and public works trust fund.

Table 10-4. Solid Waste Fund Financial Forecast (2016–2021)

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

	2016	2017	2018	2019	2020	2021
Beginning Cash	$3,552,254	$3,700,000	$3,885,529	$4,079,765	$4,316,519	$4,544,625
Revenues						
Grants, Refuse Tax, and Recycling Commodity Sales						
Coordinated Prevention DOE Grant	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000
Refuse Tax Collected	$58,300	$69,300	$70,700	$72,100	$73,600	$75,100
Subtotal Grants/Refuse Tax	$83,300	$94,300	$95,700	$97,100	$98,600	$100,100
Fees and Charges						
Tipping Fees - Daily (cash) – 15% of Fee	$324,000	$385,200	$392,850	$400,800	$408,750	$417,000
Tipping Fees - Charge Accts. – 85% of Fee	$1,836,000	$2,182,800	$2,226,150	$2,271,200	$2,316,250	$2,363,000
Subtotal Fees and Charges	$2,160,000	$2,568,000	$2,619,000	$2,672,000	$2,725,000	$2,780,000
Haul Contract Fees	$210,790	$0	$0	$0	$0	$0
Total Revenues	$2,454,090	$2,662,300	$2,714,700	$2,769,100	$2,823,600	$2,880,100
Expenses						
Landfill Operating Expenses						
Administration	$69,000	$70,000	$72,000	$74,000	$76,000	$77,000
Onsite Maintenance	$43,000	$44,000	$45,000	$46,000	$47,000	$48,000
Heavy Equipment Rental - no inflation	$418,000	$428,000	$438,000	$448,000	$459,000	$470,000
Labor and Benefits	$354,000	$363,000	$372,000	$380,000	$390,000	$399,000
Supplies	$15,000	$15,000	$16,000	$16,000	$17,000	$17,000
Office Equipment Rental	$8,000	$8,000	$8,000	$8,000	$8,000	$8,000
Utilities (e.g., Gas, Electricity, Phone, Internet)	$21,000	$22,000	$23,000	$23,000	$24,000	$24,000
Miscellaneous	$5,000	$5,000	$6,000	$6,000	$6,000	$6,000
Communication/PBX	$4,000	$4,000	$5,000	$5,000	$5,000	$5,000
County Prosecuting Attorney	$13,000	$13,000	$14,000	$14,000	$14,000	$15,000
Interfund - Land Lease	$50,000	$52,000	$53,000	$54,000	$55,000	$57,000
Sewer Treatment Fee	$26,000	$26,000	$27,000	$28,000	$28,000	$29,000
County Professional Services	$14,000	$14,000	$15,000	$15,000	$15,000	$16,000

Table 10-4. Solid Waste Fund Financial Forecast (2016–2021)

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

	2016	2017	2018	2019	2020	2021
Insurance	$86,000	$88,000	$90,000	$92,000	$94,000	$97,000
Data Processing	$47,000	$48,000	$50,000	$51,000	$52,000	$53,000
Moderate Haz Waste						
Labor and Benefits	$77,000	$79,000	$81,000	$83,000	$85,000	$87,000
Supplies	$13,000	$13,000	$14,000	$14,000	$14,000	$15,000
Equipment Rental	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Maintenance	$4,000	$4,000	$5,000	$5,000	$5,000	$5,000
Miscellaneous	$4,000	$4,000	$5,000	$5,000	$5,000	$5,000
Disposal	$30,000	$31,000	$32,000	$32,000	$33,000	$34,000
Capital Outlay	$11,000	$11,000	$11,000	$12,000	$12,000	$12,000
Engineering Professional Services	$3,000	$3,000	$3,000	$3,000	$4,000	$4,000
Groundwater Monitoring						
Labor and Benefits	$30,000	$31,000	$32,000	$32,000	$33,000	$34,000
Supplies	$4,000	$4,000	$5,000	$5,000	$5,000	$5,000
Lab Services	$32,000	$33,000	$34,000	$35,000	$35,000	$36,000
Equipment Rental	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Miscellaneous	$5,000	$5,000	$6,000	$6,000	$6,000	$6,000
Capital Outlay	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Engineering Professional Services	$45,000	$46,000	$47,000	$48,000	$50,000	$51,000
Landfill Gas Monitoring						
Labor and Benefits	$31,000	$32,000	$33,000	$33,000	$34,000	$35,000
Supplies	$5,000	$5,000	$6,000	$6,000	$6,000	$6,000
Equipment Rental	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Electricity	$8,000	$8,000	$8,000	$8,000	$8,000	$8,000
Maintenance	$4,000	$4,000	$5,000	$5,000	$5,000	$5,000
Miscellaneous	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Capital Outlay	$0	$0	$0	$0	$0	$0

Table 10-4. Solid Waste Fund Financial Forecast (2016–2021)

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

	2016	2017	2018	2019	2020	2021
Engineering Professional Services	$21,000	$22,000	$23,000	$23,000	$24,000	$84,102
Waste Haul						
Labor and Benefits	$2,000	$0	$0	$0	$0	$0
Contract (M.L. Albright) Payment	$191,920	$0	$0	$0	$0	$0
Equipment Rental	$27,000	$0	$0	$0	$0	$0
Maintenance	$16,000	$0	$0	$0	$0	$0
Capital Outlay	$13,000	$0	$0	$0	$0	$0
Subtotal Landfill Operating Expense	$1,762,920	$1,543,000	$1,592,000	$1,623,000	$1,662,000	$1,761,102
Bond Payment, Taxes, Interest, Permit Fees						
Refuse Tax	$58,300	$69,300	$70,700	$72,100	$73,600	$77,400
Operating Permit	$12,000	$13,000	$14,000	$14,000	$14,000	$15,000
Operating Permit – Ecology	$15,000	$16,000	$17,000	$17,000	$18,000	$18,000
Intergovernmental Tax/Use - B&O	$113,066	$112,545	$112,024	$111,503	$110,982	$110,461
Subtotal Bond Payment, Taxes, Interest, Permit Fees	$32,400	$38,520	$39,285	$40,080	$40,875	$42,975
Capital Expenditures						
Labor and Benefits	$15,000	$15,000	$16,000	$16,000	$17,000	$17,000
Supplies	$26,000	$26,000	$27,000	$28,000	$28,000	$29,000
Equipment	$16,000	$16,000	$17,000	$17,000	$18,000	$18,000
Capital Improvements	$54,000	$55,000	$56,000	$58,000	$59,000	$60,000
Old Landfill Engineering/Consulting - Remediation	$81,000	$82,000	$84,000	$50,000	$59,000	$60,000
Landfill Engineering/Consulting - General	$51,000	$52,000	$54,000	$55,000	$56,000	$58,000
Landfill New Cell Engineering and Construction	$50,000	$25,000	$0	$0	$0	$0
Subtotal Capital Expenditures	$304,000	$282,000	$265,000	$236,000	$249,000	$254,000
Future Capital Outlay						
Capital Reserve Fund	$0	$214,046	$218,327	$222,693	$227,147	$231,690
Landfill Closure/Post-Closure						

Table 10-4. Solid Waste Fund Financial Forecast (2016–2021)

