Solid Waste and Moderate Risk Waste Management Plan – Preliminary Draft

Prepared for
Walla Walla County

August 2024

Parametrix

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Prepared for

Walla Walla County

Prepared by

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Glossary of Terms

Automated Collection: Solid waste collection by mechanical means, where arms or other devices extend from the collection vehicle, grasp or otherwise manipulate containers, lift them overhead, tip them to empty solid waste into the vehicle, and set them back down on the ground. Fully automated collection requires no manual labor to grasp containers; semi-automated collection requires manual labor to position containers for mechanical grasping.

Buyback Center: Facility that purchases recyclable materials.

Buy Recycled: Purchasing recycled products. Buy recycled programs often emphasize purchase of products that contain a specified or maximum level of post-consumer content and/or recyclable materials content without affecting the intended use of the product.

Commingled Recyclables: Recyclable materials designated for recycling either by (1) generators' placement with other recyclable materials mixed in a single, common container for collection, or (2) collectors' sorting and placement in a single, common compartment on the collection vehicle.

Composting: Biological decomposition or decay of organic wastes (sometimes including mixed solid waste) under controlled conditions. Composting takes place under aerobic conditions, typically in an open pile (called a windrow) or in a tank or container (called in-vessel composting).

Diversion: The recovery of "asphalt, concrete, and other construction, demolition, and land clearing debris" through uses "other than landfill disposal."

Drop-Off Center: Containers such as bins and roll-off boxes placed at collection sites designated for deposit by generators of specified materials such as recyclable materials or solid waste.

Environmentally Preferable Purchasing: Buying environmentally preferable products or services that have a lower or a reduced adverse effect on human health and the environment than competing products or services that serve the same purpose, considering life cycle impacts. These products or services include raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal.

Franchise: Right or privilege conferred by a local government on one or more private entities for the collection, transportation or other handling of solid waste or recyclable materials. A franchise may extend throughout the corporate limits of the local government or may be limited to a specified area. Local power to grant franchises typically stems from state or provincial law, municipal charter, or home rule authority. Franchisees may be required to secure licenses or permits to perform franchised services.

Landfill: A disposal facility or part of a facility at which solid waste is placed in or on land and that is not a land treatment facility.

Manual Collection: Solid waste collection by hand rather than machine, where workers grasp, lift, and empty cans, or toss bags into hoppers or buckets on a collection vehicle. Contrast with "Automated Collection."

Materials Recovery Facility (MRF): A building where commingled recyclables are separated and processed (including sorting, baling, and crushing) or where source separated recyclables are processed for sale to various markets. See "Intermediate Processing Center." In a dirty MRF, the incoming recyclable materials are co-collected and commingled with other non-recyclable portions of solid waste. See "Mixed Waste Processing."

Glossary of Terms (continued)

Mixed Waste Processing: Picking, sorting, and otherwise separating recyclable materials from commingled refuse and garbage, as opposed to picking, sorting, and otherwise separating one type of commingled recyclables (such as fiber) that was separated and collected apart from solid waste from another type of commingled recyclable (such as containers). See "MRF."

Municipal Solid Waste (MSW): All putrescible and non-putrescible solid and semisolid wastes, including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, and recyclable materials.

MSW Recycling Rate: To determine a recycling rate that is consistent and comparable to past years, the Washington State Department of Ecology has measured a very specific part of the solid waste stream since 1986. It is roughly the part of the waste stream defined as MSW by the U.S. Environmental Protection Agency (EPA). It includes durable goods, nondurable goods, containers and packaging, food wastes, and yard trimmings. It does not include industrial waste, inert debris, asbestos, biosolids, petroleum-contaminated soils, or construction, demolition, and land clearing debris recycled or disposed of at MSW landfills and incinerators.

Product Stewardship: Involves the actions taken to improve the design and manufacture of products to facilitate either their reuse, recycling, or disposal, as well as actions to establish programs to collect, process and Reuse or Recycle products when they are discarded.

Rail Haul: Transportation of solid waste (generally long distances) by railroad.

Recovery: Material that is diverted from the solid waste stream for the intended purpose of recycling, composting, burning source-separated materials for energy, anaerobic digestion, land application, and other beneficial uses.

Recyclable Materials: Solid wastes that are separated for recycling or reuse, such as papers, metals, and glass, which are identified as recyclable material pursuant to a local comprehensive solid waste plan.

Recycled Content: Portion of a product or a package's weight that is composed of materials remanufactured from a recyclable product or packaging material, including pre-consumer materials or post-consumer materials.

Recycling: Transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration.

Reuse: Use of a product more than once in its same form for the same or different purpose without substantial alteration.

Solid Waste Management: Planned and organized handling of solid waste and recyclable materials in an environmentally and economically sound manner, encompassing the generation, storage, collection, transfer, transportation, processing, resource recovery, reuse, and disposal of solid waste and recyclable materials, including all administrative, financial, educational, environmental, legal, planning, marketing, and operational aspects thereof.

Source Reduction (or Waste Reduction): Actions taken to reduce solid waste toxicity or disposal, including (1) manufacturers' redesign and management of products and packaging to extend product life, and facilitating repair, (2) consumers' reduced purchase and consumption of products that become wastes, and (3) manufacturers and consumers' reuse of products.

Glossary of Terms (continued)

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

Transfer Station: Facility that receives and consolidates solid waste or recyclable materials from municipal or commercial collection trucks and self-haulers' vehicles and loads the solid waste onto tractor trailers, railcars, or barges for long-haul transport to a disposal facility.

Variable Rates (or Pay as You Throw/PAYT): Charges for solid waste collection services that incrementally increase with disposed refuse and garbage volume (such as 32-, 64-, or 96-gallon containers) or weight, with lower or no charges for recyclables collection services, to encourage recycling and discourage disposal. Variable rates do not necessarily reflect actual operational costs; rather, they constitute behavioral incentives (or disincentives).

Waste Exchange: Organization or service that facilitates or arranges for recyclable materials or discarded materials from various generators or industries to be Recycled or Reused by others.

Waste Generation: Total amount of disposed solid waste and diverted recyclables.

Waste-to-Energy: Controlled combustion of solid waste in solid waste combustors having state-of-the-art pollution controls, and energy recovery therefrom. Types of waste-to-energy facilities include mass burn units that incinerate mixed solid waste with little or no prior separation and refuse derived fuel (RDF) units that separate combustible solid waste from noncombustible solid waste prior to combustion.

Yard Debris: Plant material commonly created while maintaining yards and gardens and through horticulture, gardening, landscaping, or similar activities. Yard debris includes, but is not limited to, grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, vegetable garden debris, holiday trees, and tree prunings that are 4 inches or less in diameter.

Zero Waste: Efforts to reduce solid waste generation waste to nothing, or as close to nothing as possible, by minimizing excess consumption and maximizing the recovery of solid wastes through recycling and composting.

Acronyms and Abbreviations

2024 Plan	2024 Walla Walla County Solid Waste and Moderate Risk Waste Management Plan
ACM	asbestos-containing materials
ASP	aerated static pile
BDI	Basin Disposal, Inc.
BRS	Builders ReSupply Store
C&D	construction and demolition
CFL	compact fluorescent light
CFR	Code of Federal Regulations
County	Walla Walla County
CROP	Contamination Reduction and Outreach Plan
CRT	cathode ray tube
DOC	Department of Corrections
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
EPR	extended producer responsibility
EPS	expanded polystyrene
FMP	Facility Master Plan
FEMA	Federal Emergency Management Agency
FTE	full-time equivalent
GMA	Growth Management Act
HB	House Bill
HHW	household hazardous waste
HDPE	high-density polyethylene
HID	high-intensity discharge
HMP	Hazard Mitigation Plan
HWMA	Washington Hazardous Waste Management Act
IA-H	industrial agriculture-heavy
IA-M	industrial agriculture-mixed

Acronyms and Abbreviations (continued)

1	IIWL	Isaacs Inert Waste Landfill
2	LDPE	low-density polyethylene
3	LPL	limited purpose landfill
4	LSWFA	Local Solid Waste Financial Assistance Program
5	MRF	materials recovery facility
6	MRW	moderate risk waste
7	MSW	municipal solid waste
8	NESHAP	National Emissions Standards for Hazardous Air Pollutants
9	NWPSC	Northwest Product Stewardship Council
10	OCC	old corrugated cardboard
11	OFM	Washington Office of Financial Management
12	PCA	Packaging Corporation of America
13	PCB	polychlorinated biphenyl
14	PCR	postconsumer recycled
15	PET	polyethylene terephthalate
16	PP	polypropylene
17	PPA	pollution prevention assistance
18	ppl	people
19	PSMMC	Providence St. Mary Medical Center
20	PV	photovoltaic
21	RDC	Recycling Development Center
22	RCRA	Resource Conservation and Recovery Act
23	RCW	Revised Code of Washington
24	SB	Senate Bill
25	Sf	square foot
26	SLC	Sustainable Living Center
27	SMP	shoreline master program
28	sq ft	square feet
29	SRL	Sudbury Road Landfill

Acronyms and Abbreviations (continued)

1	State	Washington State
2	SWAC	Solid Waste Advisory Committee
3	SWMP	Solid Waste Management Plan
4	SQG	small quantity generators
5	TWL	Tausick Way Landfill
6	UGA	urban growth area
7	WAC	Washington Administrative Code
8	WGA	waste generation area
9	WRRLA	Waste Reduction, Recycling, and Model Litter Control Act
10	WSP	Washington State Penitentiary
11	WUTC	Washington Utilities and Transportation Commission
12	WWCC	Walla Walla County Code
13	WWMC	Walla Walla Municipal Code
14	WWU	Walla Walla University

1 PLACEHOLDER: Dept of Ecology letter of approval

Executive Summary

The 2024 Walla Walla County Solid Waste and Moderate Risk Waste Management Plan (2024 Plan) provides background and guidance for a long-term approach to solid waste and moderate risk waste management in the region. This 2024 Plan comprises the combined comprehensive solid waste management plan (SWMP) and Local Hazardous Waste/Moderate Risk Waste (MRW) Plan for the incorporated and unincorporated areas of Walla Walla County.

The preparation of the 2024 Plan included a comprehensive review of the solid waste system and allowed the Solid Waste Advisory Committee (SWAC) and solid waste managers to make recommendations based on current data. The recommendations contained in the 2024 Plan include policies, programs, and facilities to protect public health and safety. Although not all recommendations may be implemented during the near-term planning horizon, the 2024 Plan will serve as a roadmap to manage the comprehensive solid waste management system in Walla Walla County.

The 2024 Plan was developed as a joint effort of Walla Walla County and the cities of Walla Walla, College Place, Prescott, and Waitsburg. It is intended to provide citizens and decision makers in Walla Walla County with a guide to implement, monitor, and evaluate future activities in the planning area for a 20-year period. The recommendations for the 2024 Plan not only guide local decision makers but substantiate the need for local funds and state grants to underwrite solid waste and MRW projects.

The SWAC has participated in the 2024 Plan development by attending meetings, reviewing draft reports, providing input and comment on all issues covered by the Plan, acting as a liaison to its constituencies, and assisting in public involvement. After the Plan is adopted, the SWAC will routinely evaluate implementation of recommended programs, and it will help to promote the 2024 Plan throughout the region. SWAC members will also participate in amending the 2024 Plan, if necessary.

Mission Statement, Objectives, and Strategies

The intent of the 2024 Plan is to establish the foundation for the proper management of solid waste in Walla Walla County. The 2024 Plan Mission Statement is as follows:

The overall goal of this 2024 Plan and the participating jurisdictions is to ensure that citizens of Walla Walla County have efficient, reliable, and affordable solid waste collection, handling, recycling, and disposal services in order to improve our quality of life while protecting human health, the environment, and natural resources.

To accomplish this goal, the 2024 Plan was developed with the following objectives and strategies. The SWAC provided revisions to the objectives and strategies, which included open discussions during several regularly scheduled meetings related to the 2024 Plan update.

- Manage solid wastes in a cost-effective and environmentally responsible manner that promotes, in order of priority, waste reduction, reuse, and recycling, and proper/safe disposal.
  - → Consider restoring and/or expanding the opportunities for recycling and yard waste collection within the municipalities, unincorporated County area, and Urban Growth Area (UGA).
  - → Evaluate options to reduce landfilling of materials (e.g., construction and demolition (C&D) diversion, material processing for reuse, composting, etc.).
  - → Explore opportunities to reduce the carbon footprint of the Sudbury Road Landfill.
  - → Continue to evaluate tipping fees as related to the true cost of operations, including closure and post closure costs associated with the Sudbury Road Landfill.
  - → Evaluate future needs and funding.

- Emphasize public outreach and educational programs to promote recommended waste management practices.
  - → Continue to expand methods of outreach, including use of social media.
  - → Increase public awareness of proper solid waste handling and the options available.
  - → Develop outreach and educational programs that emphasize waste prevention and reduction techniques that avoid or create less waste and reduce the need for recycling, composting, or landfilling.
- Maintain and improve solid waste infrastructure and programs to meet or exceed Washington State solid waste regulations and 2024 Plan goals and objectives.
  - → Plan for future needs and establish adequate financial investment for facilities and programs that support waste management goals and recommended practices.
- Encourage and expand coordination and communication regarding solid waste issues among all jurisdictions, agencies, and private firms in Walla Walla County.
  - → Encourage consistent policies and communication across jurisdictions.
  - → Encourage public involvement in the planning and implementation process.
  - → Emphasize local responsibility for solving solid waste management issues.

Recommendations and Implementation

Table ES-1 lists the recommendations included in the 2024 Plan, the schedule for implementation, and the likely source of funding that would be used to implement and/or maintain the programs. Some programs are ongoing. These recommendations are based on an assessment of the County's solid waste management needs and the options available to address those needs. The recommendations were approved by the SWAC in 2022 and again confirmed by the SWAC in 2023 with the completion of the Sudbury Road Landfill Facility Master Plan. In addition to approving the recommendations listed in Table ES-1, the SWAC identified their top 10 recommendations as shown in Figure ES-1 below.

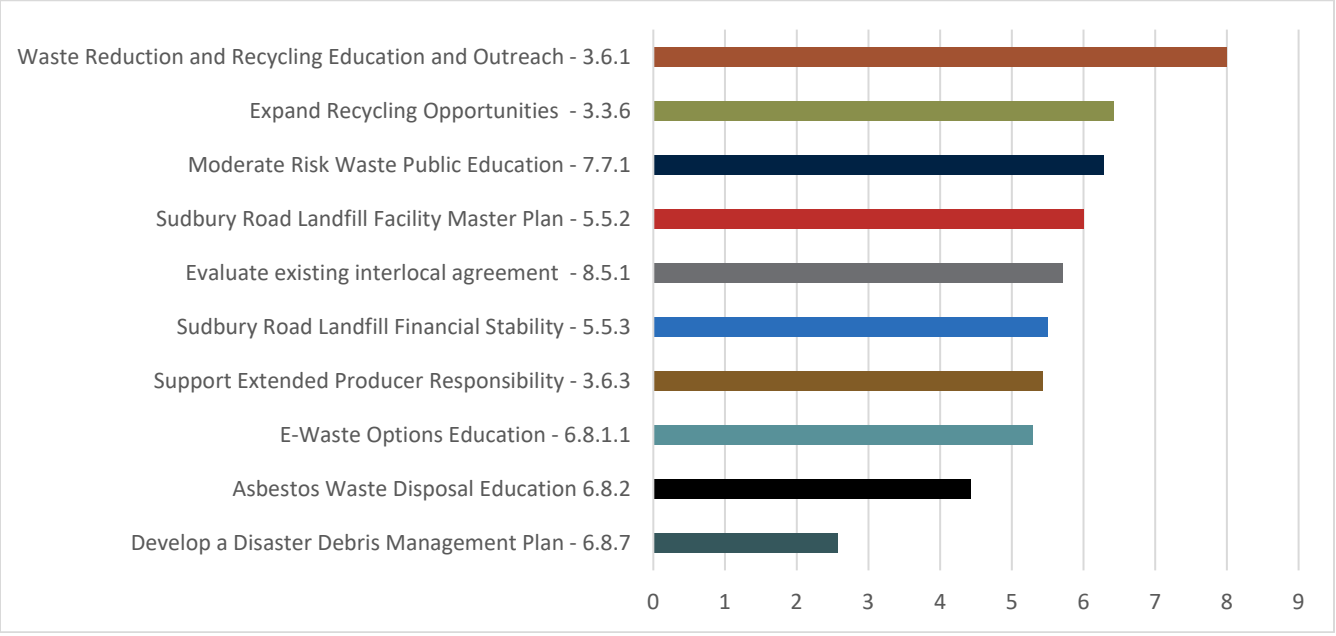


Figure ES-1. Solid Waste Advisory Committee Prioritization of Recommendations – Top 10

Table ES-1. Recommendations, Implementation Schedule, and Funding Sources

Chapter		Recommendation	Implementation Year(s)	Funding Source
Chapter 3: Education and Outreach, Waste Reduction, Recycling	3.7.1	**Education and Outreach (high priority)**		
	a.	Continue to expand outreach methods to promote waste reduction, reuse, composting, and recycling on the City of Walla Walla website and online social media.	Ongoing	Tip Fee, Grants
	b.	Improve messaging for opportunities to reduce, reuse, compost, and recycle on other local jurisdiction's websites.	2025–2026	Tip Fee, Grants
	c.	Continue to host community events or discussion forums and coordinate with other community events.	Ongoing	Tip Fee, Grants
	d.	Continue to implement the Contamination Reduction and Outreach Plan.	Ongoing	Tip Fee, Grants
	e.	Promote existing opportunities for residents and businesses to reduce, reuse, and recycle priority recyclables, as well as other materials, through opportunities such as Builders ReSupply Store (BRS) and other nonprofit organizations (e.g., thrift stores).	Ongoing	Tip Fee, Grants
	3.7.2	**Backyard Composting (low priority)** – Continue to support and encourage backyard composting through educational materials and social media.	Ongoing	Tip Fee, Grants
	3.7.3	**Support Extended Producer Responsibility (EPR) (high priority)**		
	a.	Solid Waste Advisory Committee (SWAC) review and provide recommendations on EPR State Legislation.	2025–2029	Tip Fee, Grants
	b.	Support EPR to encourage a full life-cycle approach with an emphasis on the manufacturer's responsibility for ensuring the product is recyclable and recycled.	2025–2029	Tip Fee, Grants
	3.7.4	**Promote Multifamily Recycling (low priority)**		
	a.	Provide technical assistance to property owners and managers.	Ongoing	Tip Fee, Grants
	b.	Provide education and outreach.	2025–2029	Tip Fee, Grants
	c.	City of Walla Walla will continue to require multifamily recycling for up to 10 units at a location.	Ongoing	Tip Fee, Grants
	d.	Consider changing the building code to require multifamily and businesses to provide space for recycling and garbage.	2026–2027	Tip Fee, Grants
	3.7.5	**Develop an Award and Recognition Program (low priority) –** Promote award and recognition programs provided by local nonprofits that recognize businesses that implement sustainable practices.	2026–2029	Tip Fee, Grants
	3.7.6	**Expand Recycling Opportunities (high priority)** – Evaluate feasibility of expanding materials collected, facility expansion, and education and outreach.	Ongoing	Tip Fee, Collection Fee, Grants

Table ES-1. Recommendations, Implementation Schedule, and Funding Sources (continued)

Chapter		Recommendation	Implementation Year(s)	Funding Source
	3.7.7	**Consider Variable Can Rate (low priority)** – Consider incentivizing recycling by establishing a variable can rate structure that rewards residents for waste reduction and recycling. This policy option could be reviewed and discussed by each jurisdiction whenever rate structures are evaluated. The City of Walla Walla, for example, typically reviews policy initiatives on a 5-6-year interval as part of the financial planning/cost of service process for sanitation, yard waste, and recycling.	2024–2029	Tip Fee, Collection Fee, Grants
	3.7.8	**Provide On-Site Business Waste Audits and Technical Assistance (low priority)** – Explore options to support commercial recycling through/with local waste haulers.	2026–2027	Collection Fee, Grants
Chapter 4: Collection Services	4.5.1	**Curbside Recycling in Urban Growth Areas (low priority)** – Consider offering recycling services in the cities and the Urban Growth Areas (UGAs) that do not have this service. This would involve working with haulers to establish a new minimum service level.	2026–2027	Tip Fee, Collection Fee, Grants
	4.5.2	**Expand Curbside Organics Collection in Urban Growth Areas (low priority)**		
	a.	Consider providing curbside yard waste collection for residents in the cities and the UGAs that do not have this service. This would involve working with haulers to establish a new minimum service level.	2027–2029	Tip Fee, Collection Fee, Grants
	b.	Implement a food waste collection pilot program in the City of Walla Walla if/when food waste processing is available.	To be determined	Tip Fee, Grants
	c.	Consider bundling yard waste service with other waste collection services, possibly incentivizing subscriptions for yard waste collection.	2026–2029	Tip Fee, Collection Fee, Grants
	4.5.3	**Mixed Paper and Cardboard Collection (low priority)** – Consider establishing a program for mixed paper and cardboard from large commercial generators.	2026–2027	Tip Fee, Collection Fee, Grants
	4.5.4	**Organics Collection for Large Commercial Generators (low priority)** – Consider implementing a food waste composting pilot that would involve commercial or institutional entities.	2028–2029	Tip Fee, Collection Fee, Grants
Chapter 5: Solid Waste Facilities	5.5.1	**Use of Sudbury Road Landfill for Out-of-County Waste (low priority)** – Consider increased import of out of County waste. Consider a Market Wasteshed Radius Study to understand the feasibility of being competitive with regional markets.	2025–2026	Tip Fee, Grants
	5.5.2	**Sudbury Road Landfill Facility Master Plan (high priority)** – Implement the 2023 Facility Master Plan.	2024–2029	Tip Fee, Grants, Loans, Bond Sales
	5.5.3	**Sudbury Road Landfill Financial Stability (high priority)** –The City of Walla Walla adopted/implemented the 2018 Cost of Service Analysis and Financial Plan (2018–2023). Update the Cost of Service Analysis and Financial Plan in 2024.	2024	Tip Fee, Grants

Table ES-1. Recommendations, Implementation Schedule, and Funding Sources (continued)

Chapter		Recommendation	Implementation Year(s)	Funding Source
	5.5.4	**Expand Organics Processing to Include Additional Materials (low priority)** – Evaluate expanding the existing composting operations to include additional materials, with consideration toward the expansion being economical relative to other disposal options.	2024–2025	Tip Fee, Grants
	5.5.5	**Improve the Marketability of the Sudbury Compost Facility's Finished Product (low priority)** – Substantial progress has occurred with regard to compost sales following implementation of the 2018 Cost of Service Analysis and Financial Plan (2018–2023) with demand currently exceeding production. Continue monitoring production vs. demand.	Ongoing	Tip Fee, Grants
Chapter 6: Miscellaneous Waste	6.3.1	**Agricultural Waste (low priority)** – County will support others regarding the feasibility of developing a facility for the production of biofuels, biopower, or bioproducts, and work with local entities to further discussions and development of such facilities.	Ongoing	Tip Fee, Grants
	6.3.2	**Asbestos Waste (high priority)** – Provide education to homeowners on the proper handling and disposal of asbestos waste as a component of building permits.	2025–2026	Tip Fee, Grants
	6.3.3	**Construction and Demolition – Feasibility Study (high priority) –** Study the feasibility of developing a C&D drop-off site for sorting and processing wood, metals, and other salvageable materials, with consideration toward the service being economical relative to other disposal options.	2026–2028	Tip Fee, Grants
	6.3.4	**Construction and Demolition – Inert Waste Disposal (low priority)** – Design and construct an inert waste receiving, processing, and disposal area at Sudbury Road Landfill.	2027–2030	Tip Fee, Grants, Loans, Bond Sales
	6.3.5	**Construction and Demolition – County Support to Existing Programs (low priority) –** Continue to expand and support the BRS and other opportunities for reuse and recycling of C&D materials.	Ongoing	Tip Fee, Grants
	6.3.6	**Construction and Demolition – Contractor Education (low priority) –** Provide education to contractors.	2027–2029	Tip Fee, Grants
	6.3.7	**Develop a Disaster Debris Management Plan (high priority) –** Consider developing a County-wide disaster debris management plan.	2026–2027	Tip Fee, Grants
	6.3.8	**Biomedical Waste – Education and Outreach (low priority)** – Provide education and outreach to residents on the correct management of medical waste.	2024–2026	Tip Fee, Grants
	6.3.9	**Tire Management Funding (low priority)** – Continue to pursue state grants, if available, to assist in tire pile cleanup.	Ongoing	Tip Fee, Grants
	6.3.10	**Monitor and Evaluate E-Waste Program (low priority) –** Complete the satisfaction report to monitor the effectiveness of the existing E-Cycle program.	Ongoing	Tip Fee, Grants
	6.3.11	**E-Waste Education(high priority) –** Continue to educate consumers on the E-Cycle program.	Ongoing	Tip Fee, Grants

Table ES-1. Recommendations, Implementation Schedule, and Funding Sources (continued)

Chapter		Recommendation	Implementation Year(s)	Funding Source
Chapter 7: Moderate Risk Waste	7.7.1	**Moderate Risk Waste (MRW): Public Education (high priority) –** Continue the existing education and outreach programs. The information will continue to be made available through a variety of methods and venues, including social media and partnerships with other organizations.	Ongoing	Tip Fee, Grants
	7.7.2	**MRW: School Curriculum (low priority) –** Expand outreach in the K-12 classrooms including presentations, assignments, and projects.	2026–2027	Tip Fee, Grants
	7.7.3	**MRW: Business Technical Assistance (low priority)**		
	a.	Continue to use the $mart Business Program to provide education and outreach, technical assistance, and recognition of businesses on reducing the generation of MRW.	Ongoing	Tip Fee, Grants
	b.	Expand participation in the Washington State Department of Ecology pollution prevention assistance program to provide technical assistance to businesses and organizations that qualify as small quantity generators (SQGs).	2025–2026	Tip Fee, Grants
	7.7.4	**Small Business Collection Opportunities (low priority)** – Consider developing an area at the landfill for SQG hazardous materials collection. This would include working with a contractor to establish a collection system for businesses.	2024	Tip Fee, Grants
	7.7.5	**Household Hazardous Waste Collection Events and Locations (low priority) –** Work towards expanding the number of collection events or locations, depending on the availability of funding.	2026–2027	Grants
Chapter 8: Administration and Enforcement	8.5.1	**Evaluate Existing Interlocal Agreement for Coordination of Programming and Planning (high priority) –** SWAC members should maintain an open dialog regarding solid waste issues and challenges to ensure effective provision and management of solid waste programs and activities. Amend or update agreements as needed.	Ongoing	Tip Fee, Grants
	8.5.2	**Coordinate Enforcement Activities to Attain Maximum Impact Without Duplication (N/A) –** Each agency will continue to address code enforcement in their respective jurisdictions.	Ongoing	Tip Fee, Grants

The Revised Code of Washington 70A.205.075 requires the SWMP contain a 6-year construction and capital acquisition program for public solid waste handling facilities, including development and construction or purchase of publicly financed solid waste management facilities. The legislation further requires plans to contain a means for financing both capital costs and operations expenditures of the proposed solid waste management system. Any recommendation for the development, construction, and/or purchase of public solid waste management and recycling facilities or major equipment should be included in this discussion.

Capital expenses over the next 6 years and beyond are summarized in Table ES-2. Actual budgets to carry out the recommendations will vary from year to year as specific programs are defined and will depend upon availability of staffing, Public Works Trust Fund loans, state and federal grant funding, capital improvement fee tied to customer tipping fees, and bond sales.

The proposed Cost of Service Analysis and Financial Plan is scheduled for 2024. This analysis will provide greater definition to the strategy for funding the proposed capital investments as well as related administration and operation costs.

Table ES-2. Capital Improvement Expenses and Implementation Schedule

Facility Improvement	Approximate Implementation Duration (months)	Implementation Commencement Year	Capital Budget (2023 $)
Landfill Core And Supporting Element Investments (Non-Optional)			
Self-Haul Waste Drop Off Area Replacement	22	2024	$4.23 million
Design/Connect Existing Leachate Cleanout Locations to Existing Gas Header	24	2024	$0.06 million
Compost Facility Improvements Alternative 1	30	2024	$3.84 million
Existing Moderate Risk Waste (MRW) Building Rehabilitation and Expansion Alternative 2 (7,500 square feet [Sf])	36	2025	$2.5 to $3 million
Maintenance Building Replacement	36	2026	$5.37 million
Permit for Area 7, Cell 4	36	2026	$0.08 million
Compliance Monitoring System	24	2028	$1.44 million
Design/Install New 300–800 cubic feet per minute Landfill Gas Flare Facility	30	2028	$1.94 million
Design/Install Landfill Gas Extraction System in Area 7 and Connect to Existing Header, Horizontal/Vertical.	28	2028/2030	$0.62 million
Design and Development of Area 8, Cell 1	36	2028	$5.39 million
Design and Final Closure of Area 7	30	2029	$3.62 million
Design/Install Passive Biofilter for Areas 1 and 2	16	2030	$0.04 million
Design/Install Landfill Gas Extraction System In Area 8, Cell 1	18	2041	$0.63 million
Scale Plaza Improvements	36	Not likely to occur before 2073	$0.60 million
ALTERNATIVES TO PROPOSED CAPITAL PROJECTS			
Compost Facility Improvements Alternative 2 (First Phase, 60% of Full-Buildout, 15 Acres)	30	2024	$17.42 (10.45) million
MRW Building Replacement Alternative 1 (7,400 Sf)	40	2025	$5.88 million
OTHER SOLID WASTE PROGRAM INVESTMENTS (DISCRETIONARY)			
Drop Off Recycling Area Improvements	20	2027	$0.29 million
Recycled Glass Processing Area	20	2029	$0.37 million
Design/Construct Inert Waste Receiving, Processing and Disposal Area	36	2030	$0.61 million

Source: Parametrix 2023a.

1. Introduction

The 2024 Walla Walla County Comprehensive Solid Waste and Moderate Risk Waste Management Plan (2024 Plan) provides background and guidance for a long-term approach to solid waste and moderate risk waste management in the region. This 2024 Plan comprises the combined comprehensive Solid Waste Management Plan (SWMP) and the Local Hazardous Waste/Moderate Risk Waste (MRW) Plan for the incorporated and unincorporated areas of Walla Walla County. The 2024 Plan replaces the 2014 Solid Waste and Moderate Risk Waste Management Plan.

1.1 Purpose and Organization of the 2024 Plan

The purpose of the 2024 Plan is to serve as a roadmap to manage the comprehensive solid and MRW in Walla Walla County. It is intended to provide citizens and decision makers in Walla Walla County with a guide to implement, monitor, and evaluate future activities in the planning area for a 20-year period. The 2024 Plan was developed as a joint effort of Walla Walla County and the cities of Walla Walla, College Place, Prescott, and Waitsburg. The preparation of the 2024 Plan included a comprehensive review of the solid waste system and allowed the Solid Waste Advisory Committee (SWAC) and solid waste managers to make informed recommendations based on current data.

The recommendations contained in the 2024 Plan include policies, programs, and facilities that encompass an efficient solid waste system that protects public health and safety. The recommendations in the 2024 Plan substantiate the need for local funds and state grants to underwrite solid waste projects. It is understood that not all of the recommendations will be implemented during the near-term planning horizon, and the recommendations are not to be considered mandated for each jurisdiction to implement. Instead, taken together, the recommendations contained in the 2024 Plan serve as a guide for local decision makers over the 20-year planning period.

The 2024 Plan conforms to the State Solid Waste Management requirements for local solid waste planning, which are found in Revised Code of Washington (RCW) 70A.205.040 through 70A.205.075, and RCW 70A.205.110 and 70A.205.115. The 2024 Plan follows suggested protocol as outlined in Guidelines for the Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions (Ecology 2010a) and Guidelines for Developing and Updating Local Hazardous Waste Plans (Ecology 2010b).

The 2024 Plan is organized as follows:

- Executive Summary
- Chapter 1 Introduction
- Chapter 2 Waste Generation and Projections
- Chapter 3 Education and Outreach, Waste Reduction and Recycling
- Chapter 4 Collection Services
- Chapter 5 Solid Waste Facilities
- Chapter 6 Miscellaneous Waste
- Chapter 7 Moderate Risk Waste
- Chapter 8 Administration and Enforcement
- Chapter 9 Financing and Implementation
- Chapter 10 References

1.2 Mission Statement, Objectives and Strategies

The intent of the 2024 Plan is to establish the foundation for the proper management of solid waste in Walla Walla County. The 2024 Mission Statement is as follows:

The overall goal of the 2024 Plan and the participating jurisdictions is to ensure that citizens of Walla Walla County have efficient, reliable, and affordable solid waste collection, handling, recycling, and disposal services to improve our quality of life while protecting human health, the environment, and natural resources.

To accomplish this goal, the 2024 Plan was developed with the following objectives and strategies:

- Manage solid wastes in a cost-effective and environmentally responsible manner that promotes, in order of priority: waste reduction, reuse, and recycling, and disposal.
  - → Consider restoring and/or expanding the opportunities for recycling and yard waste collection Countywide.
  - → Evaluate options to reduce landfilling of materials (e.g., construction and demolition (C&D) diversion, material processing for reuse, composting, etc.).
  - → Explore opportunities to reduce the carbon footprint of the Sudbury Road Landfill (SRL).
  - → Continue to evaluate tipping fees as related to the true cost of operations, including closure and post closure costs associated with the SRL.
  - → Evaluate future needs and funding.
- Promote recommended waste management practices.
  - → Continue to expand methods of outreach, including use of social media.
  - → Increase public awareness of proper solid waste handling and the options available.
  - → Develop outreach and educational programs that emphasize waste prevention and reduction techniques that avoid or create less waste and reduce the need for recycling, composting, or landfilling.
- Maintain and improve solid waste infrastructure and programs to meet or exceed Washington State solid waste regulations and 2024 Plan goals and objectives.
  - → Plan for future needs and establish adequate financial investment for facilities and programs that support waste management goals and recommended practices.
- Encourage coordination and communication regarding solid waste issues among all jurisdictions, agencies, and private entities in Walla Walla County.
  - → Encourage consistent policies and communication across jurisdictions.
  - → Encourage public involvement in the planning and implementation process.
  - → Emphasize local responsibility for solving solid waste management issues.

1.3 Planning Authorities

1.3.1 Solid Waste Advisory Committee

According to RCW 70A.205, each county shall establish a local SWAC to assist in the development of programs and policies for solid waste handling and disposal and to review and comment upon proposed rules, policies, or ordinances prior to their adoption. Two primary responsibilities of the SWAC are to advise on the 2024 Plan development and to assist in the plan adoption process.

The 2024 Plan update was prepared under the direction and guidance of the SWAC. The SWAC has participated in the 2024 Plan update process by reviewing the previous plan and a draft version of the 2024 Plan, providing input and comment on all issues covered by the 2024 Plan, acting as a liaison to its constituencies, and assisting in public involvement. The committee also reviewed the complete draft and final plans, and it will be asked to recommend the 2024 Plan for adoption by Walla Walla County and its municipalities. After the 2024 Plan is adopted, the SWAC will routinely evaluate implementation of recommended programs and will help to promote waste reduction and recycling throughout the region. SWAC members will also participate in amending the 2024 Plan, if necessary.

Members of the SWAC during the development of the 2024 Plan are included in Table 1-1. A list of SWAC meeting dates held during preparation of the 2024 Plan is included in Table 1-2. Minutes of the meetings are on file in the City of Walla Walla Public Works Office.

Table 1-1. Solid Waste Advisory Committee Members 2021–2024

Name	Affiliation
Andrew Dressler	Agricultural Industry
Carlan Bradshaw	City of Walla Walla Residents – At Large
Dave Dressler	Business and Industry
Linda Vannoster	City of Prescott
Randy Hinchliffe	City of Waitsburg
Rebecca Francik, Chair	Waste/Recycling Industry
Rick Dawson	Walla Walla County
RL McFarland, Vice Chair	Walla Walla County Residents
Robert McAndrews	City of College Place
Sandy Shelin	Environmental Interest Groups
Stacy Cutter	Walla Walla County
Steve Moss	City of Walla Walla
Susan Nakonieczny	City of Walla Walla

Table 1-2. Solid Waste Advisory Committee Meetings 2021–2024

September 2, 2021	April 7, 2022
October 7, 2021	November 16, 2023
November 4, 2021	June 20, 2024
January 6, 2022	
February 3, 2022	

1.3.2 Role of Local Governments

The cities of Walla Walla County have chosen to fulfill their solid waste management planning responsibilities by participating in preparing a joint plan for solid waste management. The City of Walla Walla has been authorized by the Interlocal Agreement, dated May 24, 2021 (2021 Interlocal Agreement), with Walla Walla County, for the Continued Coordination of Regional Pollution

Prevention and Waste Prevention Programs to act on the County's behalf to update and implement the Walla Walla County SWMP. The 2024 Plan has been developed with the City of Walla Walla as the lead agency with participation and cooperation defined in the 2021 Interlocal Agreement for plan development among the County and the cities of College Place, Prescott, and Waitsburg. The interlocal agreement referenced above is included in Appendix A.

1.4 Solid Waste Planning History in Walla Walla County

Solid waste management in the County has evolved several times through the years to the current system. The original system of local dumps was later shifted to a series of rural drop boxes serving a central landfill. This was updated to the current system in which collection services are available to all County residents with disposal at the SRL—which is owned and operated by the City of Walla Walla—or transferred out of the County to an out of state landfill (i.e., communities of Prescott and Waitsburg).

This plan supersedes all previous Walla Walla County solid waste plans, including the 1987 SWMP, the 1994 Walla Walla and Columbia Counties SWMP, the 1991 Walla Walla and Columbia Counties MRW Management Plan, and the 2014 Walla Walla County Solid Waste and MRW Management Plan.

Table 1-3 lists the key recommendations from the 2014 Walla Walla County SWMP and the actions taken on those recommendations.