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

	2016	2017	2018	2019	2020	2021
Landfill Closure	$0	$97,391	$99,339	$101,325	$103,352	$105,419
Landfill Post-Closure	$78,693	$90,970	$92,789	$94,645	$96,538	$98,468
Subtotal Landfill Closure/Post-Closure	$78,693	$188,360	$192,128	$195,970	$199,890	$203,887
Total Expenditures	$2,376,379	$2,476,771	$2,520,464	$2,532,347	$2,595,494	$2,710,941
Revenues Minus Expenditures	$77,711	$185,529	$194,236	$236,753	$228,106	$169,159
Ending Balance	$3,629,965	$3,885,529	$4,079,765	$4,316,519	$4,544,625	$4,713,784
Total Landfill Disposal Amount (tons)	52,462	53,511	54,582	55,673	56,787	57,923
Tip Fee ($/ton)	$42.67	$49.73	$49.73	$49.73	$49.73	$49.73
Lewiston Disposal Amount (tons)	26,756	N/A	N/A	N/A	N/A	N/A
Haul Fee ($/ton)	$185.59	N/A	N/A	N/A	N/A	N/A

Note: N/A = not applicable

SECTION 11

Summary of Recommendations and Implementation Schedule

In Chapters 4 through 10, each element of the solid waste system was examined in detail, and various options and actions were evaluated and recommended. This summary presents the recommendations for the next 6 years (Table 11-1). The recommendations and planning requirements for the next 20 years are outlined in Table 11-2.

An overview of the findings and recommendations of this SWMP update is provided in the following sections and organized in the same sequence as the plan.

11.1 Solid Waste Programs

11.1.1 Waste Collection

The current system appears to be functioning adequately. However, the County should continue to work with local communities to help evaluate the need for curbside collection of recyclables and yard waste, to encourage diversion of the waste from ACRL.

11.1.2 Transfer of Wastes

The improvements made to the transfer station in Lewiston should serve the City of Lewiston and Nez Perce County residents for the next several years. No transfer stations for Asotin County are currently planned or are warranted in the next several years. Long-range planning (beyond the closure of the landfill in 2033) is evaluating the option of transfer and long-haul of waste to a regional repository, among other waste management options.

11.1.3 Waste Exportation/Importation

The County should continue to provide waste disposal services for its current waste partners that dispose of waste at ACRL. Importation of other wastes should be carefully considered as this will affect the landfill service life. Export of waste should not be considered until the need for closure of ACRL, unless there are system changes or regulatory drivers that would necessitate an early closure of the landfill.

11.1.4 Landfilling and Volume Reduction

The County should continue to own and manage the current landfill, in accordance with federal, state, and local health district regulations. In order to satisfy the requirements of WAC 173-351, various environmental protection measures are being implemented at the landfill. These include groundwater monitoring, landfill gas management, leachate control, and operations that control vectors and provide for higher levels of safety for workers, the public, and the environment.

The County should evaluate the need for use of ADC materials and peeling off daily cover soil to help reduce the airspace taken up by soil. Additionally, the County should consider installing a yard waste collection bin or building a stockpile of some kind near the entrance facility to recycle yard waste (excluding organic and yard wood waste) rather than disposing it in the landfill.

11.2 Special Wastes

11.2.1 Tires

Sophisticated mechanical or chemical processing systems to process tires at ACRL are not feasible because of the relatively low numbers of used tires disposed of at the landfill (economy of scale). Tires are not currently considered a problem at ACRL as a result of the high tipping fee for excessive tire disposal by residents and businesses. Additionally, the tire take-back programs offer alternatives to disposal that promote reuse and recycling.

11.2.2 Refrigeration Units/Chlorofluorocarbons

The County should continue to process refrigeration units that contain CFCs, or direct the public to use the services of a refrigeration service center.

11.2.3 Electronics

The County has an E-Cycle collection site at ACRL. The County should continue to provide this collection location and should continue to implement the E-Cycle Washington program as required under a Washington State law (Chapter 70.95N RCW), and work with local recycling agencies, private retailers, and Ecology to expand the types of e-wastes collected under the program.

11.2.4 Biohazardous and Wastewater Treatment Wastes

Only minor amounts of biohazardous wastes are disposed of at ACRL. Most major hospitals and clinics in the area contract with private entities for disposal of these waste types. The current process of co-composting the domestic wastewater treatment sludge with yard waste at the Clearwater Composting facility is the best option for managing these wastes. Wastewater treatment sludges are co-composted with yard waste at Clearwater Composting. The end-product is a beneficial reuse material that can be used for soil amendments, planting, and agricultural purposes. Continue to provide disposal services for the minor amounts of biohazardous and grit materials that are disposed of at the landfill.

11.3 Moderate Risk Waste Management

Continue to provide MRW waste collection services to divert these types of waste from the landfill. Options to enhance this program include expanding the household and public education outreach, expanding the collection sites with additional sponsored events, and continuing to provide technical assistance to businesses (and management of waste for CESQG).

11.4 Waste Reduction, Recycling, and Organics Management

Waste reduction and recycling are the first two solid waste management priorities. However, due to limited County funds, options were focused on the following areas:

- Public Education Programs
- Expansion of Organics Management Efforts
- Construction Materials Program
- Reduce Contamination at Drop Box Locations

These are areas that can build off existing infrastructure and programs and also address some of the largest components of the disposed waste stream.

Increased public education efforts can result in both source reduction and improved reuse, recycling, and disposal activities. The County can utilize existing fact sheets and the ACRL's website (which it plans

to update) to be the vehicle for increased information. The County will also explore opportunities to include information in a billing insert and distributed with regular billing. Existing online resources can easily be added the website, fliers, and billing inserts. Public Service Announcements may be another way to reach a larger section of the community.

The existing network of yard waste programs should continue. There is a heavy incentive for residents to use these programs as there is no charge for disposal of these types of wastes at ACRL or through the Clearwater Compost Facility (depending on residency). Efforts to better understand the composition of the disposed waste stream (performing a waste characterization) will help to inform the effectiveness of these programs. Increase source reduction of food waste can be achieved by partnering with the local food bank and providing public education.

Addition of a Construction Materials program is an area that could increase the County's reuse and recycling opportunities. However, this has not been economical based on lack of existing markets.

The existing network of drop box locations should be continued with an increased focus on reducing contamination levels by increasing public awareness.

11.5 Enforcement, Administration, and Financial Assurance

The County should continue to administer the landfill, MRW, and recycling programs. It is recommended that the SWAC continue to be actively involved with the development and direction of solid waste programs. The next update of the SWMP should begin early in the fourth year after the adoption of this plan, so that the update can be completed in a timely manner.

Asotin County should continue to investigate solid waste complaints. Public education on proper disposal of solid waste should be enhanced in an effort to reduce illegal dumping. ACHD should work closely with the County to assure that facilities are operated in compliance with applicable rules. This should include permitting, periodic inspections, and assistance with adequate monitoring and operational procedures. The County has an unsecured ordinance (Ordinance 86-35) that has been difficult at best to enforce at the landfill. The County should evaluate options on how best to enforce this ordinance without placing undue pressure on its scale attendants.

The landfill user tipping fee should continue to finance the operation of the waste disposal system and should be supplemented as possible by the sale of recyclable commodities and state grants. The County should continue with routine updates of the financial model to evaluate impacts on the operations account balance, accounting for planned and unplanned expenses and revenues, in-coming tonnages, price indices (tipping and hauling fees), contract conditions with their regional partner Lewiston, and any other factor that would impact the financial status and outlook for the County. The County should continue discussions with regional solid waste partners for setting rate schedules that will allow the next phase of development (Cells E1 and E2). The funding for the new development is assumed to be financed by the solid waste account and public works trust fund.