Table 1-3. Recommendations of the 2014 Solid Waste Management and Moderate-Risk Waste Plan and Resulting Implementation

	2014 Solid Waste Management Plan Recommended Actions	Implementation Schedule[1]	Implemented? Yes or No
Waste Reduction			
1	Expand outreach methods to include online social media.	Years 1-2	Yes
2	Host community events or discussion forums and coordination with other community events.	Years 1-2	Yes
3	Implement Waste Reduction Ambassadors Program.	Year 3	No
4	Measure program effectiveness through surveys.	Years 2-3	Yes
5	Utilize and expand existing network of relationships with local committees and private organizations to help promote its waste diversion programs.	Years 1-2	Yes
6	Expand promotion and awareness of $mart Business Partners Program, and develop additional award categories.	Years 2-3	No
7	Provide on-site business waste audits and technical assistance.	Years 2-3	Yes
8	Work directly with large businesses and institutions to implement waste reduction and recycling programs. Provide outreach for the program and publicize results.	Years 2-3	No
9	Promote use of waste reduction workshops, buy-back centers, and other waste reduction and recycling opportunities.	Years 1-2	No
10	Promote existing opportunities for residents and businesses to reduce, reuse, and recycle priority recyclables, as well as other materials. Make information available through a variety of media.	Years 1-2	Yes
11	Backyard Composting: Conduct annual workshops, master composting training, and/or expand education materials and communication methods.	Years 2-3	Partially
12	Promote Builders ReSupply Store (BRS) and other nonprofit organizations. Provide online forum for materials exchange. Sponsor reuse website.	Year 2	Yes

Table 1-3. Recommendations of the 2014 Solid Waste Management and MRW Plan and Resulting Implementation (continued)

	2014 Solid Waste Management Plan Recommended Actions	Implementation Schedule[1]	Implemented? Yes or No
13	Support initiatives for non-recyclable, toxic, and/or hard to handle materials that cannot be handled efficiently through the current solid waste collection system.	Years 2-3	Yes
14	Consider becoming an Associate Member of the Northwest Product Stewardship Council.	Years 2-3	No
15	Local governments could consider incentivizing recycling by establishing a rate structure that rewards residents for reducing waste and recycling.	Years 3-4	No
16	Promote multifamily recycling.	Years 2-4	Yes
17	Provide technical assistance to property owners and managers. Provide education and outreach.	Years 2-4	Partially
18	Provide containers or bags for collecting and transporting materials.	Years 2-4	No
19	Evaluate feasibility of expanding materials collected, facility expansion, and education and outreach.	Years 2-3	Yes
20	Offer recycling services in the cities and the UGAs, working with the haulers to establish a new minimum service level.	Years 2-3	Partially
21	Offer curbside organics recycling to residents in the cities and the UGAs. Work with the contracted and Washington Utilities and Transportation Commission hauler to establish this service.	Years 2-3	Partially
22	Establish a program for collection of mixed paper and cardboard from large commercial generators.	Year 2	Partially
23	Establish a curbside green waste service for commercial customers and work with landscapers and gardeners to educate them on keeping these materials separated.	Year 3	Partially
24	Resume use of the Sudbury Road Landfill (SRL) for out-of-county waste. The City of Walla Walla will evaluate opportunities and market the SRL within and outside of the County to attract more waste, organics, and recyclables.	Years 1-3	Partially
25	The City of Walla Walla will evaluate various options for increasing the financial stability of the SRL, including various funding mechanisms.	Years 1-3	Yes
26	The Solid Waste Advisory Committee (SWAC) recommends that the City of Walla Walla develop a C&D drop-off site at the landfill for sorting and processing wood, metals, and other salvageable materials, with consideration towards the service being economical in relation to other disposal options.	Years 2-3	Partially
27	Expand organics processing to include food, compostable paper, and biosolids. The SWAC recommends that the City of Walla Walla expand the existing composting operations to include additional materials, with consideration towards the expansion being economical relative to other disposal options.	Years 2-3	No
28	Develop and implement a business/marketing plan for the compost facility.	Years 1-2	No
29	The County will support studying the feasibility of developing a facility for the production of biofuels, biopower, or bioproducts, and it will work with local entities to further discussions and development of such facilities.	Years 1-2	Partially
30	The County will provide education to homeowners on the proper handling and disposal of asbestos waste.	Year 2	No

Table 1-3. Recommendations of the 2014 Solid Waste Management and MRW Plan and Resulting Implementation (continued)

	2014 Solid Waste Management Plan Recommended Actions	Implementation Schedule[1]	Implemented? Yes or No
31	The County will provide education and outreach to residents on the correct management of medical waste. The County will investigate opportunities for additional drop-off locations and events for pharmaceutical waste, including additional U.S. Drug Enforcement Administration-sponsored events.	Years 2-3	Yes
32	The County will continue to expand and support the BRS and other opportunities for reuse and recycling of C&D materials.	Years 1-4	Yes
33	The SWAC recommends that the City of Walla Walla consider purchasing equipment to handle inert materials more effectively.	Years 1-4	Partially
34	The County will promote green building through education and outreach.	Years 1-4	Yes
35	The County will provide education to contractors about alternatives to landfilling for C&D and inert materials.	Years 1-4	No
36	The County will develop a disaster debris management plan.	Years 1-4	No
37	The County will develop a plan for addressing accumulation of tires on individual properties, and it will pursue state grants, if available, to assist in tire pile cleanup.	Year 2	Yes
38	The County will monitor the effectiveness of the implementation of the existing E-Cycle program, and it will determine the need to modify or alter the program.	Years 1-2	No
39	The County will provide education to consumers on the E- Cycle program and the opportunities available for recycling of these materials.	Years 1-2	Yes
40	The County will continue the existing education and outreach programs, including the following: • Classroom presentations on household hazardous waste • Information booths at community events • Recycling hotline • Mass mailings • Newspaper articles • Website postings The information will be made available through a variety of methods and venues, including social media and partnerships with other organizations.	Years 1-2	Partially
41	The County will expand outreach in the K-12 classrooms including presentations, assignments, and projects.	Years 2-3	Partially
42	The County will continue to use the $mart Business Partners Program to provide education and outreach, technical assistance, and recognition of businesses on reducing the generation of MRW.	Years 1-3	No
43	The SWAC recommends that the City of Walla Walla consider developing an area at the landfill for small quantity generator hazardous materials collection. The City will also work with a contractor to establish a collection system for businesses.	Years 2-3	No
44	The County will work towards expanding the number of collection events or locations, depending on funding availability.	Years 2-3	No
45	The County will support state product stewardship efforts for MRW and other toxic materials.	Years 1-2	No

Table 1-3. Recommendations of the 2014 Solid Waste Management and MRW Plan and Resulting Implementation (continued)

	2014 Solid Waste Management Plan Recommended Actions	Implementation Schedule[1]	Implemented? Yes or No
46	Evaluate the current Interlocal arrangement for coordination of programming and planning. The agencies involved will evaluate the existing Interlocal agreement to identify whether roles, responsibilities, funding mechanisms, and implementation should be changed.	Year 2	Yes
47	Coordinate enforcement activities to attain maximum impact without duplication. Solid waste enforcement activities will be coordinated among all affected and interested agencies to maximize efforts and resource use and to avoid duplication of efforts.	Years 1-2	No
48	Improve agency coordination for illegal dumping cleanup, education, and prevention programs. The agencies involved in enforcing illegal dumping programs will coordinate efforts, resources, and activities.	Years 2-3	No
49	Evaluate potential future establishment of a Regional Solid Waste Management Agency. The County may evaluate the feasibility of establishing a formal regional agency for managing solid waste in the County.	Year 3	No

[1] Per 2014 Plan, actual implementation schedule may vary.

1.5 Walla Walla County Solid Waste Management Plan Amendment Process

According to RCW 70A.205.075, comprehensive solid waste management plans shall be reviewed and revised every 5 years. However, occasional minor amendments between 5-year plan revisions may be required to keep the 2024 Plan current so it will continue to meet the needs of the County and participating cities. Proposed amendments may be received or initiated by the SWAC for consideration. In these situations, the SWAC will review and consider the amendment, and if it is approved by a majority of the Plan participants (County and cities), it will be adopted. Because all plan participants have representation on the SWAC, it is deemed adequate to handle minor amendments this way. An example of a minor amendment is the ability of the SWAC to alter the designated recyclable list in response to changing market conditions or local hardship to provide collection of one or more materials (recyclable material priorities are discussed further in Chapter 3).

The amendment must be submitted to the Washington State Department of Ecology (Ecology) after adoption by the SWAC. Upon final adoption of the amendment, all future copies of the plan will include the amendment and note the amendment date on the cover. This process follows Ecology's Guidelines for the Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions (Ecology 2010a) and the interlocal agreement between the County and participating cities (Appendix A).

1.6 Relationship to Other Plans

Solid waste and MRW management plans must be viewed in the context of the overall planning process within all jurisdictions. As such, they must function in conjunction with various other plans, planning policy documents, and studies which deal with related matters. Included among these are the Washington State Solid and Hazardous Waste Plan, county comprehensive plan and zoning code, shoreline management master plan, capital facility plans, emergency management plans, watershed plans, and floodplain management plans.

1.6.1 Washington State Solid and Hazardous Waste Plan

The State updated and published the Washington State Solid and Hazardous Waste Plan: Moving Washington Beyond Waste and Toxics (2021 State Plan) in December 2021 (2021a Ecology). The 2021 State Plan priorities include the following:

- Increase the focus on manufacturing phases as opposed to end-of-life for solid waste.
  - → Gather data on the life cycle of materials and encourage the producers of these products to take responsibility for them. The State also plans to encourage the repair and reuse of products over discard and an environmentally conscious approach to the purchase of new products.
- Reduce the toxic threats of products and industrial processes.
  - → Encourage fewer toxic products and industrial processes through improved design, and encourage the use of safer, available alternatives to the most toxic chemicals. The State will also encourage the use of alternative assessments and green chemistry to find more safe alternatives to toxic chemicals and pursue local partnerships to improve toxic chemical source control.
- Maximize the effectiveness of recycling and organic processing systems.
  - → Address contamination issues in the recycling and composting process; support the creation of a market for recycled materials and recycling; and focus on issues with facilities including compliance, technology, and enforcement of regulations.
- Mitigate climate change through waste reduction, reuse, and recycling.
  - → Reduce overall waste—including food waste—and increase the use of processed organics to sequester carbon while also utilizing opportunities to decrease waste and toxic chemicals in ways that concurrently reduce carbon (2021a Ecology).

The 2021 State Plan also addresses changes in recycling practices and legislature that have been implemented since the publication of the previous 2015 Plan, reviews the progress toward the 2015 Plan recommended actions, and recommends new additional actions.

1.6.2 Walla Walla County Comprehensive Plan

The planning guidelines require that the solid waste management plan reference comprehensive land use plans for all participating jurisdictions to ensure that the solid waste management plan is consistent with policies set forth in the other documents. This 2024 Plan considers the effect of other utility, land use, and resource development plans produced by the participating jurisdictions on solid waste management in the County.

The Walla Walla County Comprehensive Plan is an official document adopted by the Board of County Commissioners as a guide to making decisions about the future development of Walla Walla County. It strives to balance the community's financial ability to support growth with its projected increase in population and employment and the need for environmental protection. Updated in 2018, the Walla Walla County Comprehensive Plan is a mandatory update required by the Growth Management Act (GMA), RCW 36.70A.130 (4)(d) (Walla Walla County 2019).

The Walla Walla County Comprehensive Plan provides a legally recognized policy framework for making decisions about accommodating growth in the County. It is not just a land use policy document. It also establishes the County's growth-related policies for transportation, economic development, housing, critical areas, shorelines, parks and recreation, utilities, and capital facilities. The GMA, in turn, requires that the policies be implemented through the County's development regulations (Walla Walla County 2019).

1.6.3 Zoning

Chapter 17 of the Walla Walla County Code (WWCC) establishes zoning districts, zoning maps, and development standards to regulate land use in the unincorporated areas of Walla Walla County. The zoning ordinance allows landfills by conditional use permit in areas zoned industrial agriculture-mixed (IA-M) and industrial agriculture-heavy (IA-H). The zoning code permits development of organic waste processing facilities in IA-M and IA-H zones, and with an administrative conditional use permit in Resource Zone Primary agriculture (PA-40).

Chapter 20 of the City of Walla Walla Municipal Code (WWMC) conditionally allows development of solid waste handling facilities within all zoning districts. Defined as an essential public facility, solid waste handling facilities are subject to a Level III land use review process. This process requires a quasi-judicial public hearing before, and a final decision by, the hearing examiner; public input; and State Environmental Policy Act review. As a prerequisite to the Level III review process, proposed solid waste handling facilities must undergo a siting process, which includes input from an appointed advisory committee (WWMC 20.176).

1.6.4 Shoreline Management Plan

Under the Washington State Shoreline Management Act, local governments have the primary responsibility for initiating the planning program and administering the regulatory requirements of the Act. Ecology acts in a supportive and review capacity. Walla Walla County and the cities of Walla Walla, Waitsburg, and Prescott all have adopted shoreline master programs (SMPs), which prohibit solid waste disposal sites within the areas of their respective shoreline jurisdiction.

Walla Walla County adopted a SMP, which was approved in May 1975. The October 2023 update was completed with the goals of aligning the plan with state laws and guidelines, ensuring that the plan is consistent with the Walla Walla County Comprehensive Plan and providing clarification to improve the usability to the reader.

The City of Walla Walla adopted and approved its first SMP in 1977 and updated it in June 2018 (City of Walla Walla 2018). The City of Prescott adopted and approved their first SMP in 2016 (City of Prescott 2016). The City of Waitsburg also adopted and approved their first SMP in 2016 (City of Waitsburg 2016).

1.6.5 Sudbury Road Landfill Facility Master Plan

The City of Walla Walla owns and operates the SRL. The City completed the SRL Facility Master Plan (FMP) in September 2023 to document the long-term planning approach for the landfill and surrounding facilities. See Section 5.2.1 for a description of the SRL FMP.

1.6.6 Flood Response Plan

The 2022 Walla Walla County Flood Response Plan (2022 Flood Response Plan) guides Walla Walla County on flood response and recovery actions to maintain public health and safety. It addresses recognizing flood potential, reducing property damage because of flooding, and developing community awareness of flood hazards. The 2022 Flood Response Plan details the roles and responsibilities of County agencies and the activation of the Emergency Operations Center and includes information on administration, financing and logistics, and training. The 2022 Flood Response Plan does not address solid waste facilities or waste streams relative to flood response (Walla Walla County 2022).

1.6.7 Multi-Jurisdictional Hazard Mitigation

The Walla Walla County Multi-Jurisdictional Hazard Mitigation Plan (HMP) was written in 2018 and updated in 2020. Its purpose is to mitigate the potential for and the damages resulting from natural hazards and disasters. The HMP addresses the issue that debris would likely be generated as a result of various disasters, but it doesn't act as a strict guideline for recovery from disasters. The plan does not address solid waste facilities or waste streams relative to disaster response (Walla Walla County 2018).

1.7 Background of the Planning Area

The planning area includes the cities of Walla Walla, College Place, Prescott, and Waitsburg, as well as the unincorporated County areas. Walla Walla County is bordered on the west by Benton and Franklin Counties, on the north by Franklin County, on the east by Columbia County, and on the south by Umatilla County, Oregon. See Figure 1-1.

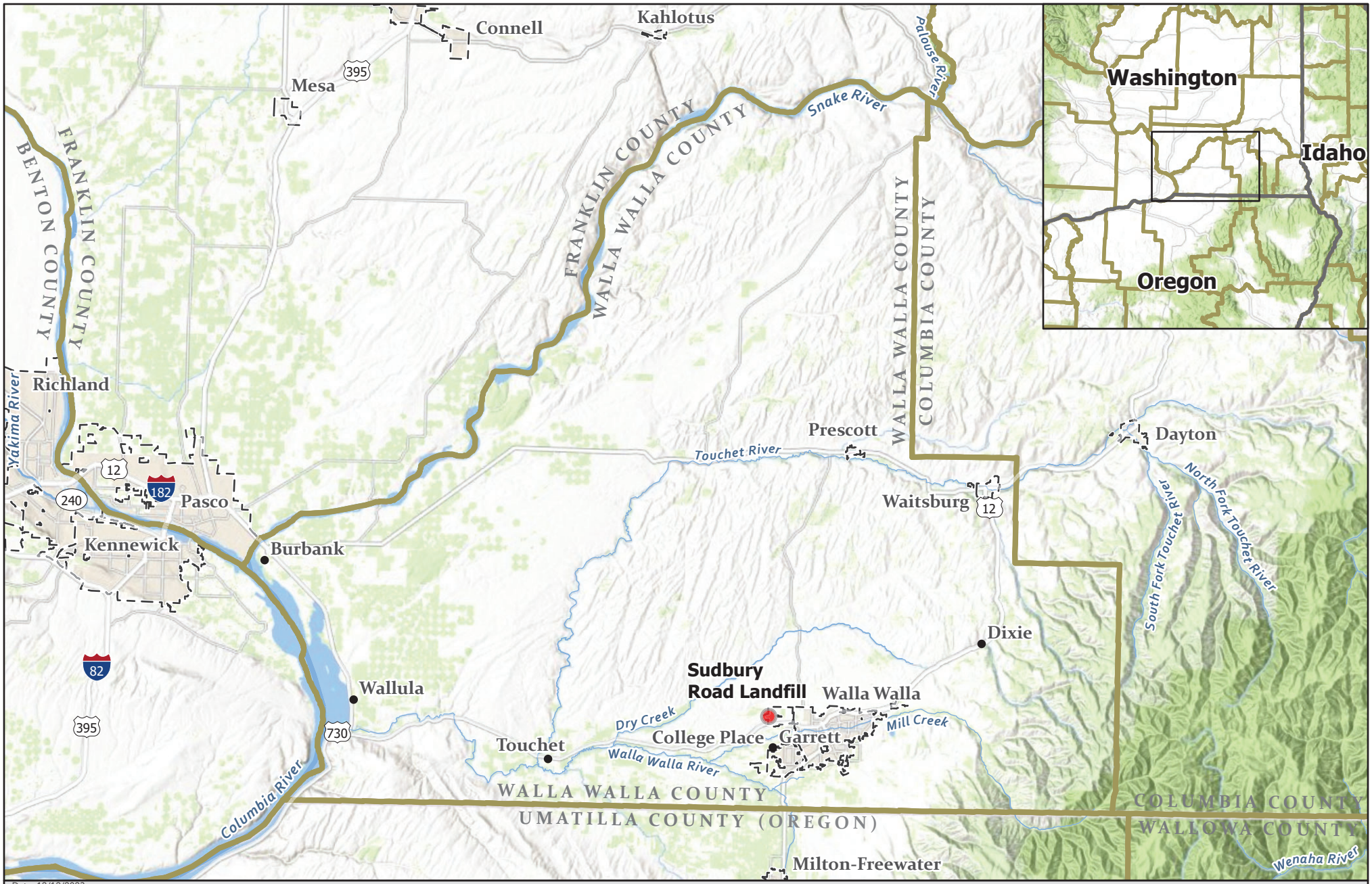
1.7.1 Population

The County encompasses four incorporated cities (College Place, Prescott, Waitsburg, and Walla Walla) and six U.S. Census-designated unincorporated places (Burbank, Dixie, Garrett, Touchet, Walla Walla East, and Wallula). Between 1960 and 2020, the population of the County grew 48 percent, or at an annual rate of 0.62 percent, increasing from 42,195 to 62,580 people. During the 1990s, the County experienced the largest percentage increase in population compared to any other decade; however, the population increased at a rate slower than most counties in Washington State. Between 2010 and 2020, the population of the County increased by approximately 3,800 persons, or approximately 6 percent. The total population of Walla Walla County in 2020 was approximately 62,580 persons (OFM 2021a). Most growth has occurred in the incorporated cities, predominantly Walla Walla and College Place. The population growth from 2010 to 2020 is shown in Table 1-4.

Table 1-4. Population Growth, 2010–2020

Jurisdiction	2010	2015	2020
College Place	8,765	9,110	9,780
Prescott	318	325	330
Waitsburg	1,217	1,235	1,240
Walla Walla City	31,731	33,390	34,400
County Unincorporated	16,750	16,590	16,830
COUNTY TOTAL	**58,781**	**60,650**	**62,580**

Source: United States Census Bureau 2020



Date: 12/12/2023
Sources:
PCS: NAD 1983 StatePlane Washington North FIPS 4601 Feet
Disclaimer: This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes.

0 2.5 5 10 Miles

- Sudbury Road Landfill
- City Limits
- Unincorporated Community
- County Boundary
- State Boundary

Figure 1-1. Vicinity Map
Walla Walla County Solid Waste Management Plan

Walla Walla County, WA

As indicated in Table 1-4, most residents live in the incorporated City of Walla Walla, with other population centers in College Place, Waitsburg, and Prescott. The 2020 population percentages of the cities and Walla Walla County are shown in Table 1-5.

Table 1-5. Walla Walla County Population Percentages, 2020

Jurisdiction	Population	Percent of Total
College Place	9,780	15%
Prescott	330	>1%
Waitsburg	1,240	2%
Walla Walla City	34,400	55%
County Incorporated	45,750	73%
County Unincorporated	16,830	26%
County Total	**62,580**	**100%**

Source: United States Census Bureau 2020

1.7.2 Land Use

The land area of the County is approximately 813,000 acres, of which 801,000 acres are unincorporated, and the remainder consists of the incorporated cities of Walla Walla, Prescott, College Place, and Waitsburg. According to the Walla Walla County Comprehensive Plan, approximately 93 percent of the County's existing land uses consisted of resource production and extraction, including agriculture, forestry, and mining. Table 1-6 indicates the distribution of existing land use in the unincorporated areas of the County as described in the Walla Walla County Comprehensive Plan (Walla Walla County 2019).

Table 1-6. Walla Walla County Unincorporated Land Use

Existing Land Use	Estimated Acres	Percentage of Total Acreage
Cultural, Entertainment, and Recreational	4	0.0%
Services-Education	13,502	1.7%
Manufacturing	417	0.1%
Services-Public/Government	3,646	0.5%
Residential	12,888	1.6%
Resource Production and Extraction-Agriculture, Forestry, Mining	743,734	93.2%
Services-Other	261	0.0%
Trade	222	0.0%
Transportation, Communication, and Utilities	3,395	0.4%
Undeveloped Land and Water Areas	8,688	1.1%
Unknown	11,233	1.4%
Total	**798,272**	**100.0%**

Source: Walla Walla County 2019

The County has worked with its incorporated cities to establish UGAs. Designation of these UGAs recognizes both the historical and existing urbanized development pattern in the County and plans for future growth within those areas. In addition, the County has established the Industrial UGA in Attalia and a UGA in Burbank. Except for Burbank and Attalia, all UGAs are contiguous to and expand the respective City's incorporated boundaries. The County's designated UGAs are as follows:

- Attalia Industrial UGA
- Burbank UGA
- City of College Place UGA
- City of Prescott UGA
- City of Waitsburg UGA
- City of Walla Walla UGA

1.7.3 Economy

Historically, manufacturing has been the leading industry in the County. However, the largest employer in the County is now Broetje Orchards, which was sold and became FirstFruits Farms in 2019, an apple orchard that employs 19.4 percent of the County's labor force. This indicates that agriculture is comparable to manufacturing for numbers of employees. FirstFruits Farms is one of the largest privately owned orchards in the world with more than 6,000 acres near Prescott, Benton City, and Wallula.