11.6 Summary

This solid waste management plan update has been prepared to comply with the *Washington State Solid Waste Management–Reduction and Recycling Act* (Chapter 70.95 RCW). Asotin County and its waste partners have implemented several beneficial methods to curb waste from entering the waste stream and ultimately entering the landfill. The County and its partners have managed to reduce waste through curbside recycling, curbside yard waste pick up, and centralized drop stations for recyclables.

Table 11-1 provides a summary of recommendations and implementation schedule of opportunities over the next 6 years (through 2015). Table 11-2 presents a list of future projects that are on the horizon for the next 20 years.

Table 11-1. Summary of Recommendations and Implementation Schedule for 6 Years
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Element of the Solid Waste System	2017	2018	2019	2020	2021	2022
A. Waste Reduction, Recycling, Organics, and Special Wastes						
1. Waste reduction programs to motivate use of waste reduction techniques	X	X	X	X	X	X
2. Seek Ecology grants with support from communities	X	X	X	X	X	X
3. Encourage recycling and those recyclers to recycle additional items	X	X	X	X	X	X
4. Recycling drop box collection	X	X	X	X	X	X
a. Evaluate effectiveness of existing drop box locations in the County, reduce contamination, and optimize	X	X	X	X	X	X
b. Add additional recyclable collection as they become more of a commodity with market conditions (e.g., construction materials)	X	X	X	X	X	X
5. Perform waste characterization audit to better understand disposed stream and effectiveness of existing programs				x		
6. Continue the organic and yard waste (clean wood) recycling program at ACRL.	X	X	X	X	X	X
7. Evaluate the feasibility of expanding existing yard waste (clean wood) recycling program at ACRL.	X	X				
B. Collection, Transfer, and Import/Export						
1. Interlocal agreements/contracts with adjacent counties should be negotiated for wastes coming into or going out of County	X	X	X	X	X	X
2. Encourage recycling at all drop box sites	X	X	X	X	X	X
C. Landfilling and Volume Reduction						
1. County should continue to own and manage the current landfill	X	X	X	X	X	X
2. Encourage the use of recycling opportunities at all solid waste stations	X	X	X	X	X	X
3. Evaluate the need for ADCs and other means to maximize landfill airspace	X	X	X	X	X	X
D. Special Wastes						
1. Look for alternatives for tires (e.g., shredding and recycling) as technology advances	X	X	X	X	X	X
2. Continue to recover CFCs from refrigerators	X	X	X	X	X	X
3. Closely monitor disposal of biohazardous wastes and sludges	X	X	X	X	X	X
4. Evaluate the potential to dispose/recycle of other special wastes, if a need arises	X	X	X	X	X	X
E. Moderate Risk Waste Management						
1. Continue to develop public outreach programs to support MRW diversion from the landfill waste stream	X	X	X	X	X	X

Table 11-1. Summary of Recommendations and Implementation Schedule for 6 Years
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Element of the Solid Waste System	2017	2018	2019	2020	2021	2022
2. Continue to look at ways to expand the MRW collection, with continued sponsorship of collection events and mobile collection systems	X	X	X	X	X	X
F. Enforcement, Administration and Financial Assurance						
1. The SWAC should continue to actively review and comment upon the planning administration of the solid waste system.	X	X	X	X	X	X
2. Financing of solid waste disposal system should continue to be from user fees, grants, surcharges (as appropriate), and the sale of recyclables.	X	X	X	X	X	X
3. Continue routine updates of the financial model for financial assurance and work closely with the waste partners for setting tipping rates in the near term to pay for the development of Cell D out of the solid waste account rather than financing	X	X	X	X	X	X

Table 11-2. 20-Year Future Project Needs, 2017–2036
Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Task	Year(s)
Update Solid Waste Management Plan	2021
Update Solid Waste Management Plan	2026
Update Solid Waste Management Plan	2031
Cell E Construction (and CM)	2035