Roughly 70 percent of the largest employers operate in the City of Walla Walla, where the labor force is established. Exceptions include Tyson Fresh Meats and Packaging Corporation of America (PCA)/Boise Paper located in Wallula and Wal-Mart located in College Place. The County's largest employers are indicated in Table 1-7 (Walla Walla County 2019).

Table 1-7. Walla Walla County Largest Employers (2015)

	Company	Product/Service	FTE	PTE	Total
1	Broetje Orchards (FirstFruits Farms)[1]	Apple Grower, Packer, Shipper	1,300	1,100	2,400
2	Tyson Fresh Meats, Inc.	Beef Slaughter/Processing	1,380	0	1,380
3	Washington State Penitentiary	Correctional Institution	1,030	59	1,089
4	Providence St. Mary Medical Center	Health Care	650	311	961
5	Walla Walla School District #140	Education	570	244	814
6	Walla Walla Community College	Community College/Higher Education	322	292	614
7	Packaging Corp. of America/Boise Paper	Pulp, Paper, Packaging	600	0	600
8	Whitman College	Higher Education	379	191	570
9	Walla Walla University	4-yr. Comprehensive University	255	193	448
10	U.S. Dept. of Veterans Affairs	Health Care (Walla Walla VA MC)	393	43	436
11	Key Technology Inc.	Design and Manufacture Process Automation Systems	431	3	434
13	U.S. Army Corps of Engineers	Federal Government – Engineering Construction	350	3	353
14	Walla Walla County	County Government	315	27	342
15	Wal-Mart	Retail	161	177	338

Table 1-7. Walla Walla County Largest Employers (2015) (continued)

	Company	Product/Service	FTE	PTE	Total
16	City of Walla Walla	Municipal Services	239	67	306
17	Walla Walla Clinic	Medical Clinic/Health Care Service	175	75	250
18	Washington Odd Fellows Home	Nursing, Assisted Living, and Retirement Center	168	53	221
19	Banner Bank	Full Service Banking	187	15	202
20	Nelson Irrigation Corporation	Irrigation Products	175	10	185

Notes: FTE = full-time equivalent; PTE = part-time equivalent.

Source: Walla Walla County Comprehensive Plan 2019, Economic Development Element, August 2019.

[1] Broetje Orchards was sold in 2019 and was renamed FirstFruits Farms.

2. Waste Generation and Projections

Walla Walla County's solid waste management planning requires information on the size, composition, and projected changes to the County's waste stream. This information helps identify waste recovery potential, measure existing program and policy effectiveness, highlight market needs, and estimate capacity for current and future processing and disposal infrastructure.[1]

This chapter characterizes the County's disposed municipal solid waste (MSW). It is organized into the following key sections:

- Historic Disposal and Recovery Quantities, which includes an overview of past disposal trends.
- Historic Per Capita Waste Generation, which presents past disposal trends in relation to population, both at the County and State level.
- Disposal, which includes current waste composition profiles for MSW disposed by the County.
- MSW Recycling and Diversion, which includes recycled and diverted material quantities and rates.
- Waste Stream Projections, which provides projected future waste stream quantities based on historic data and population growth estimates.

2.1 Historic Municipal Solid Waste Disposal and Recovery

This section discusses the quantities of MSW disposed and recovered in Walla Walla County.

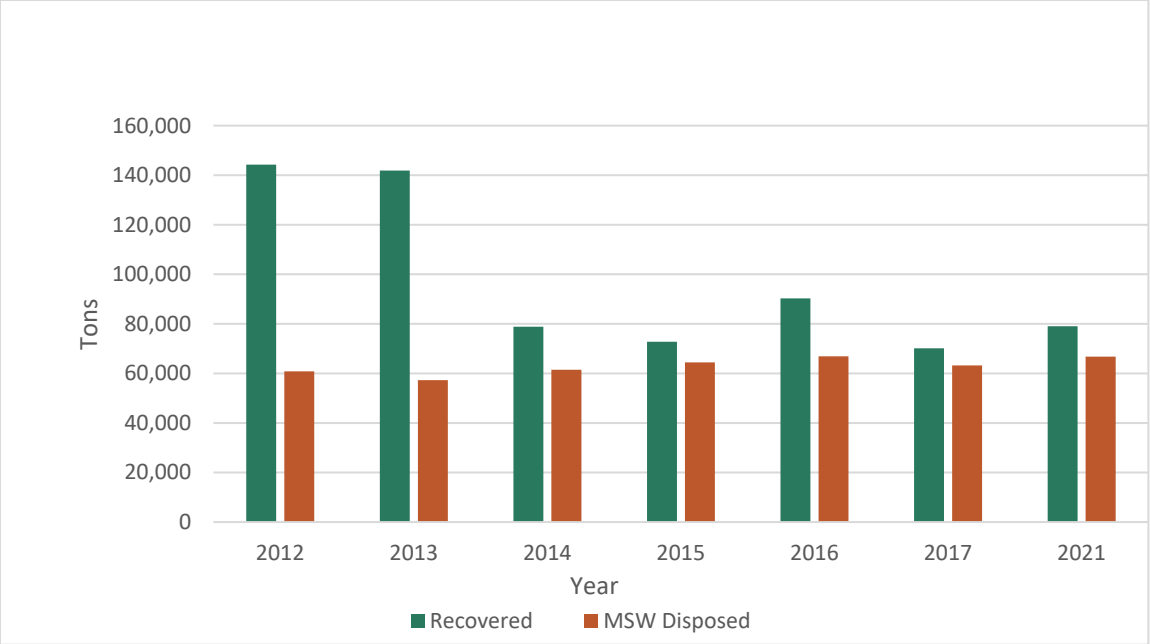
Dating back to 2012, recovered and waste disposal quantities reached the lowest levels in 2015 at about 72,800 and 64,400 annual tons, respectively. Disposal and recovery peaked in 2012 with an estimated 144,300 annual tons recovered, approximately 61,000 tons disposed, and a total generation rate of approximately 205,100 tons. (Ecology 2021b, 2024a).

Between the reporting years of 2012 and 2021, there are instances where recovery (MSW recycling and diversion) of specific commodities far exceeded the average tonnage reported compared to other years. In 2012, 2013, and 2016, for example, ferrous metal recycling contributed approximately 48,200 tons (72 percent), 51,400 tons (77 percent), and 23,030 tons (68 percent), respectively, to the overall MSW recycling tonnage. According to Ecology, there were inconsistencies in how this information was reported; therefore, the recycling tonnage reported for those years misrepresents what was recycled (Ecology 2021b, 2024a). As discussed further in Section 2.2, food processing waste and industrial organics are also large contributors to the recovery tonnage, but this is consistent among all years. Figure 2-1 shows an estimate of what was disposed and recovered from 2012 to 2021.[2]

[1] MSW recycling includes mixed solid waste and other materials collected for recycling or disposal from municipal sources (residential and commercial) and excludes source separated C&D debris, agricultural waste, mining waste, and most industrial sources. This is also partially defined in WAC 173-350.

Recovery is defined as material that is diverted from the solid waste stream for the intended purpose of recycling, composting, burning source-separated materials for energy, anaerobic digestion, land application, and other beneficial uses (includes MSW recycling and diversion).

[2] There is a gap of data provided by Ecology between 2017 and 2021.



Source: Ecology 2021b, 2024a

Figure 2-1. Walla Walla County Recovery and Municipal Solid Waste Disposal Quantities, 2012-2021

2.2 Historic Per Capita Waste Generation

Per capita waste generation measures the population's effect relative to waste generation, creating a useful tool for comparison and projection purposes. The equation below shows how per capita waste generation is calculated.

$$\frac{\textit{waste generated (tons)}}{\textit{population}} \times \frac{\textit{1 year}}{\textit{365 days}} = \textbf{\textit{per capita waste generation (lbs/per person/day)}}$$

Walla Walla County per capita waste generation data compared to Washington State levels for 2012 through 2021 are shown in Table 2-1[3]. County per capita waste generation decreased between 2014 and 2015, with an increase between 2016 and 2017 and in 2021, but it did not exceed what was generated in 2012 and 2013. The statewide per capita generation consistently increased from 12.0 pounds per person in 2012 to 12.9 pounds per person in 2016, and 13.3 in 2021. The County's total waste generation (what is disposed and recovered) is generally higher compared to the State averages, with some years between 2014 and 2017 only slightly higher than the State averages (Ecology 2021b, 2024a). The County's high generation rate is driven, in part, by large amounts of food processing and industrial organic waste that is managed by the generator, not the County.

[3] There is a gap of data provided by Ecology between 2017 and 2021.

Table 2-1. Walla Walla County and Statewide Per Capita Waste Generation Comparison (Recoverable), 2012–2021

Year	County Per Capita Waste Generation	WA Per Capita Waste Generation
2012	19.1	12.0
2013	18.3	12.2
2014	12.9	12.4
2015	12.5	12.4
2016	14.5	12.9
2017	10.7	13.1
2021	15.0	13.3

Sources: Ecology 2021b, OFM 2021b, Ecology 2024a

Walla Walla County per capita solid waste disposal data compared to Washington State levels for 2012 through 2021 are shown in Table 2-2.[4] County per capita waste disposal is mostly lower than the state's average, with 2021 as the only year showing a higher disposal rate.

Table 2-2. Walla Walla County and Statewide Per Capita Waste Generation Comparison (Disposal) 2012–2017

Year	County Per Capita MSW Generation	WA Per Capita MSW Generation
2012	5.7	6.0
2013	5.3	6.5
2014	5.7	6.7
2015	5.9	6.9
2016	6.3	6.7
2017	6.3	6.7
2021	8.1	7.6

Sources: Ecology 2021b; OFM 2021b, Ecology 2024a

2.3 Waste Stream Composition

County refuse is primarily disposed at the SRL. In 2021, 78 percent (approximately 54,954 tons) was disposed at SRL, and about 22 percent (approximately 15,145 tons) was disposed at Finley Buttes Landfill (Oregon) (Ecology 2024b). This section summarizes the composition of waste disposed from Walla Walla County using data from 2022 for the four substreams defined below.

- **Commercial** – This is waste generated by businesses, institutions, industrial entities, and apartments with 10 or more units and collected by a municipal or private garbage hauler.
- **Residential** – This is waste generated by single-family residences, apartments with fewer than 10 units and collected by a municipal or private garbage hauler.
- **Self-haul** – This is waste transported to a disposal site by someone other than a municipal or private garbage hauler.
- **Dropbox (also Compactor Waste)** – This is waste generated by businesses, institutions, industrial entities, apartments of all sizes, and single-family residences on a temporary basis

[4] There is a gap of data provided by Ecology between 2017 and 2021.

and collected by a municipal or private garbage hauler. It is often associated with construction sites.

The 2022 estimated tonnage disposed at the SRL by substream is shown in Figure 2-2. The residential substream was the largest overall contributor, disposing roughly 23,609 tons, followed by the self-haul, drop box, and commercial substreams, which contributed about 22,027 tons, 5,637 tons, and 5,322 tons, respectively (Leno 2023).

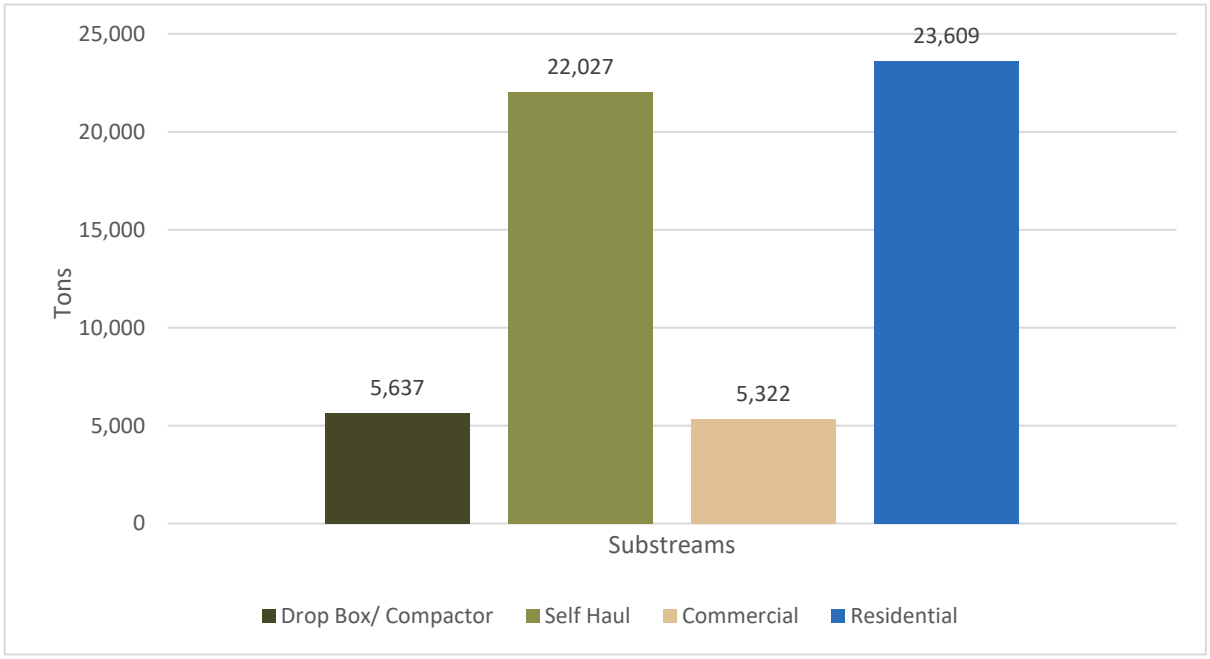


Figure 2-2. Walla Walla County Waste Disposal by Substream

2.3.1 Waste Composition, Overall County

This section discusses the overall waste composition of the County based on samples of residential, self-haul, and commercial waste according to Ecology's 2020–2021 Washington Statewide Waste Characterization Study (Ecology 2021c). Ecology has performed five state-wide waste characterization studies over the last 20 years. The studies survey residential, commercial, and industrial waste substreams to determine the percentages of specific material types that end up in the landfill by sector.

The 2020–2021 four-season study surveys six waste generation areas (WGAs) across the State of Washington as grouped by similar geographies, demographics, and economies. For our analysis, we combined the data for two WGAs to better represent the waste characterization in Walla Walla County: the Central WGA, which includes Kittitas and Okanogan Counties, and the East WGA, which includes Spokane and Whitman Counties. Figures 2-3 through 2-6 provide an overview of the composition of eight material classes: Paper, Plastic, Glass, Metal, Organics, Household Hazardous Waste (HHW)/Special Wastes, C&D[5], and "Other"[6] Materials. Detailed composition results for the County's overall waste stream and the three substreams are included in Appendix B.

[5] C&D includes the "wood debris" category.

[6] "Other" materials include consumer products (e.g., TVs, textiles, furniture), hazardous materials (e.g., pesticides, paint, antifreeze), and residuals (e.g., diapers, ash, dust).

Figure 2-3 provides a general overview of the composition of MSW disposed in Walla Walla County as drawn from the East and Central WGAs, including residential, commercial, and self-haul wastes. Organics made up about 21 percent of all waste disposed by weight, and included food (15.5 percent), yard waste (about 2 percent), and other organic materials. C&D debris/wood debris made up 18 percent, and paper made up 20 percent of the total waste disposed by weight, 17 percent of which was recyclable paper.

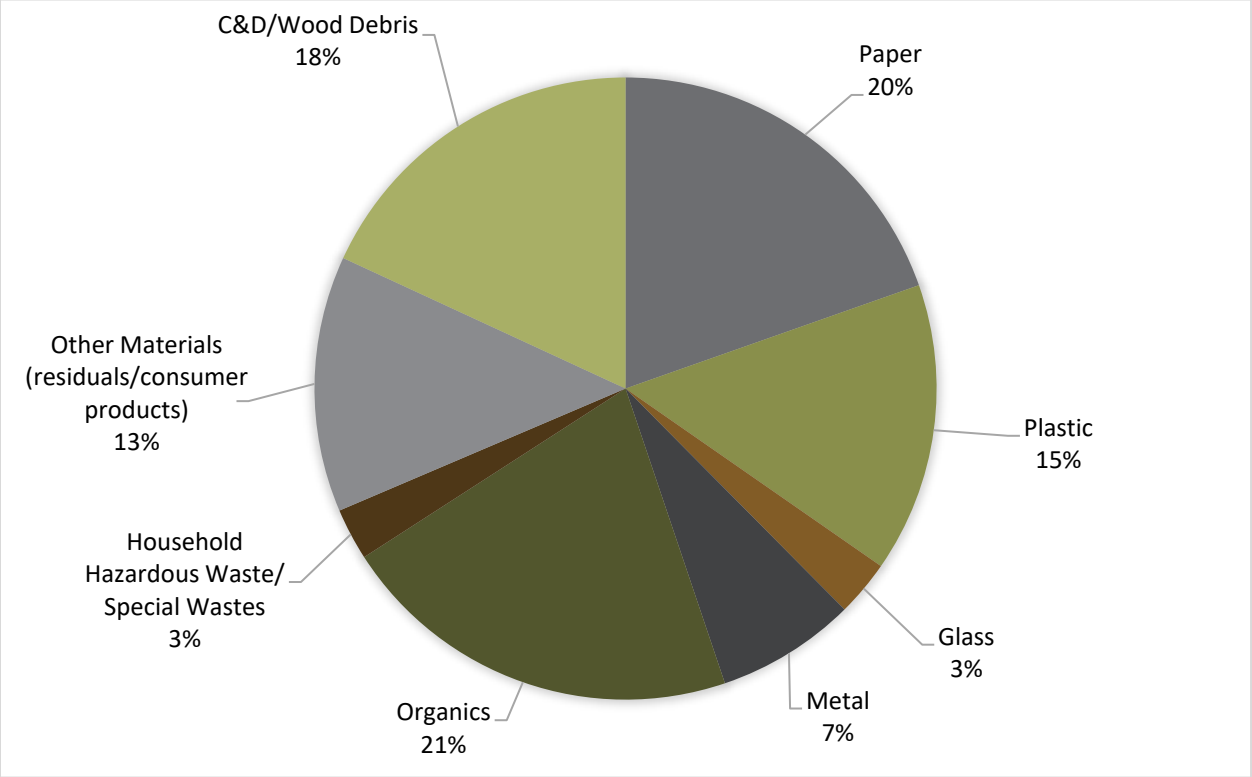


Figure 2-3. Overview of Walla Walla County Overall Waste Composition

2.3.2 Waste Composition, Commercial Substream

An overview of Walla Walla County's commercial waste stream is shown in Figure 2-4. Paper and C&D/wood debris, at 23 percent each, made up the largest fractions of this substream by weight. Recyclable paper accounted for slightly less than 20 percent of the total. Organics, which comprised more than 16 percent of the total by weight, were predominately composed of food (Ecology 2021c).

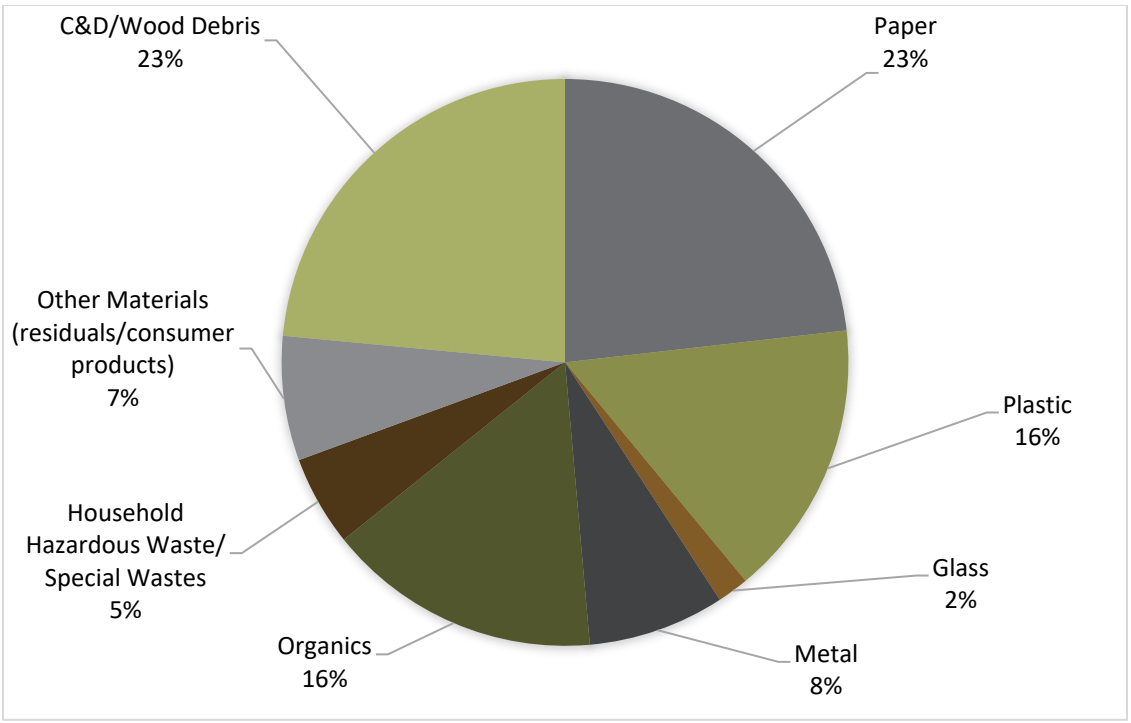


Figure 2-4. Overview of Walla Walla County Commercial Waste Composition

2.3.3 Waste Composition, Residential Substream

An overview of the County's residential substream waste composition is presented in Figure 2-5. Organics composed the largest percentage of this waste stream at 32 percent, followed by paper at 19 percent of the total by weight. Food (about 23 percent) was the largest individual material by weight in the organics category (Ecology 2021c).

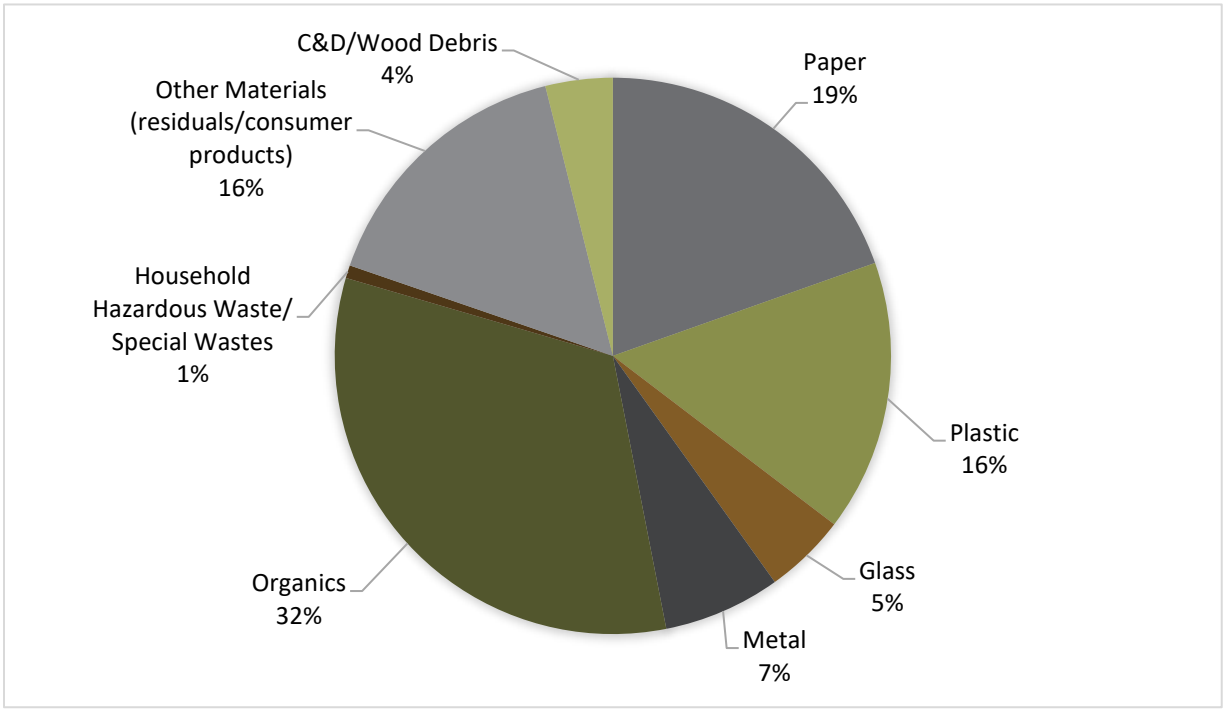


Figure 2-5. Overview of Walla Walla County Residential Waste Composition

2.3.4 Waste Composition Self-Haul Substream

An overview of Walla Walla County's self-haul waste is presented in Figure 2-6. C&D materials were estimated to compose 34 percent of this substream by weight. Wood debris made up about 17.5 percent, while construction materials made up 16.3 percent (Ecology 2021c).

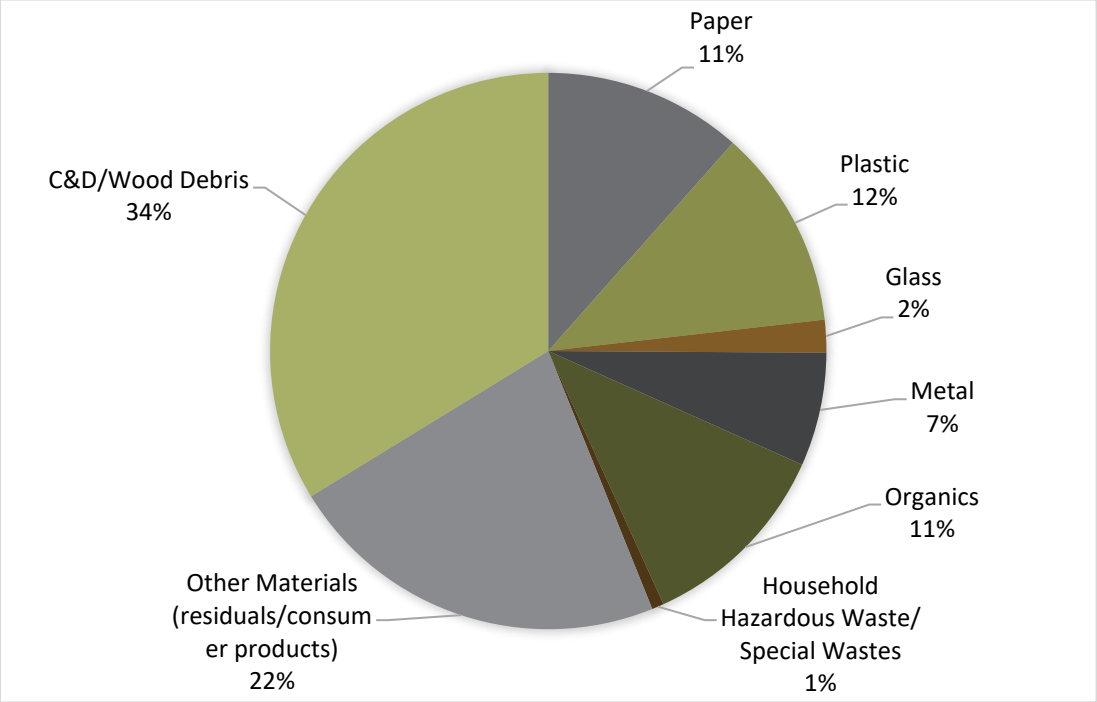


Figure 2-6. Overview of Walla Walla County Self-Haul Waste Composition

2.4 Waste Stream Projections

This section presents waste generation projections for the 20-year planning period, 2024 to 2043, using Washington State Office of Financial Management (OFM) population forecasts (OFM 2022) and estimated waste disposal and recycling information provided by the City of Walla Walla and Walla Walla Recycling Inc.[7], respectively (City of Walla Walla 2023, Stapleton 2021 Personal Communication). Figure 2-7 presents population growth estimates throughout the County – both incorporated and unincorporated areas. The "middle series" population projection was applied to this forecast.

[7] Details regarding Walla Walla Recycling are provided in Chapter 3, Section 3.3 Recycling.

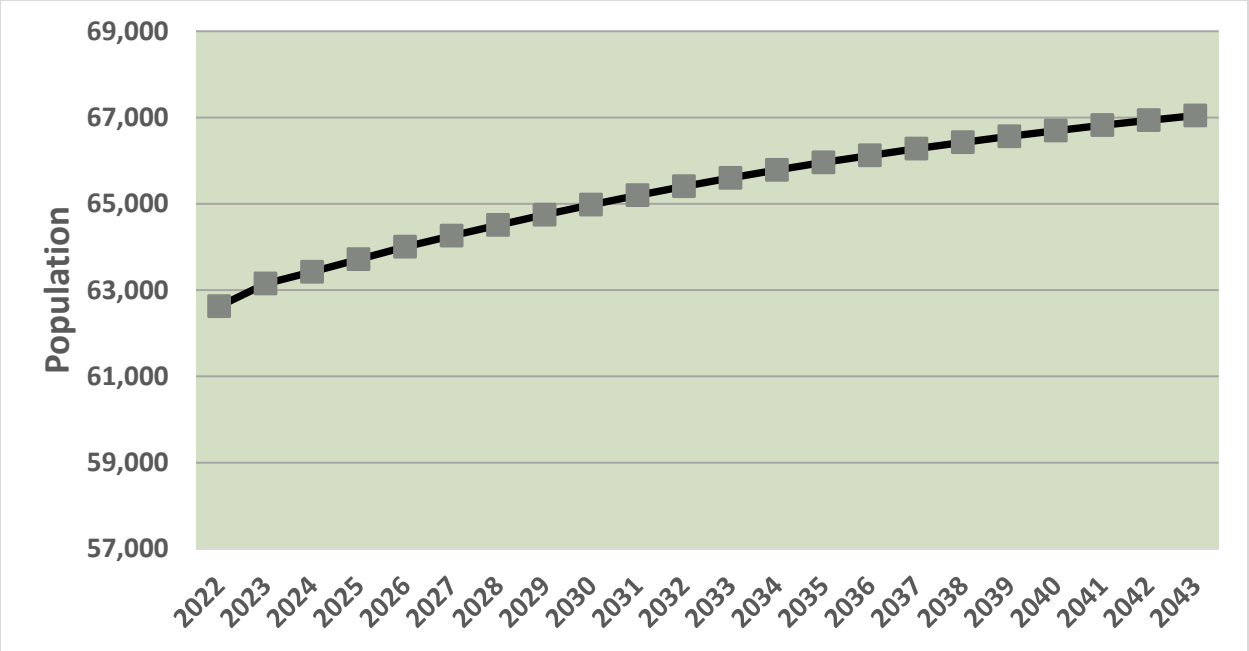


Figure 2-7. Population Projections for Walla Walla County through 2043

The 20-year waste generation projections for recycling, diversion, and disposal are presented in Table 2-3. Waste generation estimates for the 20-year planning period were calculated using the following methodology:

- Per capita disposal was projected using the estimated 2022 population and disposal quantity as the baseline.
- The baseline recycling quantity was provided by Walla Walla Recycling for the year 2020 and the baseline quantity of yard waste diverted to the compost facility at SRL was provided by City of Walla Walla for the year 2022.
- The projected population growth through 2043 uses the OFM middle series population estimates.
- The rate of diversion is based on an estimated organics diversion of 25 percent from 2028 through 2030, with an estimated diversion after 2030 at 75 percent. This estimate is based on planned compost facility improvements outlined in the SRL FMP (City of Walla Walla 2023). If the recycling rate can be increased with the reintroduction of commodities that were removed from recycling collection due to market constraints, and with the introduction of new materials, the projected waste generation based on recycling and disposal conservatively estimates an increase in the recycling rate of 5 percent/year.

Table 2-3. Walla Walla County Projected Waste Generation Quantities through 2043

Year	Population	Waste Generation with Current Trend of Recycling, Organics Diversion, and Disposal (tons/yr)	Waste Generation with Increased Recycling and Organics Diversion (tons/yr)	Disposal with Increased Recycling and Organics Diversion (tons/yr)
2020	62,584	74,100	--	--
2025	63,714	77,400	73,500	57,400
2030	64,977	78,900	73,400	56,900
2035	65,959	80,100	71,300	54,600
2040	66,695	80,900	72,000	55,200
2043	67,045	81,400	72,400	55,500

Sources: OFM 2022; City Walla Walla 2022

3. Education and Outreach, Waste Reduction and Recycling

This chapter describes existing programs and potential options for reducing the amount of waste being generated and disposed in Walla Walla County. The programs discussed in this chapter are organized as follows:

- State Legislation, Regulations, and Guidelines
- Education and Outreach
- Waste Reduction
- Recycling

3.1 State Legislation, Regulations, and Guidelines

This section introduces state legislation, regulations, and guidelines that shape both existing practices and the future of waste reduction and recycling.

Use Food Well Washington Plan (RCW 70A.205.715). Implemented in 2021, the Use Food Well Washington Plan outlines a pathway to a more resilient food system through food waste reduction. The Plan establishes statewide food waste reduction goals including: to reduce food waste generated by 50 percent by 2030 and reduce at least half of edible food waste by 2030. Three key strategies to meet these goals include 1) prevent and reduce the amount of food wasted, 2) rescue food that would otherwise be wasted and ensure it reaches those that need it, 3) recovery (use as animal feed, composting, vermicomposting).

Plastic Packaging Evaluation and Assessment Law (RCW 70A.520). This law was passed in 2020 and required a statewide study of plastics management and recommendations for improvements to the system be conducted and submitted to the Washington State Legislature. Laws that have passed stemming from this study include:

- Plastic Bag Ban (RCW 70A.530). Beginning October 1, 2021, single-use plastic carryout bags were banned statewide, excluding plastic produce bags. In addition, paper carryout bags must contain a minimum of 40 percent postconsumer recycled (PCR) material. Small paper bags may be provided at no cost, but large bags (882 cubic inches or larger) are required to be purchased for $0.08 per bag. Thick, reusable plastic carryout bags are also allowed under the law if available to purchase at $0.08 per bag and are required to be labeled as reusable, with the millimeter thickness and percent PCR material.
- Optional (Single-Use) Food Serviceware (RCW 70A.245.080). This law went into effect in 2022 and disallows restaurants and other businesses from automatically including single-use plastic serviceware in customer orders. This includes items such as utensils, straws, condiment packages, and cup lids for cold beverages; it does not include food containers, lids for hot beverages, or food wrappers.
- Expanded Polystyrene Ban (RCW 70A.245.070). This law went into effect in 2023 and regulates the use and sale of expanded polystyrene (EPS). EPS-based packing peanuts or other void-filling materials were banned in June 2023. By June 2024, portable coolers and other food service products (e.g., plates, bowls, clamshell packages, and other containers) will be banned. This law will not include trays and packaging for raw, uncooked, or butchered meat, fish, poultry, seafood, or fruits and vegetables; egg cartons; block EPS packaging materials; or EPS containers for drugs, medical devices, and biological materials or shipping perishable commodities from a wholesale or retail establishment.

Reducing Plastic Pollution (House Bill [HB] 1085). This bill was passed in 2023 and implements new restrictions intended to reduce plastic waste and pollution in three ways. First, it includes restrictions on plastic packaging for single-use health and beauty products provided to guests in lodging establishments with the intent to phase these out over time. In addition, it restricts the installation of overwater plastic foam structures (such as floating boat docks, blocks, and floats). This will also include a study on alternatives to these structures by the Department of Fish and Wildlife. Finally, it will require certain public buildings to install bottle filling stations in addition to standard water fountains, intended to encourage the use of reusable water bottles, and reduce plastic, single-use water bottles.

Recycling, Waste, and Litter Reduction: Postconsumer Recycled (PCR) Content (RCW 70A.245.010 to 060). Implemented in January 2023, this law requires producers of common single-use plastics to include a minimum of PCR plastics within products. Currently the law extends to plastic trash bags, which are required to contain 10 percent PCR materials, and plastic beverage bottles (excluding dairy and 187 milliliter wine bottles), which are required to contain 15 percent PCR materials. In addition, plastic trash bags must be labeled with the name and location of the producer or a uniform resource locator/QR code to a webpage with producer information. Additional products will be added and recycled minimums will be increased through 2031 as detailed below:

- Beginning 2025: Household cleaner and personal care product containers will be required to contain 15 percent PCR materials; plastic trash bag will increase to 15 percent PCR materials.
- Beginning 2026: Beverage containers (excluding dairy and 187 milliliter wine bottles) will increase to 25 percent PCR materials.
- Beginning 2027: Plastic trash bags will increase to 20 percent PCR materials.
- Beginning 2028: Household cleaner and personal care product containers will increase to 25 percent PCR materials. Dairy milk and 187 milliliter plastic wine bottles will be required to include 15 percent PCR materials.
- Beginning 2031: Beverage containers (excluding dairy and 187 milliliter wine bottles), household cleaner and personal care product containers will increase to 50 percent PCR materials, and dairy milk and 187 milliliter plastic wine bottles will increase to 25 percent PCR materials.
- Beginning 2036: Dairy milk and 187 milliliter plastic wine bottles will increase to 50 percent PCR materials.

Plastic Packaging Advisory Committee Report (Senate Bill [SB] 5022, Section 9). This law was passed in 2021 and required Ecology to hire a third-party facilitator to convene a stakeholder advisory committee. This committee prepared recommended recycled content minimums for plastic items not currently subject to RCW 70A.245.010 through 70A.245.060, including polypropylene number 5 resin (#5 PP) tubs, polyethylene terephthalate (#1 PET) thermoform containers for consumable and durable goods; single-use cups made from #1 PET; #5 PP; and polystyrene.

Recycling Development Center (RDC) (RCW 70A.240). Implemented in 2019, the RDC facilitates research and development, marketing, and policy review to strengthen the recycling system in Washington State. The overall goal of the RDC is establishing a circular economy to eliminate waste products through maintenance, reuse, refurbishment, remanufacture, recycling, and composting. The current duties of the RDC include, but are not limited to, studying developments in the recycling market, communicating important findings concerning the recycling markets, providing grants or contracts intended to further develop the recycling market, and working with private and public stakeholders to provide business and marketing assistance. The RDC is guided by an advisory board that meets quarterly to evaluate and make recommendations for future and current RDC work and to discuss state policies affecting recycled materials.

Contamination Reduction and Outreach Plans (CROP) (RCW 70A.205.045). Implemented in July 2021, counties with a population of 25,000 or more and the cities within those counties that have an independent SWMP are required to include a CROP within their SWMPs. This should include an overview of contaminants identified by Ecology and the County, the impacts on the system, a set of actions to reduce contamination within the system, and a schedule to implement the proposed actions. This can be prepared using an Ecology provided template.

Consumer Packaging and Paper Products Study (SB 5693 budget proviso). This study was contracted by Ecology in 2022 and assessed the types and amounts of consumer packaging and paper products sold and supplied in Washington. The study also estimated the recycling rates for these products through existing recycling programs and activities. Using this information, the study provided recommendations for legislative actions that would address the materials that are considered problematic and unnecessary and identified for elimination, according to the U.S. Plastic Pact.

Recycling, Reuse, and Source Reduction Target Study and Community Input Process (SB 5187, Sec. 302(20)). This bill required Ecology to use a consultant to conduct a study that analyzed plastic packaging reduction. This study recommended the most successful recycling, reuse, and source reduction rates under four potential policy scenarios. In addition, the consultant conducted a community survey to assess public opinion of the current recycling system and ways that the system could be improved.

HB 1799 Washington State Organics Management Law. This bill is centered on the diversion of organic materials from the landfill disposal with the overarching intent to reducing methane emissions. In 2023, Washington State began the phased implementation of HB 1799, which requires organic solid waste materials to be diverted from landfill disposal to food rescue programs and organic waste facilities. The following discussion highlights the key components of the bill as codified in the RCW.

Compost Procurement Ordinance (RCW 43.19A)

As of January 2023, cities and counties are required to adopt compost procurement ordinances, excluding cities with a population of less than 25,000. Beginning in December 2024, compost collection amounts and compost purchased from specific sources must be reported to Ecology. In July 2023, Washington State completed a study to determine the adequacy of funding by local governments to enact the upcoming organic waste requirements. This was done in addition to a study that determined which local governments currently had SWMPs and which of those cities and counties currently offer organics collections to businesses, the study also assessed the current and future capacity of the organic waste collection facilities.