SECTION 12

References

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Figures

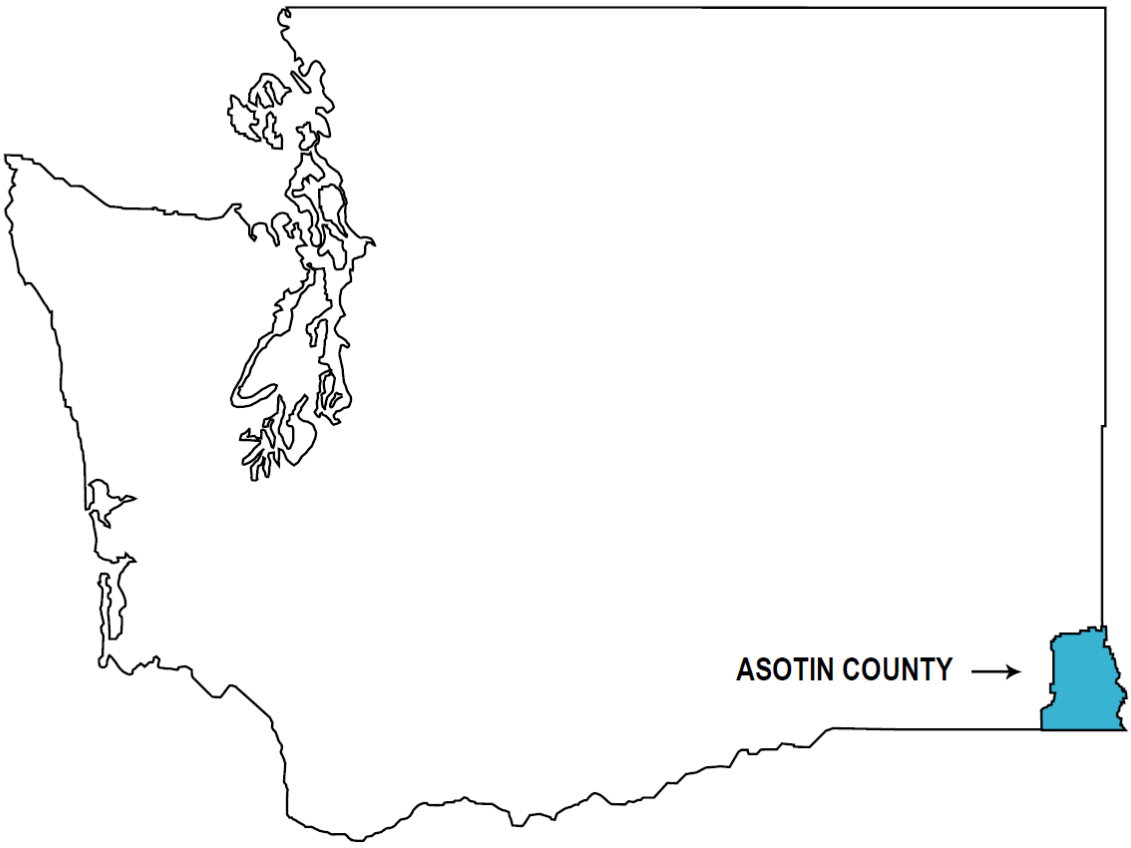

Figure 2-1. Location of Asotin County

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

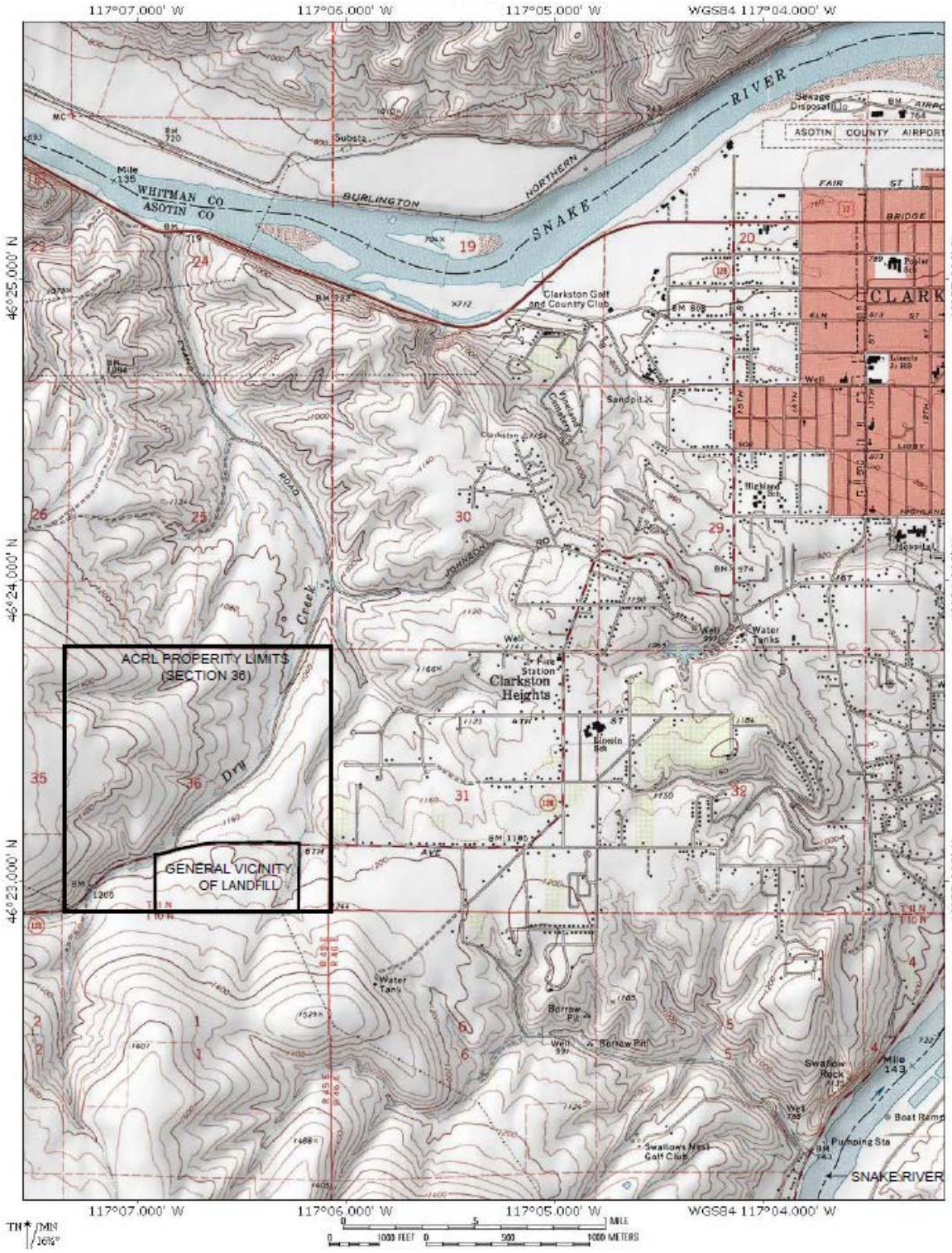

Figure 2-2. Vicinity Map of Asotin County Regional Landfill

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

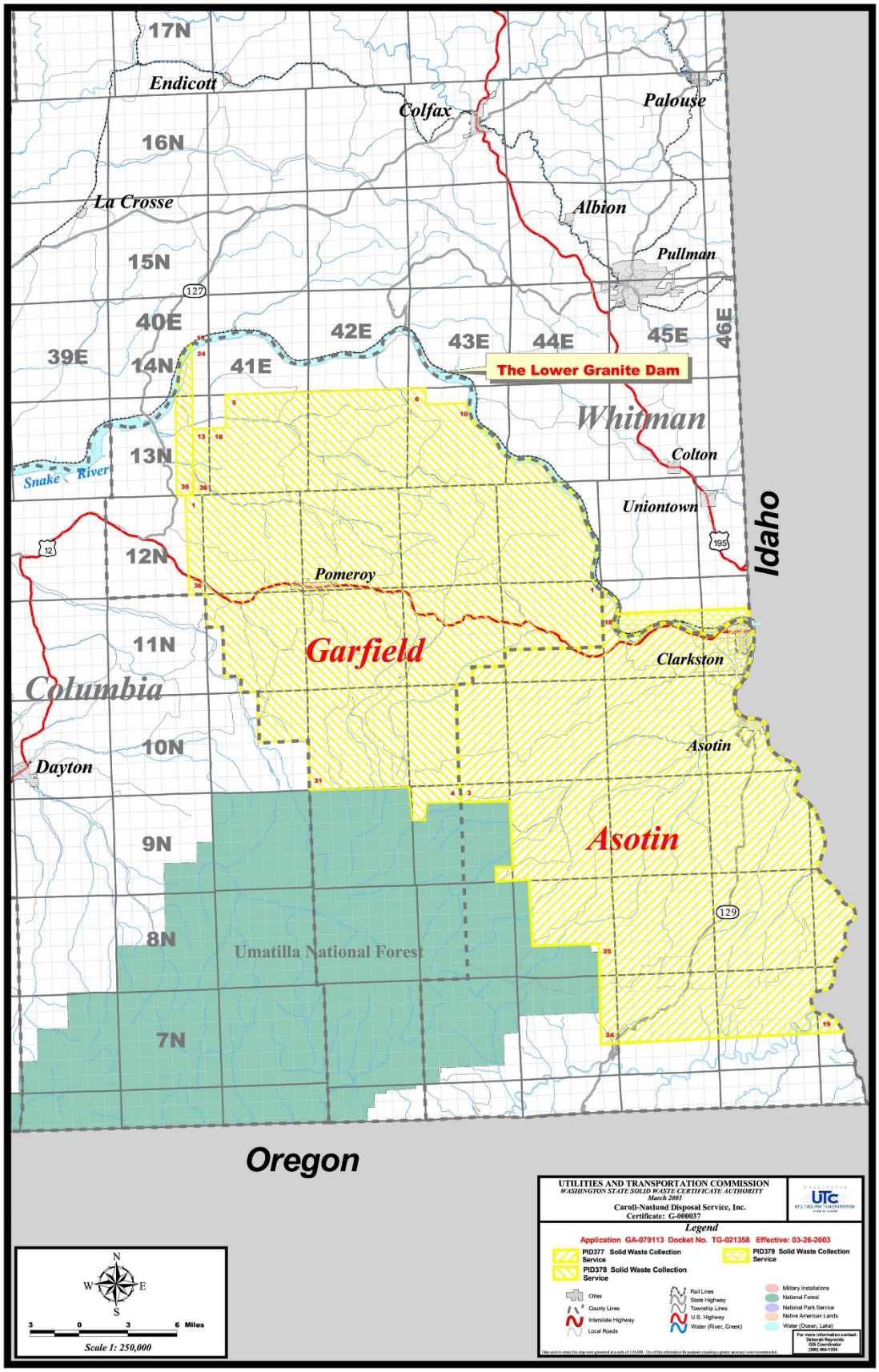

Figure 4-1. WUTC Map of Franchise Haulers

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

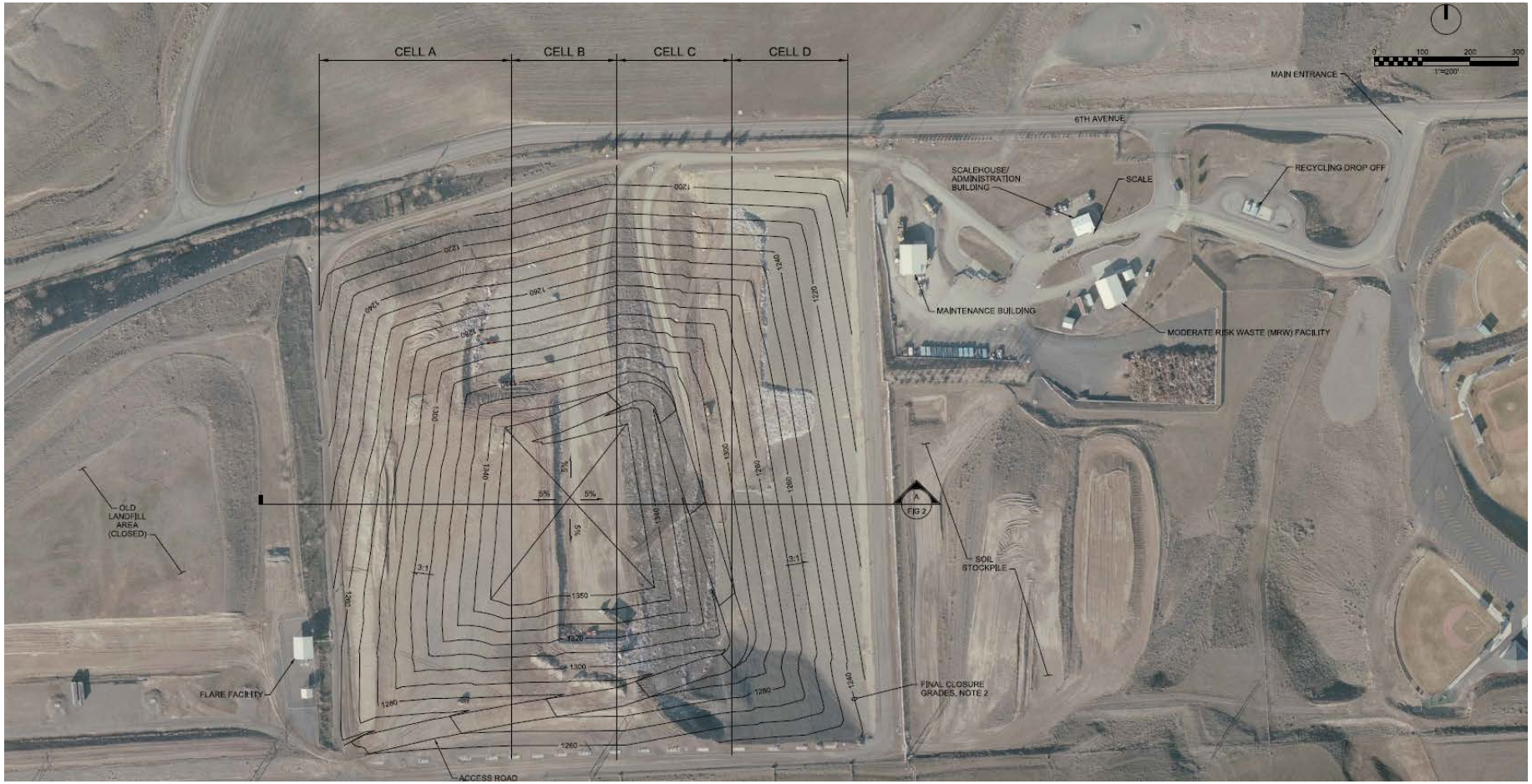

Figure 6-1. Landfill Site Plan

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

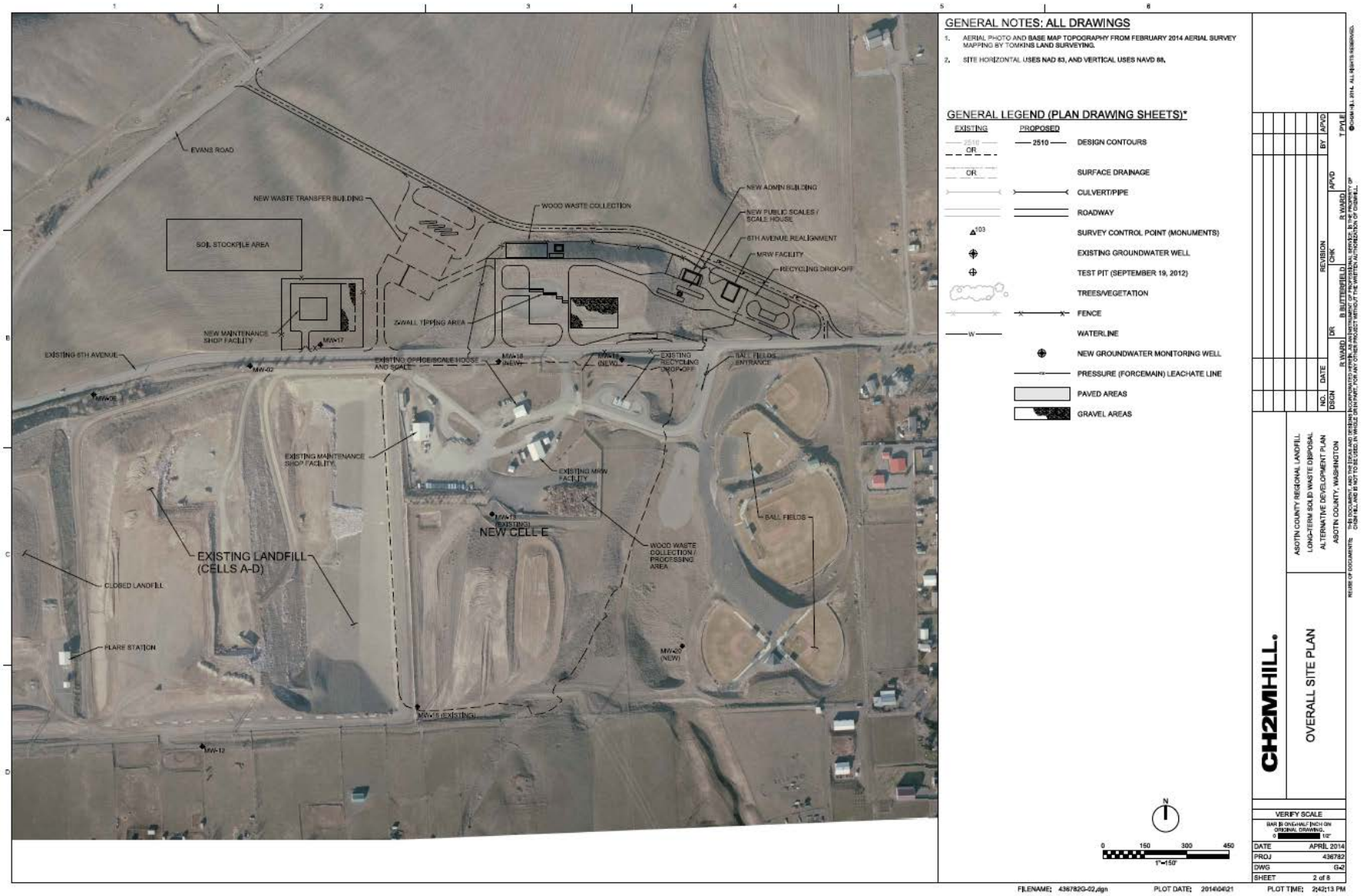

Figure 6-2. Future ACRL Solid Waste Option

Asotin County Solid Waste and Moderate Risk Waste Management Plan 2017 Update

Asotin County

2017 Solid Waste Planning Package

Tab 2: Interlocal Agreements from Participating Jurisdictions

INTERLOCAL AGREEMENT
BETWEEN
THE CITY OF CLARKSTON
AND
ASOTIN COUNTY
FOR
THE SOLID WASTE MANAGEMENT PLAN (2017 UPDATE)

THIS AGREEMENT is made and entered into this 11th day of Dec., 2017, by and between the City of Clarkston ("City"), and Asotin County ("County"), (herein jointly referred to as "the parties") under RCW 39.34, authorizing interlocal agreements for jointly exercising the authority to establish a comprehensive solid waste management plan. No separate legal or administrative agency is established, no financing or budget will be needed, no property will be acquired and the County is the administrator for the purposes of the statute, and;

WHERAS; the purpose of this Agreement is to engage in an integrated and coordinated effort for preparing, adopting, and implementing the 2017 update to the parties Solid Waste Management Plans, herein referred to as the "Solid Waste Management Plan," and

WHEREAS; pursuant to the provisions of *RCW 70.95 et seq* each county within the state, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of three options regarding implementation of the City mandatory solid waste management plan:

WHEREAS; The City of Clarkston has been in cooperation with the County for a coordinated, comprehensive solid waste management plan and;

WHERAS; the City has considered and rejected the options of preparing its own plan to be integrated into the county plan, and considered and rejected the option for participating in a joint city-county plan for the reasons set forth below;

WHERAS; the City finds that tax payer resources will be conserved, and duplication of efforts will be eliminated, by authorizing the County to prepare a plan for the City's solid waste management plan for inclusion in the comprehensive county plan;

WHEREAS: the duration of this agreement is the duration of the County's comprehensive plan or a change in the solid waste management portion of the County's comprehensive plan:

THEREFORE BE IT RESOLVED: that the City and County have cooperated in a comprehensive solid waste management plan and agree that City authorizes the county to prepare a plan for the City's solid was management for inclusion in the comprehensive County Solid Waste Management Plan.

BE IT FURTHER RESOLVED; that this agreement may be terminated by 30 days notice from the City to the County, but termination by the City will not change the County's comprehensive plan;

This agreement will become effective on the latest date signed below,

If one of these conditions is found to be invalid because of a court ruling or new legislation, the remaining terms will remain in effect.

Agreed by the Parties as signified by the signatures of the elected officials below.

CITY OF CLARKSTON:

Monika Lawrence

Monika Lawrence, Mayor

Attest:

Steve Austin, City Clerk

Date: 11/13/17

APPROVED TO AS FORM:

Todd Richardson
City Attorney
WSBA#30237

ASOTIN COUNTY BOARD OF COMMISSIONERS:

Jim Jeffords, Chairman

Attest:

Vivian Bly, Clerk of the Board

Date: 12-11-2017

APPROVED AS TO FORM:

Jane Bremner Risley
Chief Deputy Prosecuting Attorney
WSBA #20791

INTERLOCAL AGREEMENT
BETWEEN
THE CITY OF ASOTIN
AND
ASOTIN COUNTY
FOR
THE SOLID WASTE MANAGEMENT PLAN (2017 UPDATE)

THIS AGREEMENT is made and entered into this 11th day of Dec, 2017, by and between the City of Asotin ("City"), and Asotin County ("County"), (herein jointly referred to as "the parties") under RCW 39.34, authorizing interlocal agreements for the jointly exercising the authority to establish a comprehensive solid waste management plan. No separate legal or administrative agency is established, no financing or budget will be needed, no property will be acquired and the County is the administrator for the purposes of the statute, and;