As required by HB 1799, the City of Walla Walla (codified in 2022 under Walla Walla Municipal Code [WWMC] 2.104) and Walla Walla County (codified in 2023 under WWCC 13.06) passed ordinances in 2023 that require the purchasing of finished compost for use in public projects. Per HB 1799, WWMC 2.104 and WWCC 13.06 include the following provisions:

- Composted material will be procured locally from providers certified by a nationally recognized program whose products are derived from MSW programs.
- Material will be used in landscaping projects, construction and post-construction soil amendments, applications to prevent soil erosion, filter stormwater, promote vegetative growth, or improve the stability of roadways or, low-impact development of green infrastructure to filter pollutants to keep water on site or both.
- Reporting on compost materials usage and purchasing will be submitted to Ecology every 2 years beginning in 2024.
- Both the City of Walla Walla and the County will inform residents of the value of compost and the ways that composted materials are used in operations.

Washington Center for Sustainable Food Management (RCW 70A.207)

In 2024, the Washington Center for Sustainable Food Management was created to help coordinate food waste reduction across the state to meet Washington food waste reduction goals. This includes collaborating with federal, state, and local governments on food waste initiatives; and researching and providing education, outreach, and technical assistance to local governments. By 2025, Ecology must develop and adopt model ordinances (related to commercial solid waste collection and disposal) for "optional" use by counties and cities that would disincentivize the generation of organic waste.

Degradable Products Labeling (RCW 70A.455)

Beginning in January 2024, producers of products labeled as compostable sold in Washington must submit a declaration of compliance for appropriate labeling and colors on the products. The requirements apply to three major categories: film bags, plastic food service products, and film products.

County Comprehensive Solid Waste Management Plans (RCW 70A.205)

All SWMPs that are created or updated after July 1, 2024, including this 2024 Plan, need to 1) identify priority areas for organic materials facilities and 2) identify volumetric capacity required to manage the county's organic materials consistent with the state's landfill disposal of organics goal[8], and 3) consider new organic materials collections requirements that are scheduled to begin in 2027 according to RCW 70A.205.540. Under RCW 70A.205.540, a jurisdiction must adhere to specific organic waste collection requirements beginning January 1, 2027[9]. This generally only applies to jurisdictions of a certain size. The only jurisdiction in the County that would be subject to the requirement is the City of Walla Walla. These three topics related to organic materials management are covered in this 2024 Plan as itemized below.

1) Priority Areas for Organic Materials Facilities – Sections 5.4.4 and 5.5.5 include additional information on the expansion of the SRL Compost Facility, addressing requirements for priority areas for organic materials facilities.
2) Volumetric Capacity – The planned compost facility improvements outlined in Sections 5.5.2 and 5.5.4 are projected to divert 25 percent organics from the landfill from 2028 through 2030, and 75 percent after 2030. This estimate is based on planned compost facility improvements outlined in the SRL FMP (City of Walla Walla 2023).
3) Consistency with RCW 70A.205.540 – Sections 4.4.2 and 4.4.4 address residential and commercial organic material collection, respectively. As discussed above, 5.4.4 and 5.5.5 address expansion of compost operations.

Additionally, RCW 70A.205.540 asserts that Ecology may issue a renewable waiver to jurisdictions that are subject to the organics collection requirement for up to 5 years, based on the following considerations: *distance to organic materials management facilities, the sufficiency of the capacity to manage organic materials at facilities to which organic materials could feasibly and economically be delivered from the jurisdiction, and restrictions in the transport of organic materials under*

[8] Goal of a 75 percent reduction of disposed organic materials by 2030 and 20 percent volume of edible food by 2025 – both metrics relative to 2015 levels.

[9] Specific collection requirements: 1) Source-separated organic solid waste collection every other week (26 weeks annually) for all residents and for nonresidential customers that generate more than 0.25 cubic yards of organic waste per week. 2) All collected organic waste must go through an organic waste management process. 3) Jurisdictions may charge and collect fees and rates for the organic waste collection services.

Chapter 17.24 RCW. Although not currently in place, Ecology will likely develop a specific process for reviewing and approving waiver applications.

3.2 Education and Outreach

The solid waste education and outreach efforts in the County are offered in a variety of mediums, ranging from classroom presentations provided by City of Walla Walla to support from for-profit and local nonprofit organizations. The education and outreach efforts for the County are managed by the City of Walla Walla's Public Works Department, established through an interlocal agreement in June 2008. These efforts are primarily funded by grants from the Coordinated Prevention Grant Program. This section discusses existing education and outreach throughout the community.

3.2.1 City of Walla Walla

Since the previous plan was implemented, the City of Walla Walla Public Works Department has made improvements to their community-based social marketing program to help change culture and behavior, with different messages targeted to different demographics. The education and outreach programs include the following:

- Classroom presentations on waste reduction and recycling, backyard composting, vermicomposting, HHW, and sustainability planning
- Information booths at community events (e.g., National Night Out, farmers markets)
- Recycling hotline
- Radio
- Online social media (Facebook and Twitter)
- Mass mailings
- Newspaper articles
- Information in the "City Central" e-newsletter
- Website postings
- Updated stickers for outdoor bins
- Brochures

Within the last several years, the City of Walla Walla Public Works Department hired one new employee to improve outreach, with an emphasis on overhauling the City website. The informational and interactive website includes the following features:

- Evolving informational videos such as an overview of the City of Walla Walla Recycling program and recycling contamination reduction
- FAQ Section

With the drastic changes in the recycling commodities world market, the City of Walla Walla Public Works Department held numerous public discussions/presentations between 2017 and 2023 regarding recycling, recycling contamination, and the impacts of the China National Sword policy. This included educating the public on the necessity for a recycling commodities surcharge. In 2021, the City sent out a flyer (Figure 3-1) to customers to continue education on the changes to the recycling program. In November 2023, the Walla Walla City Council approved a new residential recycling contract that allows residents to recycle plastics, specifically plastic numbers 1, 2, and 5 with no lids. The service reintroducing plastic to the recycling system began in January 2024.

Figure 3-2 shows the new messaging related to this change. Stickers were also added to all indoor and outdoor recycling bins reminding customers of currently recyclable materials.

Figure 3-1. City of Walla Walla Recycling Updates Flyer 2021

Figure 3-2. City of Walla Walla Recycling Updates Flyer 2024

In 2019, the Washington Legislature required counties and cities with greater than 25,000 residents to include a CROP in their solid waste management plans by July 11, 2021. As the only jurisdiction that provides recycling collection in the County, the City of Walla Walla published its CROP in February 2021, with the goals of reducing contamination, reducing the cost to the customers, and improving the marketability of the City recycling programs (Appendix C).

As an initial step in the CROP process, the City of Walla Walla gathered data on the amount of recycling and levels of contamination in recycling and observed the bins on routes that were noted as having high levels of contamination. With this information, the City developed a program and timeline for ongoing educational and enforcement procedures.

As outlined in the CROP, the educational component includes various ongoing outreach methods such as mailers, newsletters, videos, and social media campaigns including the following:

- Recycling mailer on "recycling right"
- City of Walla Walla website for recycling to include anti-contamination campaign, which includes theme-based education videos covering a specific topic (e.g., "Why not pizza boxes?" and "Lids or no lids?") and "Q&A" on how and why to recycle clean
- Press release to newspaper, radio stations, and the Chamber of Commerce

Enforcement of contamination reduction is done through a series of tagging and spot checks on cans. If a resident is noted as a repeat offender or has blatant contamination, bins are not to be picked up until the contaminant is removed. Alternatively, bins may be picked up and disposed of as landfill waste and charged as such. From the onset of the program, there has been a noticeable reduction in contamination of recycling. Spot checking of bins began in October 2021 to continue to ensure that contamination is reduced over time.

The City of Walla Walla also regularly performs a community engagement and priority assessment survey to ascertain community values and priorities. Although the survey assesses "utility services" broadly, with no understanding of how the respondents specifically score the services of the solid waste division, there is an opportunity for respondents to identify the top two improvements they would like implemented in the community. Solid waste management is a topic that receives suggestions for improvements.

In addition to the City of Walla Walla's efforts described above, there are also several committees and private organizations that promote waste reduction and recycling in the County. A description of each resource is provided below.

3.2.2 Nonprofit Organizations

Other important ways to provide education and outreach to the community are the efforts of nonprofit organizations. This section describes these organizations and their approaches to education and outreach.

3.2.2.1 Sustainable Living Center

The Sustainable Living Center (SLC), located on the campus of Walla Walla Community College, is a nonprofit organization that provides education in the community about the benefits of conserving resources. Established in July 2005, the organization is supported through grant funding, donations, memberships, and fees charged for workshops. Two programs that the SLC provides are related to waste reduction, reuse, and recycling: the Builders ReSupply Store (BRS) and the $mart Business Program, described below.

BRS – The SLC operates BRS, a building materials reuse store, located at 551 Lockheed Ave in the City of Walla Walla. BRS was opened in 2010 after a 2009 U.S. Environmental Protection Agency (EPA)-sponsored construction waste survey conducted at the SRL identified that a large quantity of useable construction/building materials were being disposed. The BRS promotes reuse by accepting donations of new or used reusable building materials and selling them at a discounted price to the community (Cruz 2021 personal communication). See Section 3.2.1 for more information.

$mart Business Program – The $mart Business Program is a free advisory service that helps business and organizations set goals to reduce energy, water, waste (especially hazardous waste), and materials in their operations. This program assists businesses in strengthening their bottom line and reducing their ecological footprints. The $mart Business Program was originally established in 1992 as the Green Seal Program under the Public Participation Grant Program. A program of the

SLC, the program maintains approximately 50 active business partners. In 2019, the $mart Business Program received an EPA Pollution Prevention grant to provide technical outreach with the goals of reducing energy and water use in the Blue Mountain Region (Cruz 2021 personal communication).

3.2.2.2 Walla Walla Area Resource Conservation Committee

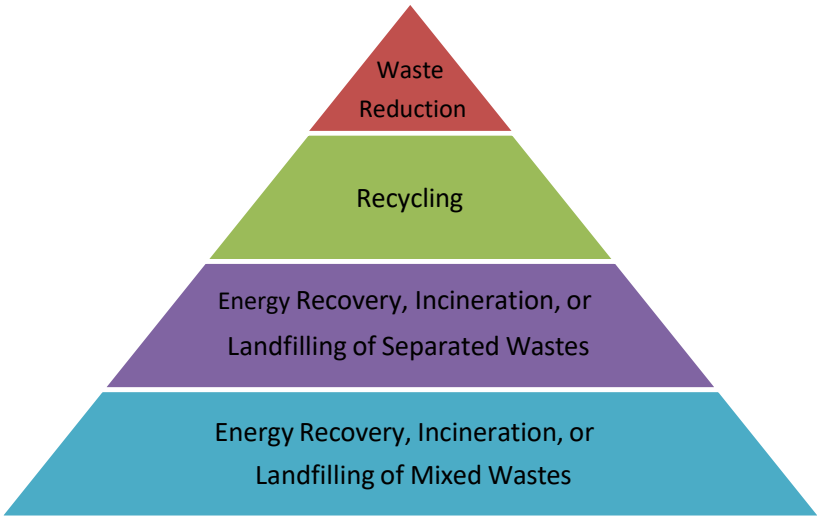
The Walla Walla Area Resource Conservation Committee evolved out of its original function as the Walla Walla County Recycling Committee to its present status as a nonprofit organization that provides information on ways to reduce, reuse, recycle, and purchase environmentally preferred products. The committee is involved with conducting the $mart Business Program.

3.2.2.3 City of Walla Walla Sustainability Committee

The City of Walla Walla's Sustainability Committee conducts scenario planning to prepare for social, economic, and environmental changes in an efficient and cost-effective manner and to provide advice to the Council on the development and integration of sustainability parameters to be used in the implementation of goals, objectives, and policies of the City of Walla Walla's Comprehensive Plan. The committee serves as a resource for City staff, departments, administration, Council, and the community for defining and exploring sustainable options during decision-making processes.

3.3 Waste Reduction

Waste reduction is defined as a reduction in the amount and/or toxicity of waste entering the waste stream. While all components of an integrated solid waste management system (Figure 3-3) are important, reduction of waste at its source should be applied prior to implementation of other techniques, creating less waste to be recycled, reused, composted, incinerated, or landfilled.



The solid waste hierarchy places source reduction as the top priority

Figure 3-3. Solid Waste Management System

Waste reduction is the most environmentally significant and cost-effective way to impact waste generation. Waste is reduced by decreasing consumption, reusing durable products, retrieving materials from disposal, reducing the toxicity of the waste stream, or a combination of these options. Unlike recycling or diversion, most waste reduction methods require no material processing. A key component of both volume and toxicity reduction involves moving upstream to encourage both

manufacturers to make less wasteful, less hazardous products and consumers to use less wasteful, less hazardous products.

3.3.1 Existing Conditions

The cities and County are working to instill waste reduction and recycling as a work ethic among employees and to set an example for the community. Means to achieve these goals are described below.

The SLC operates BRS, located at 551 Lockheed Ave in the City of Walla Walla. BRS promotes waste reduction and reuse by accepting donations of new or reusable building materials and sells them to the community at a discounted price. BRS tracks materials and weights of items being diverted from the waste stream as they are accepted at the store. Annually, BRS diverts over 50 tons of materials from the waste stream and provides a lower cost option to the community for their building material needs. BRS also offers community volunteer opportunities and internships. Between 2016 and 2020, nearly 289 tons of materials were donated and diverted from the landfill. In the summer and fall of 2021, the BRS partnered with the City of Walla Walla Solid Waste Division in a pilot program that provided a service allowing SRL customers to donate directly to the BRS by bringing suitable construction and building materials to a BRS truck on-site at the landfill. The BRS also engaged landfill customers by educating them about the service that the BRS provides (Cruz 2021 Personal Communication).

In addition, there are a number of second-hand stores in the County that accept used goods for sale, including Yeehaw Aloha Thrift n' Gift Store, Goodwill Stores, Country Store Consignment, Pickers Paradise, SonBridge Thrift & Gift Store, Antique Mall, Tricycled Treasures, and Main Street Furniture Co. The Union-Bulletin Newspaper offers free classified ads for free items. Social media, like Craigslist, Facebook, Nextdoor, Freecycle, OfferUp, and local buy-nothing groups (Facebook), advertise used items for free and for sale. The above organizations provide opportunities for people to divert usable items from the waste stream.

3.4 Recycling

Recycling is the second tier in the hierarchy of solid waste management in the state, as defined by the Ecology State Solid and Hazardous Waste Plan. This section describes the Countywide estimated recycling and overall recovery rate,[10] state programs that emphasize waste reduction and recycling, and recycling efforts in both incorporated and unincorporated areas of the community. This section also discusses the prioritization of commodities designated for recycling.

3.4.1 Existing Conditions

3.4.1.1 Waste Generation and Recovery

This section presents the recovery quantities and rates for Walla Walla County in 2021. Ecology defines *recovery* as material that is diverted from the solid waste stream for the intended purpose of recycling, composting, burning source-separated materials for energy, anaerobic digestion, land application, and other beneficial uses (Ecology 2021d).

Table 3-1 shows the tons recycled and recovered in Walla Walla County in 2021 according to the Ecology Recycling, Recovery & Waste Generation survey (Ecology 2024).

[10] With a shift to a lifecycle approach to solid waste management, Ecology has shifted their emphasis from landfill diversion to recovering materials for greenhouse gas and energy benefits.

Table 3-1. Walla Walla County Estimated Recycling and Recovery Quantities, 2021

Category	Materials Collected for Recycling	Tons
C&D	Ash, Sand & Dust	0.0
C&D	Asphalt & Concrete	0.0
C&D	Carpet & Pad	0.0
C&D	Construction & Demolition Debris	0.0
C&D	Gypsum	0.0
C&D	Landclearing Debris	0.0
C&D	Roofing Material	0.0
C&D	Wood Waste	3,663.0
Glass	Container Glass	0.0
Metal	Aluminum Cans	97.3
Metal	Appliances/White Goods	950.6
Metal	Other Ferrous Metal	4,187.1
Metal	Other Nonferrous Metal	413.1
Metal	Steel Cans	42.8
MRW	Antifreeze	19.9
MRW	Auto Lead Acid Batteries	108.9
MRW	Electronics	20.9
MRW	Household Batteries	0.4
MRW	Light Bulbs	6.7
MRW	Oil Filters	14.3
MRW	Other Batteries	0.4
MRW	Paint	11.2
MRW	Used Oil	198.3
Organics	Agricultural Organics	183.8
Organics	Food Processing Waste	0.0
Organics	Food Scraps	358.8
Organics	Industrial Organics	32,358.9
Organics	Meats, Fats & Oils	189.4
Organics	Other Organics	19,585.2
Organics	Yard Debris	6,450.4
Organics	Yard Debris & Food mixed	0.0
Other	Mattresses	0.0
Other	Photographic Films	0.0
Other	Miscellaneous	0.0
Other	Textiles	37.9
Other	Tires	64.9
Paper	Cartons	9.6
Paper	Cardboard	8.150.5
Paper	High Grade Paper	7.39
Paper	Mixed Paper	384.8

Table 3 1. Walla Walla County Estimated Recycling and Recovery Quantities, 2021 (continued)

Category	Materials Collected for Recycling	Tons
Paper	Newspaper	996.4
Paper	Other Recyclable Paper	0.0
Plastic	Mixed Plastics	22.19
Plastic	PET Plastics	151.8
Plastic	HDPE Plastics	57.7
Plastic	LDPE Plastics	10.13
Plastic	Other Recyclable Plastics	39.1
	Total Materials Collected for Recycling	**78,800.6**
Category	**Materials Collected for Recovery**	**Tons**
C&D	Land Clearing Debris burned for energy	0.0
C&D	Wood Waste burned for energy	5.75
MRW	Used Oil burned for energy	0.0
Organics	Food Processing Waste anaerobically digested	0.0
Organics	Food Processing Waste land applied	180.5
Organics	Other Organics anaerobically digested	0.0
Organics	Other Organics land applied	0.0
Organics	Yard Waste burned for energy	0.0
Other	Tires burned for energy	44.9
	Total Materials Recovered	**231.4**

Notes: HDPE = high-density polyethylene; LDPE = low-density polyethylene; PET = polyethylene terephthalate
Source: Ecology 2024

The recovery rate is defined by Ecology as recycling, composting, anaerobic digestion, land application, and burning source separated materials for energy. Reuse is excluded since it is generally not a solid waste handling activity. The amount of recycling and recovery as a percentage of the total waste generated is calculated as follows.

$$\text{Recovery Rate (\%)} = \frac{\text{Recycled and Recovered (R/R)}}{\text{MSW disposed + other recoverable waste disposed (e.g. C\&D) + R/R}} = \frac{79{,}032 \text{ tons}}{92{,}208 \text{ tons} + 79{,}032 \text{ ton}} = \mathbf{46\%}$$

As shown above, the 2021 recycling and recovery rate for Walla Walla County is approximately 46 percent, which, by and large, is attributed to the large amount of organic waste that is managed by commercial generators, not the County solid waste system. Table 3-1 categorizes these large contributors as “industrial organics” and “other organics.” When combined, these two categories contribute approximately 51,945 tons to the overall total of 79,032 tons recovered in the County. If these two categories were removed from Ecology’s estimated recycling and recovery quantities, the County would have a recycling rate of about 23 percent. Comparatively, Washington State reached a statewide recovery rate of approximately 49 percent. If “industrial organics” and “other organics” were removed from the state recycling tonnages, there would be less than a 1 percent change, compared to a 23 percent change in the County’s recycling rate.

3.4.1.2 Community Recycling Programs

This section discusses recycling programs for the cities of Walla Walla, College Place, Waitsburg, and Prescott. Yard waste is discussed in Chapter 4, Collection.

Collection

City of Walla Walla

The City of Walla Walla's residential recycling program began as a network of neighborhood depots in the mid-1980s with a multi-stream system. In 1996, the City of Walla Walla implemented a single-stream curbside recycling program for single-family residences and multifamily complexes up to 10 units, using a 16-gallon bin and manual source separation at the curb during pickup. The weekly curbside recycling program transitioned to an automated service beginning February 2010, and every residence was issued a 96-gallon wheeled container. The City of Walla Walla contracts with Basin Disposal, Inc. (BDI) to provide this service. In response to increasing costs of collection and processing the materials, service was transitioned to every other week beginning February 1, 2013. This change also slowed the increase in customer rates that would have occurred if the service had continued on a weekly basis. All recycled materials are hauled to either the Walla Walla Recycling Center or Basin Recycling; ultimately, all materials are then sent to a materials recovery facility (MRF).

On February 12, 2020, the City of Walla Walla passed a motion to form an Ad-Hoc Recycling Committee with the assigned goal of providing specific recommendations to the City Council to contain or reduce the cost of recycling while preserving and encouraging responsible recycling. One aspect of the Ad-Hoc Committee's Recycling Program review was to consider what items should be recycled.

The Ad-Hoc Committee met virtually on six occasions from June to September 2020. In October 2020, the City Council received and approved the Ad-Hoc Committee's recommendation for the following:

- Eliminate plastics as an accepted recycling material and apply a phased approach to plastics to simplify what is allowed/goes into the commingled container.
- Implement a public information campaign followed by monitoring, measuring, and the establishment of a feedback loop to citizens/customers.
- Periodically monitor and report to the City Council. If contamination has been successfully reduced, move to Phase II, adding plastics of highest value to the accepted recyclables list.
- Reevaluate the current collection system in 2023 if contamination continues to be a problem.

In November 2023, the City of Walla Walla Public Works requested a vote by the City Council to reintroduce plastics and glass for collection. The City Council approved the reintroduction of plastics but did not approve the reintroduction of glass. The reintroduction of plastics is limited to grades #1 (PET) and #2 (high-density polyethylene [HDPE]) with no handles, and #5 (PP); lids and caps are not accepted.

In 2020, approximately 1,500 tons of recyclables were collected through the automated curbside program (BDI 2021). Table 3-2 provides the list of recyclables that are currently collected within the City of Walla Walla and the 2020 tonnages, customers, and participation rates are shown in Table 3-3.

Information on the yard waste collection is provided in Chapter 4.

Table 3-2. City of Walla Walla Residential Curbside Recycling Program Materials, 2024

Residential Curbside Materials
Mail
Office paper and file folders
Newspaper including ads and inserts
Phone books
Magazines and catalogs
Paperback books
Corrugated cardboard
Cereal, cracker, and shoe boxes (non-freezer chipboard)
Aluminum cans
Household (tin) cans
Plastics #1, #2, and #5[1]

Source: City of Walla Walla 2021

[1] Plastic #1 PET (polyethylene terephthalate) bottles 8 ounces and larger, such as water or soda bottles; #2 HDPE (high-density polyethylene) jugs, such as milk or laundry, plastic flowerpots, and buckets without handles; #5 Poly Pro tubs, such as those for dairy or coffee (no clear tubs). No lids or caps are acceptable.

Table 3-3. City of Walla Walla Residential Curbside Collection Program, 2020 Data

	Potential Set Outs	Actual Set Outs	Total Wt. (tons)	Set Out Rate	Avg. # Accts for Month
January	23,096	13,982	128	60.54%	10,086
February	20,492	12,477	107	60.89%	10,096
March	22,875	14,337	121	62.68%	10,090
April	22,679	15,088	128	66.53%	10,104
May	21,550	14,581	132	67.66%	10,108
June	22,528	15,216	132	67.54%	10,110
July	23,602	15,525	130	65.78%	10,116
August	21,688	14,520	117	66.95%	10,121
September	22,980	15,464	128	67.29%	10,126
October	22,802	14,787	123	64.85%	10,135
November	21,583	13,767	118	63.79%	10,140
December	23,640	15,007	136	63.48%	10,161
Total	**269,515**	**174,751**	**1,500**	**64.84%[1]**	10,116[1]

Source: BDI 2021

[1]Average, not total.

Recycling is also available to commercial businesses and multifamily complexes with more than 10 units on a voluntary subscription basis. BDI provides the service, and it is available upon request for a fee. In 2022, BDI served 107 unique commercial recycling customers in the City of Walla Walla, including 96 customers with curbside recycling containers and 11 with cardboard recycling drop boxes (BDI 2024).

Over the years, the City of Walla Walla has faced significant challenges with regards to glass recycling. When curbside collection began in 1996, glass bottles were sent to Owens-Illinois in Portland, Oregon for recycling. When the City took over the curbside collection program in 2007, glass was removed from the program and handled via drop-off depots. The glass was not included in the curbside program because of the low marketability of the material, and the potential negative impact on the resale value of the other commingled recyclables. The monthly recycling rate paid by residents did not include the cost to pick up and dispose of the glass; the cost of the program was covered by the City's Sanitation Department operating budget, which is derived from rates applicable to residential and commercial refuse customers.

Although glass collection increased each year between 2008 and 2011—averaging approximately 500,000 pounds per year—due to high transportation costs and low market revenue, the material was stockpiled at SRL, where it was eventually crushed with a dozer and used for road stabilization. On July 27, 2012, the City of Walla Walla suspended the glass recycling program and removed its designated glass collection depots with support from the City's Sustainability Committee. Earlier in 2012, the SWAC had evaluated the designated recyclables list from the 1995 SWMP and elected to designate glass as a low-priority commodity due to the low market value and logistics of local handling and processing. In spring 2022, the City prepared a glass recycling alternatives analysis, which recommended the City implement the following:

- Contract with BDI for collection.
- Provide an 18-gallon bin to residents for curbside pickup.
- Collect the glass every other week to coincide with commingled recycling (BDI would invest in new trucks with two compartments to separate the glass and commingled recycling).
- Glass would be stored until the volume would result in a monetary return and then hauled to Seattle for recycling.

In addition, the SRL FMP included a recycled glass processing area to manage the potential for inclusion of glass into the city's recycling program.

As discussed previously, in December 2023, the City Council determined not to reintroduce glass for collection. The SWAC will continue to monitor the glass market conditions and evaluate the potential to change the designation as appropriate.

Recently, BIG Recycling has made self-haul glass recycling available to County residents, with drop-off opportunities in the City of Walla Walla and the Benton City Winery.

City of Waitsburg

The City of Waitsburg collects and bales cardboard for recycling, which is then hauled to Walla Walla Recycling by the Public Works Department. On average, the City recycles about 40.5 tons in cardboard bales each year (Hinchliffe 2021 personal communication).

City of College Place

To ensure that citizens were not paying additional costs for a service not being provided, the curbside recycling program was suspended through Resolution 18-008 on March 27, 2018. However, the City of College Place encourages citizens to recycle through available recycling companies in the area. The 2014 Walla Walla Solid Waste and Moderate Risk Waste Plan included 2012 data from the College Place residential curbside collection program, with a total of 113 tons collected and a participation rate of about 75 percent.

Prescott

The City of Prescott does not have a recycling program, but residents have the option of self-haul to drop box locations available to County residents, as discussed below.

Unincorporated

BDI does not provide recycling services to jurisdictions that lack curbside service in unincorporated areas of the County or in incorporated jurisdictions other than the City of Walla Walla. BDI provides drop box recycling for cardboard to 10 commercial businesses in unincorporated areas (BDI 2024).

Self-Haul Opportunities

Although collection isn't offered to all residents in unincorporated and incorporated areas of the County, opportunities are available for all residents to self-haul recyclables to various locations throughout the County. This section discusses recycling self-haul opportunities offered by SRL, Walla Walla Recycling, and BIG Recyclers as well as other opportunities in the community that support recycling or diversion from the landfill.

Sudbury Road Landfill

The SRL provides a drop box for recycling located prior to crossing the scale, which, as described below, is hauled to Walla Walla Recycling. Items accepted are free of charge, and mirror what is collected in the City of Walla Walla. Chapter 5 provides a detailed description of composting self-haul operations at the SRL.

Walla Walla Recycling

Walla Walla Recycling is a private company located in the City of Walla Walla that provides self-haul recycling services to all residents in the County. The self-haul services provided by Walla Walla Recycling are particularly important given that the City of Walla Walla is the only jurisdiction that provides collection services to its residents and businesses. Items accepted at the recycling center include the following:

- Mixed paper
- Cardboard
- Aluminum cans
- Steel/tin food cans
- Additional non-ferrous metal
- E-waste

In addition to self-haul, Walla Walla Recycling is the destination for recycling BDI collects in the County (primarily mixed recycling collected for the City of Walla Walla) and for recyclables collected at the SRL, which is hauled to the recycling center by City landfill staff. The final disposition of recycling commodities can vary depending on the market. In 2020, most materials went to Pioneer Recycling in Tacoma, Washington, and Clayton Ward Recycling in Kennewick, Washington.

BIG Recyclers

BIG Recyclers is a local glass recycler working in partnership with the Glass Packaging Institute to provide glass recycling options based on paying a small tipping fee. Clean glass can be dropped off at the City of Walla Walla location on the second and fourth Tuesday of each month between 10 a.m. and 12 p.m. for a tipping fee. There is also a drop off location at a Benton City winery. Glass that is collected at local drop-offs is transported to Pasco, then to Seattle and Portland, where it is sorted and transferred to local glass manufacturers. According to the company website, "Because we collect very clean glass, glass manufacturers pay more, which helps offset some of our costs." BIG Recyclers provides an additional option to become a member and pay a smaller fee per pound as well as provide input to business operations and receive an annual environmental impact report. The member fees vary based on specific weight ranges. For example, tier one is for 10 to 20 cases, or the equivalent weight of 125 to 250 pounds, for an annual fee of $30, and tier 10 equates to 293 to 2,335 cases, or 3,501 to 4,000 pounds, for an annual fee of $565. Corporate memberships are for an unlimited glass volume at $1,000/year. The operations are reliant on volunteerism, including free bunkers for glass aggregation donated by BDI and free trucking services provided by SMI for transport of glass from Walla Walla to Seattle. According to the company website, they are looking to expand to other rural communities in the future (BIG Recyclers 2024).

Other

Table 3-4 provides a complete list of recycling, diversion, and proper disposal (e.g., hazardous materials) opportunities for County residents. The table includes the chapters in the 2024 Plan where the material is discussed in greater detail.

Table 3-4. Recycling and Diversion Opportunities in Walla Walla County

Material	Recycling Location	Chapter Discussion
Automobiles	Stubblefield Company Veteran Car Donations	Chapter 3
Aluminum	Walla Walla Recycling Stubblefield Company	Chapter 3
Glass	BIG Recyclers	Chapter 3
Green Waste/Yard Waste	Sudbury Road Landfill (SRL) Compost Facility	Chapter 3
Household Goods and Clothing	Goodwill Industries	Chapter 3
Household recyclables for non-curbside customers	Walla Walla Recycling – No plastics SRL- takes plastics #1, #2 and #5.	Chapter 3
Metals/Iron	Walla Walla Recycling Stubblefield Company	Chapter 3
White Goods (e.g., refrigerators and stoves)	SRL (fee applies) Stubblefield Company	Chapter 4
Building Materials (e.g., doors, light fixtures, toilets, sinks, windows, lumber, tile, etc.)	Builders ReSupply Store	Chapter 6
Electronics	Walla Walla Recycling (free E-Cycle) Covered Electronic Product Recycling (free E-Cycle) Goodwill Industries (free E-Cycle) SRL (fee applies)	Chapter 6

Table 3-4. Recycling and Diversion Opportunities in Walla Walla County (continued)

Material	Recycling Location	Chapter Discussion
Tires	SRL	Chapter 6
Automotive (e.g., car batteries, motor oil, antifreeze)	SRL Household Hazardous Waste (HHW) Facility Some retailers (potential)	Chapter 7
Compact Fluorescent Lightbulbs	SRL HHW Facility Home Depot Batteries Plus	Chapter 7
HHW – free for Walla Walla County residents only, no business waste accepted (batteries, cleaners, paints, fluorescent light bulbs, fertilizer, pesticides, pool chemicals, etc.)	SRL HHW Facility	Chapter 7
Rechargeable Batteries	SRL HHW Facility Home Depot Batteries Plus	Chapter 7

Source: Walla Walla County 2021

3.4.1.3 Institutional and Business Recycling Programs

This section describes waste reduction and recycling practices of several large businesses and educational institutions in the County.

Whitman College, Walla Walla

In 2016, Whitman College was diverting approximately 47 percent of its waste. As of 2016 waste diversion rates were trending downwards, however, the campus has enacted a Zero Waste Plan (Whitman College 2018) in an effort to lower overall campus waste and increase diversion rates of on campus waste. The Zero Waste plan includes a number of mitigation strategies such as implementing mandatory recycling at college events, sending e-waste to a certified electronic waste recycling program, and implementing a vegetable oil recovery/recycling program. Whitman College's current goal is for 90 percent waste mitigation by 2030. The campus has a recycling center that collects the following materials:

- Plastics labeled #1 and #2
- Tin Cans
- Aluminum
- Cardboard (No Gloss)
- Newspapers
- Magazines
- Phonebooks and paperbacks

Recycling in student residence halls is collected by student volunteers, led by a student program called The Outhouse. Recycling in the administration, faculty, and recreational buildings is collected by paid students. Small buildings on campus, such as interest houses, are serviced by the City of Walla Walla's curbside recycling pickup. The campus has a Sustainability Coordinator as well as a Sustainability Committee that consists of students, staff, and faculty members who coordinate the campus' education and outreach, which consists of training materials, emails, and posters.

Walla Walla University, College Place

Walla Walla University (WWU) has a campus-wide recycling program run by Facility Services. The WWU website outlines the recycling program and indicates that the university collects the following materials, with slightly differing methods for each item:

- Recyclable paper and cans are collected year-round in blue bins located in offices and public spaces on campus. These are taken to a local recycler approximately twice per year.
- Scrap metal is placed in a large transfer truck bin and picked up several times a year by a local vendor.
- Cardboard is picked up weekly from cardboard recycling bins located throughout the campus in a separate recycle compaction truck and taken to a local vendor.
- All computers, monitors, and other electronics are collected and sent to a recycler (a service paid for by WWU).
- Lighting products are sent to a recycler for separation of the recyclables and the hazardous materials (a service paid for by WWU).
- Other recycled materials, including motor oils and chemicals, tires, leaves, lawn clippings, and brush are collected; however, no information was provided on the disposition of these materials.

Additionally, WWU has a Sustainability Committee which strives to improve recycling and waste diversion on campus (WWU 2022).

Washington State Penitentiary, Walla Walla

The Washington State Penitentiary (WSP) handles its own waste and recyclables. The facility operates a recycling center inside of the secure perimeter. Some recyclables are removed from the penitentiary waste stream and baled on site. Recycled materials include cardboard, aluminum and steel cans, copper, stainless steel, and other metals. Where practical and safe to do so, recycling containers are available for inmates and staff; however, all other recyclables are separated from the waste stream at the main recycling area. Contamination of recyclables is a known issue for the penitentiary, all recyclables that have high levels of contamination are processed with landfill waste (Vanneste 2021 personal communication).

The WSP also takes part in the Sustainable Prisons Project, which supports the WSP Sustainable Practices Lab, which encompasses 18 programs to encourage sustainability within the prison system and the Washington State Department of Corrections (DOC). Thousands of items are refurbished for state and nonprofit use. This, in turn, saves the DOC about $200,000 annually. Items are reused in ways that reduce waste within the facility, such as using damaged laundry to make cleaning rags or to stuff teddy bears that are then donated to nonprofit organizations (Vanneste 2021 personal communication).

Packaging Corporation of America

PCA recycles several waste streams, including scrap metal, used oil, wood, and batteries. Approximately 30 percent of the total waste stream is recycled annually. Scrap metal and wood have the highest rates at 20 and 10 percent, respectively. All scrap metal is recycled off-site at Twin City Metals in Kennewick, Washington (Butkus 2021 personal communication).

In addition, the PCA facility includes an old corrugated cardboard (OCC) plant that was brought online in March 2021. The OCC processes pre- and post-consumer cardboard containers, resulting in approximately 25 percent recycled material furnished in the final product. The addition of the OCC plant roughly tripled the capacity for use of recycled OCC in the plant's final product (Butkus 2021 personal communication).

Providence St. Mary Medical Center, Walla Walla

Providence St. Mary Medical Center (PSMMC) has implemented significant waste reduction and recycling programs, earning it the 2020 National Practice Greenhealth Environmental Excellence Award and the 2024 National Practice Greenhealth Partner for change award. In addition to the single-stream commingled recycling program offered at the Medical Center, the on-site PSMMC Environmental Stewardship Council has helped implement a wide range of supplemental waste reduction and recycling programs. A list of the materials diverted in 2020 is provided in Table 3-5. Currently, the medical center does not measure the weight of diverted materials, but there are plans to begin weighing diverted materials in the future. Materials that are reused include office furniture, freezer packs, and sharps containers. The sharps containers are reused approximately 600 times before they are disposed. Education and outreach efforts of the medical center's waste reduction programs include newspaper articles, announcements in newsletters, and staff presentations. PSMMC also takes part in the Medline ReNewal Reprocessing Program, which reuses hover mat pads, sequential compression device cuffs, and other equipment. A pharmaceutical medication drop-box has been installed for expired and unused medications. The drop box is accessible to staff and community members (Aichele 2021 personal communication).

The PSMMC Environmental Stewardship Council is a part of two Providence System Groups: Washington/Montana Environmental Stewardship and 2-Action Collaborative for Environmental Stewardship. PSMMC is also a part of the Providence initiative to be carbon negative by 2030.

Table 3-5. Providence St. Mary Medical Center Diverted Materials (2020)

Material Type
Co-mingled products including cardboard, plastics, aluminum, white paper
Scrap metals
Batteries sealed lead acid and specialty rechargeable
Regulated white paper
Toner cartridges
Green waste
Cooking oil/grease
Electronic devices including computers and medical equipment
Wood and plastic pallets
Pharmaceutical medications
Reprocessed/reusable medical accessories
Co-mingled products including cardboard, plastics, aluminum, white paper
Scrap metals
Batteries sealed lead acid and specialty rechargeable

Source: Aichele 2021 personal communication

Other Institutions

Institutions such as the Downtown Walla Walla Foundation, Walla Walla Valley Wine, and the Walla Walla School District were contacted regarding their recycling programs. All three institutions are active recyclers and provide recycling bins in their buildings and at events.

The Downtown Walla Walla Foundation expressed interest in providing more active recycling programs during events. They are interested in exploring options for expanding their partnership with the SLC (Witherington 2021 personal communication).

Walla Walla Valley Wine is currently in the preliminary steps of developing a sustainability-related questionnaire that will be provided to members. This questionnaire will be used to determine if the wineries that partner with Walla Walla Valley Wine participate in specific sustainable activities, or if there is an interest in sustainable activities (Witherington 2021 personal communication).

3.4.2 Designation of Recyclables

To customize efforts for different conditions around the state, Ecology requires that local solid waste management plans include a list of recyclable materials that will be targeted in the planning area. Under WAC 173-350, the definition of recyclable materials means those "solid wastes that are separated for recycling or reuse, including, but not limited to, papers, metals, and glass that are identified as recyclable material pursuant to a local comprehensive solid waste plan." RCW 70A.205.015 provides a similar definition. Materials on the designated recyclables list should be collected by at least one of the recycling programs in the County; however, not all programs have to target all materials.

3.4.2.1 Designation Process

In Walla Walla County, the designated recyclables list has been developed based on

factors required by Ecology, namely the following:

- Diversion potential
- Recycling goals
- Local market conditions/market risk
- Continuity in materials collected
- Regional approach to recycling programs
- Consideration of new technologies or innovative programs
- Environmental impacts

The three factors that most strongly influence these potential designations are the following:

- Ease of diverting the material from the waste stream
- Amount of material in the waste stream
- Markets/market risk for each material

3.4.2.2 Designated List

The designated list is not intended to create a requirement that every recycling program in the County collect every designated material. Rather, the intent is that through a combination of programs offered throughout the County, residents and businesses should have an opportunity to recycle all the designated materials through at least one program. Table 3-6 includes the materials that the County designated as recyclable and applies a prioritization system as a means for accommodating requests to modify collection programs as needed.