WHERAS; the purpose of this Agreement is to engage in an integrated and coordinated effort for preparing, adopting, and implementing the 2017 update to the parties Solid Waste Management Plans, herein referred to as the "Solid Waste Management Plan," and

WHEREAS; pursuant to the provisions of *RCW 70.95 et seq* each county within the state, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of three options regarding implementation of the City mandatory solid waste management plan:

WHEREAS; The City of Asotin has been in cooperation with the County for a coordinated, comprehensive solid waste management plan and

WHERAS; the City has considered and rejected the options of preparing its own plan to be integrated into the county plan, and considered and rejected the option for participating in a joint city-county plan for the reasons set forth below;

WHERAS; the City finds that tax payer resources will be conserved, and duplication of efforts will be eliminated, by authorizing the county to prepare a plan for the city's solid waste management plan for inclusion in the comprehensive county plan;

WHEREAS: the duration of this agreement is the duration of the County's comprehensive plan or a change in the solid waste management portion of the County's comprehensive plan:

WHEREAS; the duration of this agreement is the duration of the County's comprehensive plan or a change in the solid waste management portion of the County's comprehensive plan;

THEREFORE BE IT RESOLVED: that the City and County have cooperated in a comprehensive solid waste management plan and agree that City authorizes the county to prepare a plan for the City's solid was management for inclusion in the comprehensive County Solid Waste Management Plan.

BE IT FURTHER RESOLVED; that this agreement may be terminated by 30 days notice from the City to the County, but termination by the City will not change the County's comprehensive plan;

This agreement will become effective on the latest date signed below,

If one of these conditions is found to be invalid because of a court ruling or new legislation, the remaining terms will remain in effect.

Agreed by the Parties as signified by the signatures of the elected officials below.

FOR:

CITY OF ASOTIN:

Vikki Bonfield, Mayor

Attest:

Tiffany Rogers, City Clerk

Date: 11/27/17

APPROVED TO AS FORM:

Jane Richards ,
City Attorney
WSBA # 33542

ASOTIN COUNTY BOARD OF COMMISSIONERS:

Jim Jeffords, Chairman

Attest:

Vivian Bly, Clerk of the Board

Date: 12-11-2017

APPROVED AS TO FORM:

Jane Bremner Risley
Chief Deputy Prosecuting Attorney
WSBA #20791

Asotin County

2017 Solid Waste Planning Package

Tab 3: Evidence of Solid Waste Advisory Committee Participation

5. Adjourn .....

Asotin County SWMP SWAC
Meeting #1: July 11, 2017

Name	Signature	Email
Lyndsey Lopez		Lyndsey.Lopez@CH2M.com
Stephen Becker		acrl@clarkston
Chris Davies		cdavies@cityofLewiston.org
Jim Jeffords		jjeffords@co.asotin.wa.us
Chelsea Cannard		ccannard@ac-hd.org
Mark Lawson		MLawson@cableone.net
Larrah Charlo	Larrah Charlo	Nasiunddisposal@gmail.com
Matt Lynch		matt-acrl@clarkston.com
Monika Lawrence	Monika Lawrence	clarkstonmayor@cableone.net
Jason Heath		jason_heath@pacific-steel.com

SWAC Sept. 19, 2017

Asotin County - [signature]

Citizen - ✓ Mark [signature]

Asotin Co. Commissioner - Jim Jeffords

Naslund Disposal Lauran Charlo

PACIFIC STEEL & RECYCLING DAN GANDY

Asotin County Health Dist. Brady Woodbury

Dept of Ecology, W2R Meagan Gilmore

Asotin County

2017 Solid Waste Planning Package

Tab 4: Preliminary State Environmental Policy Act Documents

BUILDING & PLANNING DEPARTMENT

KARST J. RIGGERS
BUILDING OFFICIAL
COUNTY PLANNER

P.O. Box 610
Asotin, WA 99402
PHONE (509) 243-2020
Fax: (509) 243-2019

WAC 197-11-625 Addenda to an existing Determination of Nonsignificance (DNS)

DETERMINATION OF NONSIGNIFICANCE
ADDENDA

Description of Proposal: **Addendum to the Asotin County Solid Waste Management Plan 2010 Update.**

Proponent: **Asotin County Public Works Department**

Location of proposal, including street address, if any: **The Asotin County Regional Landfill is located at 2901 6th Avenue, within Section 36 of Township 11N., Range 45E, Asotin County, WA.**

Lead agency: **Asotin County**

The lead agency for this proposal has determined that it does not have a probable significant adverse impact of 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 proposal is a Non-project Action.

__X___ There is no comment period for this DNS Addenda.

_____ This DNS is issued under 197-11-340(2). The lead agency will not act on this proposal for 15 days from the date below.

Responsible Official: Karst Riggers

Position/Title: Building Official/Planner Phone: (509) 243-2020

Address: P.O. Box 610, Asotin, WA 99402

Date: 8-8-16 Signature:

Asotin County

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Tab 5: Washington Utilities and Transportation Commission Cost Assessment

COST ASSESSMENT QUESTIONNAIRE
for local solid waste management planning

Please provide the information requested below:

PLAN PREPARED FOR THE COUNTY OF: *Asotin*

PREPARED BY: *CH2M (as reviewed and approved by Asotin County)*

CONTACT TELEPHONE: *(503)736-4344* **DATE:** *January 2018*

DEFINITIONS

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

Throughout this document:

YR.1 shall refer to *2016***.**
YR.3 shall refer to *2018***.**
YR.6 shall refer to *2021***.**

Year refers to **calendar** (Jan 01 - Dec 31).

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

1.1 Population

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

YR.1 *22,150* YR.3 *22,329* YR.6 *22,599*

These estimates include populations for Asotin County. See below for other areas.

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

YR.1: *64,719* YR.3 *65,251* YR.6 *66,060*

These estimates include populations for Asotin County, Nez Perce County, and Garfield County. See Section 3.1 of the 2017 SWMP Update for a more detailed discussion of population under the jurisdiction area.

1.2 References and Assumptions

Population growth is based on intermediate forecasts from the Washington State Office of Financial Management and the U.S. Census Bureau.

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

2.1 Tonnage Recycled

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

YR. *3,411* YR.3 *3,549* YR.6 *3,766*

Recyclables tonnage is from Asotin County only. Data for other areas are unavailable.

2.2 Tonnage Disposed

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

YR.1 *52,834* YR.3 *54,969* YR.6 *58,333*

2.3 References and Assumptions
Waste disposal projections assume a 2 percent annual growth rate.

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

3.1 Waste Reduction Programs

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

Implemented:

- ***Variable-Can-Rate Systems*** *(Section 9 of the 2017 SWMP Update)*
  - City of Lewiston
  - City of Clarkston
- ***Recycling Drop-Boxes*** *(Section 4 of the 2017 SWMP Update)*
- ***Tire Take-Back Programs*** *(Section 7 of the 2017 SWMP Update)*
- ***E-Cycle Washington Program*** *(Section 7 of the 2017 SWMP Update)*
- ***Reuse Stores*** *(Section 9.1.1 of the 2017 SWMP Update)*
- ***Food Donations*** *(Section 9.1.5 of the 2017 SWMP Update)*

Waste reduction, reuse, and recycling programs impact issues that should be considered in solid waste management. Most of the waste reduction activities are described in greater detail in Sections 4, 7, and 9 of the 2017 SWMP Update.

Proposed:

- ***Internal Waste Reduction Practices:***
  - Implement in-house waste reduction programs and practices
- ***Evaluation and Expansion of Existing Programs:***
  - Expand list of commodities collected
  - Implement additional drop-off locations
  - Expand organics management program

- ***Waste Reduction Education:***
  - School and youth education
  - Business and institution education
  - Brochures and Publications
  - Displays at Local Events
  - Newspaper Articles
  - Web-page information
  - Assess providing recognition for waste reduction successes

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

IMPLEMENTED

Waste reduction programs are currently funded by city hauler programs.

PROPOSED

Proposed programs would be implemented with limited funding resources available under current city hauler programs, unless additional funding sources become available.

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

Implemented:
Waste reduction programs are currently funded by city hauler programs.

Proposed:

Proposed programs would be implemented with limited funding resources available under current city hauler programs, unless additional funding sources become available.

3.2 Recycling Programs

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

on which it is discussed. (Attach additional sheets as necessary.)

Implemented:

- ***Yard Waste Composting with Clearwater Composting***
- ***Recycling Drop Boxes***
- ***Tire Take-Back Programs***
- ***E-Cycle Washington Program***

See Sections 4 and 7 of the 2017 SWMP Update.

Proposed:

- ***Enhance Yard Waste Collection and Composting Program***
- ***Explore Additional Curbside Recycling Programs***

3.2.2 What are the costs, capital costs and operating costs for recycling programs implemented and proposed?

IMPLEMENTED

Recycling programs will be funded by a combination of tipping fees and CPG Grants from the Washington Department of Ecology.

PROPOSED

Proposed programs would be conducted with limited operating budgets used for current implementation of programs unless additional funding sources become available.

3.2.3 Please describe the funding mechanism(s) that will pay the cost of the programs in 3.1.2.

Implemented:
Recycling programs will be funded by a combination of tipping fees and CPG Grants from the Washington Department of Ecology.

Proposed:
Proposed programs would be conducted with limited operating budgets used for current implementation of programs unless additional funding sources become available.

3.3 Solid Waste Collection Programs

3.3.1 Regulated Solid Waste Collection Programs

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

WUTC Regulated Hauler Name: *Carroll-Naslund Disposal Service, Inc.*
G-permit #37

YR.1 *7,951* YR.3 *8,272* YR.6 *8,779*

RESIDENTIAL

- *5 Customers (City of Asotin, Unincorporated Asotin County, City of Pomeroy and surrounding areas of Garfield County, and Port of Wilma in Whitman County)*
- *Tonnage Collected: 5,566*

COMMERCIAL

- *1 Customer (City of Asotin)*
- *Tonnage Collected: 2,385*

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

Hauler Name: *Latah Sanitation Inc. and Sanitary Disposal, Inc. (City of Lewiston and Nez Perce County)*

YR.1 *26,450* YR.3 *27,519* YR.6 *29,203*

Note: Lewiston/Nez Perce County tonnages are a total of transfer haul from the transfer station and resident self-haul directly to the landfill. This likely includes self-haul from the City of Lapwai since they are not permitted to take MSW to the transfer station.

Hauler Name: *City of Clarkston*

YR.1 *6,230* YR.3 *6,482* YR.6 *6,878*

Hauler Name: *The remainder of the MSW is self-hauled directly to the landfill for disposal*

YR.1 *7,428* YR.3 *7,728* YR.6 *8,201*

3.4 Energy Recovery & Incineration (ER&I) Programs

Asotin County has not implemented this type of program.

3.5 Land Disposal Program

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

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

Landfill Name: *Asotin County Regional Landfill*
Owner: *Asotin County*
Operator: *Asotin County*

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

YR.1 *7,951* YR.3 *8,272* YR.6 *8,779*

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

YR.1 *40,108* YR.3 *41,728* YR.6 *44,282*

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

YR.1 *$2,099,320* YR.3 *$1,896,285* YR.6 *$2,058,077*

Dollar amounts account for Landfill Operating Expenses; Bond Payment, Taxes, Interest, and Permit Fees; and Capital Expenditures.

3.5.5 Please describe the funding mechanism(s) that will defray the cost of this component.
Operating costs will be funded by a combination of tipping fees and CPG Grants from the Washington Department of Ecology.

3.6 Administration Program

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

Budgeted Cost

YR.1 *$563,000* YR.3 *$590,000* YR.6 *$632,000*

Estimated budget includes administration, labor, and benefits for landfill operations, recycling, and MRW facility operations.

Funding Source
Administration costs will be funded by a combination of tipping fees and CPG Grants from the Washington Department of Ecology.

[1] Compacted cubic yards will be converted at a standard 600 pounds per yard. Loose cubic yards will be converted at a standard 300 pounds per cubic yard. Please specify an alternative conversion ratio if one is presently in use in your jurisdiction.

3.6.2 Which cost components are included in these estimates?

Majority of costs are related to staff needed to operate programs.

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

Administration costs will be funded by a combination of tipping fees and CPG Grants from the Washington Department of Ecology.

3.7 Other Programs

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

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

N/A

3.8 References and Assumptions (attach additional sheets as necessary)

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

Table 4.1.1 Facility Inventory

Facility Name	Type of Facility	Tip Fee per Ton	Transfer Station Location	Final Disposal Location	Total 2016 Tons Disposed	Total Revenue Generated (Tip Fee x Tons)
Asotin County Regional Landfill	Landfill	$42.67	---	Asotin County Regional Landfill	52,462	$2,238,554

Table 4.1.2 Tip Fee Components

Tip Fee by Facility	Surcharge	City Tax	County Refuse Tax	Transportation Cost	Operational Cost	Administration Cost	Closure/Post-Closure Costs
$42.67	---	---	$1.48	$4.86[a]	$33.00	$1.83	$1.50[b]

Notes:
a. This cost is mostly from a contract with ML Albright, which will no longer be applicable in 2017.
b. This cost is for post-closure costs only. Closure costs are fully funded for the active cells A-C.

Table 4.1.3 Funding Mechanism

Name of Program Funding Mechanism will defray costs	Bond Name	Total Bond Debt	Bond Rate	Bond Due Date	Grant Name	Grant Amount	Tip Fee	Taxes	Other	Surcharge
Dept. of Ecology					CPG DOE Grant	$25,000				
Tipping Fee							$2,160,000[a]			
Refuse Tax								$58,300		
Haul Contract Fees									$210,790	

Notes:
a. Tipping fee funding mechanism is comprised of daily tip fees (cash) and charge accounts.

Table 4.1.4 Tip Fee Forecast

Tip Fee per Ton by Facility	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Asotin County Regional Landfill	42.67	49.73	49.73	49.73	49.73	49.73

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

Table 4.2.1 Funding Mechanism by Percentage

Year One

Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total
Waste Reduction	50	50				100%
Recycling	50	50				100%
Collection	NA					100%
ER&I	NA					100%
Transfer	100	(transfer station to landfill)				100%
Land Disposal	100	(landfilling)				100%
Administration	100					100%
Other/MRW	100					100%

Table 4.2.2 Funding Mechanism by Percentage

Year Three

Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total
Waste Reduction	50	50				100%
Recycling	50	50				100%
Collection	NA					100%
ER&I	NA					100%
Transfer	100					100%
Land Disposal	100					100%
Administration	100					100%
Other	100					100%

Table 4.2.3 Funding Mechanism by Percentage

Year Six

Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total
Waste Reduction	50	50				100%
Recycling	50	50				100%
Collection	NA					100%
ER&I	NA					100%

Table 4.2.3 Funding Mechanism by Percentage **Year Six**						
Component	Tip Fee %	Grant %	Bond %	Collection Tax Rates %	Other %	Total
Transfer	100					100%
Land Disposal	100					100%
Administration	100					100%
Other	100					100%

4.3 References and Assumptions

Please provide any support for the information you have provided. An annual budget or similar document would be helpful.
See 2017 SWMP Update, Table 10-4, Solid Waste Fund Financial Forecast (2016-2021).

4.4 Surplus Funds

Please provide information about any surplus or saved funds that may support your operations.
See 2017 SWMP Update, Table 10-4, Solid Waste Fund Financial Forecast (2016-2021) for beginning cash balances.

Asotin County

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Tab 6: Checklist of Required Planning Elements

Checklist of Required Planning Elements

Items that must be included in the plan (note: Table 1-1 in the plan, indicates additional information and the section that this information is discussed in the plan):

☒Detailed inventory of all solid waste handling facilities

☒Description of any deficiencies in the handling of solid waste

☒20-year solid waste handling projection (facility needs)

☒Meets the minimum functional standards for solid waste handling in Washington State Relationship to other plans is addressed

☒Six-year capital and acquisition projection

☒Financing plan for capital and operational costs for the proposed programs

☒A permitting and enforcement program is clearly defined

☒Current inventory of all solid waste collection programs (G-certificated and City-operated) including population densities served, address and name of all G-certificated haulers and projected solid waste collection needs for the next six years

☒Waste Reduction Strategies

☒Source Separation Strategies

☒Inventory of recycling programs

☒Current and projected recovery rates through the current and proposed recycling programs

☒Programs to monitor commercial and industrial recycling where there is sufficient density to sustain a program

☒A waste reduction and recycling outreach and education program

☒Recycling strategies, a discussion on existing markets, characterization of the waste stream and a description of existing programs and deficiencies

☒Programs to assist the public and private with recycling and an implementation schedule for those programs.

☒A list of designated recyclables

☒A WUTC cost assessment questionnaire

☒SEPA checklist and necessary SEPA documents

☒Evidence of SWAC participation (SWAC meeting minutes, signed roster, etc.) Interlocal agreement(s)