Table 3-6. Walla Walla County Designated Recyclables

Priority Level	Material
High Priority Materials: *Materials that should be collected by all standard curbside and drop-off programs throughout the County*	• Cardboard • Newspaper • Mixed paper • Aluminum cans • Tin cans • Plastics of value (e.g., #1, #2, #5)
High Priority Specialized Handling Materials: *Materials that should be collected for recycling or proper disposal by at least one location in the County because they can have harmful impacts on the environment or humans*	• Motor oil • Oil based paint • Antifreeze • Vehicle batteries • Lithium and Ni-Cad batteries • Fluorescent light bulbs
Medium Priority Materials: *Materials that should be collected at select locations throughout the County*	• Electronic waste • Ferrous metals • Yard debris • Wood waste • C&D debris
Medium Priority Specialized Handling Materials: *Materials that can be accepted for recycling or proper disposal by at least one location in the County because they can potentially have harmful impacts on the environment or humans*	• Electronic waste • Tires
Low Priority Materials: *Hard-to-recycle materials that can be recycled if markets are available or if other logistics, such as cost or potential environmental impact, make it feasible to do so without causing hardship on jurisdictions or rate payers*	• Glass (containers such as bottles and jars) • Consumer textiles • Polystyrene • Plastics #3 and #7
Low Priority Specialty Handling Materials: *Materials that can be accepted for recycling or proper disposal if doing so does not pose undue financial burden on a jurisdiction or rate payer*	• Latex paint • Alkaline batteries • Agriculture containers

While this list of designated recyclables includes items under the Specialty Handling Materials sub-heading that are typically considered HHW, it is not intended or implied to cover all items that are to be addressed through a local HHW program. Please refer to Chapter 7, Moderate Risk Waste, for further discussion of HHW items.

3.4.2.3 Modification of Designated Materials

Recognizing that recyclable commodity values are dependent on market conditions beyond the control of local jurisdictions, the SWAC reserves the right to modify the list of recyclables included in this 2024 Plan. Modifications would take place so as not to cause undue financial burden on jurisdictions or rate payers.

As such, the SWAC will treat requests to add/modify/drop items from the designated recyclable materials list as minor amendments to the Plan. Therefore, they will not require a full amendment process to be undertaken to expedite the process to meet oftentimes rapid and dramatic changes in commodity markets.

The following conditions are reasonable grounds for requesting modifications to the designated recyclable materials list identified in this 2024 Plan:

- The market price for an existing material becomes so low that it is no longer feasible to collect, process, and/or ship it to markets.
- Local markets and/or brokers expand their list of accepted items based on new uses of materials or technologies that increase demand or ability to process materials.
- New local or regional processing or demand for a particular material develops.
- No market can be found for an existing recyclable material, causing the material to be stockpiled with no apparent solution in the near future.
- The potential exists for increased or decreased amounts of diversion.
- Legislative mandates are implemented to collect new materials.
- Other circumstances occur that are not anticipated at this time.

The SWAC will make a recommendation on whether to add or remove the material from the designated recyclables list, and the recommendation will be brought before the Walla Walla Board of County Commissioners for approval. If approved, the designated recyclables list will be updated and submitted to Ecology.

3.5 Waste Stream Diversion Opportunities

The waste stream analysis also included the recyclability of wastes that are presently landfilled. The analysis compared the disposed waste stream with the list of designated recyclables established by the SWAC. This information is important to identify potential program options that will be considered by the SWAC and the community for increasing waste diversion. The charts below were generated using data from the 2020–2021 Waste Characterization Study and utilized estimates from the Central and Eastern Washington WGAs, which was then averaged to approximate the data for the County. Due to this process, the numbers are not exact and should be viewed as estimates.

For the residential waste stream, it was determined that the high priority and medium priority recyclables make up about 25 percent of the waste stream (Figure 3-4).

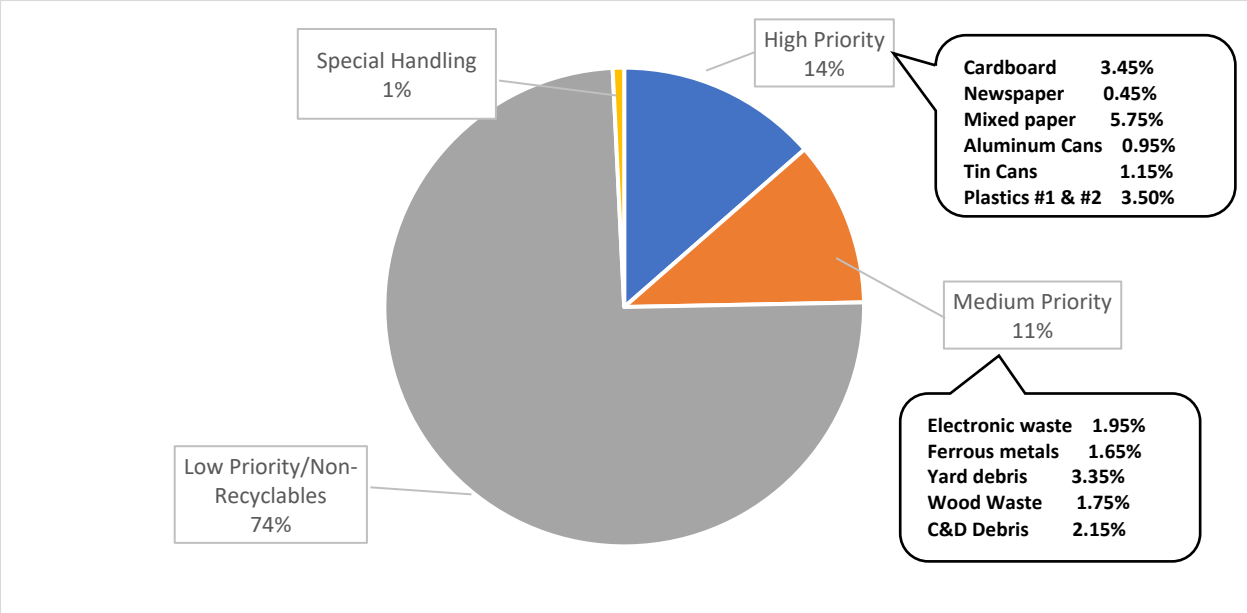


Figure 3-4. Residential Sector Potential Recyclables

For the commercial sector, the high and medium priority recyclables make up about 43 percent of the disposed waste stream (Figure 3-5).

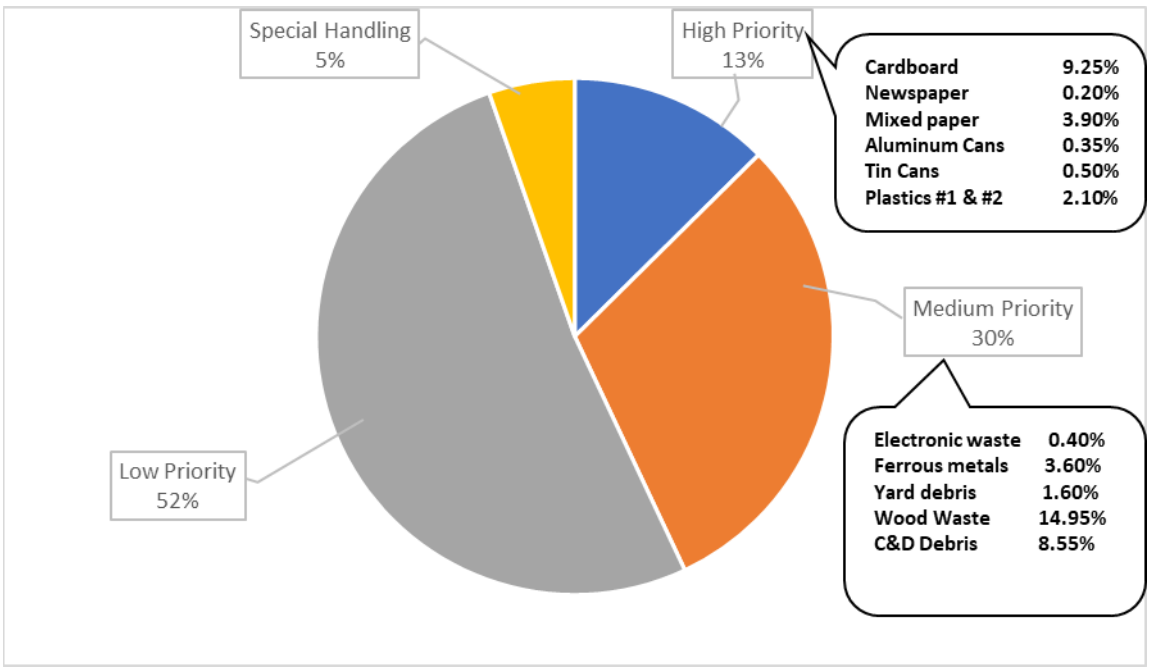


Figure 3-5. Commercial Sector Potential Recyclables

For the self-haul waste stream, it was found that high and medium priority recyclables make up about 51 percent of the disposed waste stream (Figure 3-6).

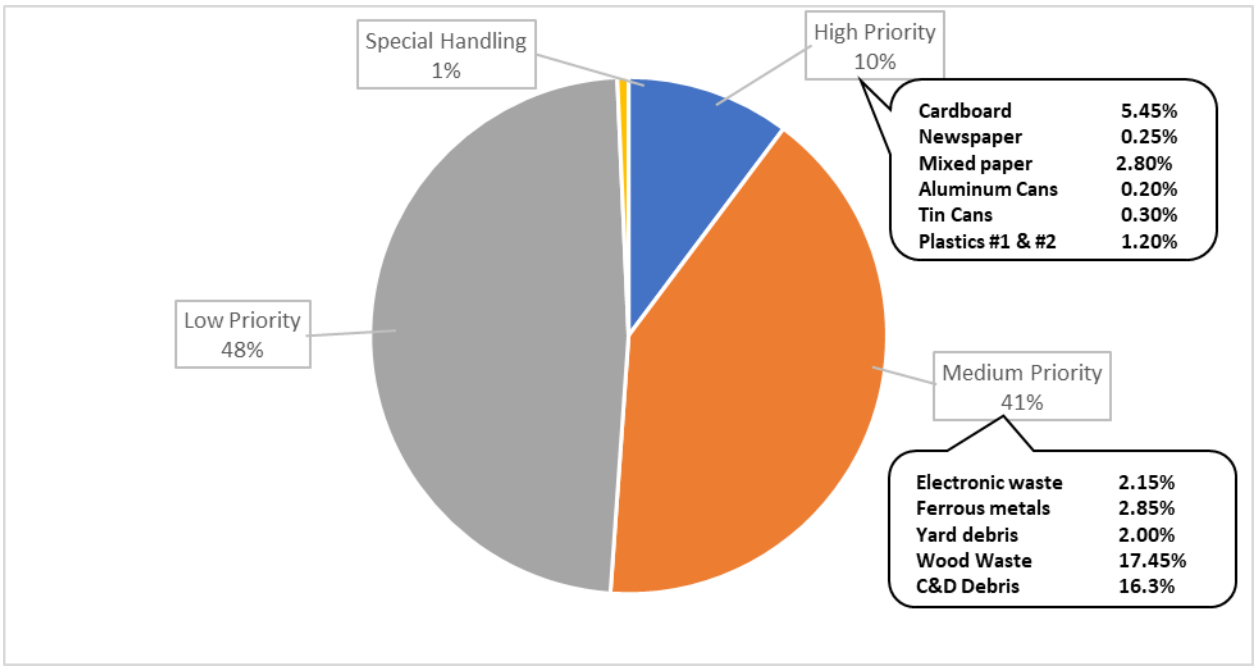


Figure 3-6. Self-Haul Waste Stream Potential Recyclables

3.6 Options

This section discusses options for education and outreach, waste reduction, and recycling. The options are based on the following guiding principles and strategies:

- Focus on the greatest diversion opportunities.
- Utilize existing infrastructure and promote existing programs.
- Emphasize programs that rely on strong, existing markets and develop new markets.
- Expand collection and processing infrastructure.
- Provide financial incentives.
- Institute regulatory requirements.

See Chapter 4, Section 4.4 for collection options related to recycling.

3.6.1 Education and Outreach

Targeted Streams

Education and promotion programs target all of the County's waste streams and materials that can be reduced, reused, or recycled.

Description

As discussed in Section 3.1, education and outreach efforts are generally managed at the discretion of the County and cities for their respective communities. As owner and operator of the SRL, the City of Walla Walla Public Works Department also engages in public outreach and educational programs specific to the SRL, which is intended for all unincorporated and incorporated communities in the County. Some of these efforts can be funded by grants from the Local Solid Waste Financial Assistance (LSWFA) Program. All participating jurisdictions, using their available resources and

materials, could continue with their existing programs, applying periodic updates as conditions change. The programs could continue to host and advertise community events to give residents the opportunity to ask questions about reduction and recycling. All education and outreach materials and events should help residents better understand the recycling and waste disposal process. Programs should promote awareness of topics such as how its diversion programs work, recycling contamination reduction, the need for source separated recyclables, and/or landfill and collection operations. Messaging could be expanded to include waste reduction tips, and to introduce and advise on new statewide mandates (e.g., plastic bag ban).

The County and cities could continue to expand and improve its community-based social marketing program to help change behavior. The City of Walla Walla Public Works Department, as the driver of the public information program, would work with community partners to further develop a public education and outreach program that targets specific audiences. For example, other local jurisdictions could improve their messaging on opportunities to reduce, reuse, and recycle on their websites or provide a link to the City of Walla Walla website, which provides information that can be used broadly (e.g., self-haul recycling opportunities).

General education brochures, social media posts, utility bill inserts, newspaper articles, media ads, new program kick-off events, webpages, and other forms of communication should consider all people residing in the County to be equitable. Funding programs on an ongoing basis to educate all audiences about the new rules and changes is an important part of maintaining positive community relations and engagement.

The County and cities could promote community events and opportunities, such as local presentations; collection events; waste reduction workshops; use of existing private buy-back centers; and other waste reduction, reuse, and recycling opportunities for residents and businesses that targets priority materials. Events such as these garner public involvement in the planning and implementation of waste diversion, and they promote consistency and ease of recycling for residents across all jurisdictions. An integrated network working towards the same goals of reduction and recycling should also emphasize citizens' responsibilities in solving solid waste management issues.

Diversion Potential

Expanded education and outreach programs should yield a 3 to 5 percent increase in waste reduction, composting, and recycling.

Cost

Staff budget (time) ranges from $10,000 to $20,000 per year. Higher expenses are currently being incurred in support of CROP, which was approximately $60,000 (+/-) in 2021.

3.6.2 Backyard Composting Program/On-Site Composting

Targeted Streams

The targeted streams for the backyard and on-site composting program are residential and commercial yard waste, food, waxed cardboard, and other compostable paper products.

Description

Composting is a highly effective waste reduction and diversion strategy. The City of Walla Walla Public Works could continue to support and encourage the current backyard composting educational

program for residents. If there is adequate funding, the County and participating municipalities could:

- Conduct an annual event to distribute free or subsidized bins for yard waste, food, waxed cardboard, and other compostable paper products for backyard composting. These annual events could also include workshop and demonstration opportunities informing the public on the value of composting.
- Develop educational materials and methods of communication with residents, including social media posts, emails, radio commercials, or local TV spots to help raise awareness about composting and to give residents tips on how to compost at their homes.

Diversion Potential

Diversion potential is 5 percent of the targeted material for residential customers, approximately 200 tons/annually. The potential for commercial diversion varies.

Cost

Negligible—no new material is anticipated to be developed nor is new funding expected to subsidize or expand this program.

3.6.3 Support of Statewide Product Stewardship

Targeted Streams

These programs target selected materials in the residential, commercial, and self-haul waste streams. Materials will vary.

Description

Product stewardship is the act of minimizing health, safety, and environmental and social impacts, as well as maximizing economic benefits of a product and its packaging throughout all lifecycle stages. Stewardship can be either voluntary or required by law. Extended producer responsibility (EPR) is a mandatory type of product stewardship that includes, at a minimum, the requirement that producers' responsibility for their products extends to post-consumer management of those products and their packaging. There are two related features of EPR policy: (1) shifting financial and management responsibility, with government oversight, upstream to the producer and away from the public sector; and (2) providing incentives to producers to incorporate environmental considerations into the design of their products and packaging.

The County and cities could support product stewardship programs for those items that are recyclable, non-recyclable, toxic, and/or have limited markets. The County and its incorporated cities could become Associate Members of the Northwest Product Stewardship Council (NWPSC). Associate members are local, state, regional and federal government agencies, businesses, and nonprofit organizations that support the NWPSC mission and product stewardship principles. Associate Members are required to sign on to the program on behalf of their entire agency or organization. Associate Members agree to support product stewardship programs and legislation as their agency or organization allows.

Diversion Potential

Estimates for diversion are not available.

Cost

Cost to support product stewardship is estimated at $3,000 to $4,000 a year.

3.6.4 Promotion of Multifamily Recycling

Targeted Streams

This program targets the priority curbside recyclables disposed of by residents in multifamily complexes.

Description

The City of Walla Walla currently requires multifamily recycling for up to 10 units at a location. No other local governments in the County have recycling requirements for multifamily residential.

This option recognizes the challenges faced by multifamily recycling programs. Multifamily recycling rates are substantially lower than those in the single-family residential sector. Multifamily recycling is often unavailable in cities and counties with curbside residential recycling. Challenges include lack of general infrastructure for multifamily recycling, uninformed property managers and residents, inconsistency of service, and high levels of contamination. Though there are barriers to recycling for multifamily units, the County and cities could improve their multifamily recycling rates through policy changes and community outreach.

The County and cities could work directly with property owners and managers to promote multifamily recycling. This could include technical assistance to property managers, helping them optimize their building's services and install infrastructure to support a recycling program. Communication with property managers could help ensure consistency of service and educational or informational updates for residents. Incentives could be extended to contracted haulers through monetary incentives relative to the number of new multifamily accounts.

Finally, the County and cities could consider changing their building code to require multifamily and businesses to provide space for recycling and garbage.

Diversion Potential

Though the need for this program is high, the potential for diversion remains low.

Cost

Implementation of this program could be achieved at a low cost, approximately $2,000 a year for coordination with property owners and an estimated $5,000 per jurisdiction to change their building codes. Cost of implementation/retrofit would be a private property owner's expense and would be site specific.

3.6.5 Award and Recognition Programs

Targeted Streams

This program targets all materials that can be reduced or recycled in the commercial waste stream.

Description

The $mart Business Program encourages and recognizes businesses that implement sustainable practices in the workplace. The program is run by coordinating with the SLC, the Walla Walla Valley Chamber of Commerce, and the Walla Walla Area Resource Conservation Committee. Any $mart Business Program calculating actual reductions in energy, materials, waste, and water is nominated for an award during the annual Business Awards Showcase in September.

The program could be expanded by promoting awareness of these awards within the community. Positive reinforcement of waste reduction and sustainable practice gives residents reminders of the importance of lowering their disposal and of their impacts on the environment. The City of Walla Walla could also work to develop additional award categories and give a greater number of annual awards. Award categories could be expanded to be specific by type of practice, amount of diversion, or other notable achievements in sustainability.

Diversion Potential

Diversion potential for this program is limited.

Cost

Estimated annual cost of less than $1,000 per year to provide public recognition via various forms of media.

3.6.6 Drop-Off Opportunities for Recyclables

Targeted Streams

This program targets priority recyclables and self-hauled cardboard, wood, and metals disposed of by both residential and commercial generators.

Description

The City of Walla Walla FMP includes recommendations for expanding the drop-off program at the SRL in the SRL FMP (City of Walla Walla 2023). For facility expansion at the SRL and other potential areas for drop-off, the City of Walla Walla would first evaluate the feasibility of adding a wider range of materials. After this assessment, the City of Walla Walla would likely have to expand the drop-off recycling area at the landfill as discussed above or provide additional drop-off boxes elsewhere in the community. The City of Walla Walla would continue to promote opportunities for recycling by continuing to increase education and outreach. Information provided to County residents could include directions to the facilities, materials accepted, contamination reduction, and hours of operation. Other educational materials could include a description of recycling processes, benefits, and other news and changes.

The County and/or other participating jurisdictions could introduce a recycling drop box system within their communities. This system would have to be managed and monitored to limit illegal dumping. This could involve a partnership with a nonprofit organization.

Diversion Potential

Diversion potential for the residential and commercial streams is about 1 percent or approximately 600 tons annually.

Cost

Estimated costs will vary for each jurisdiction and will depend upon the type and quantity of materials collected and the number of sites. Evaluation will need to consider collection, transport, monitoring, site development, and commodities (disposal) costs. Each jurisdiction will need to make its own assessments, given the variables.

3.6.7 Variable Can Rate (cities)

Targeted Streams

This program targets residential curbside recyclables and yard waste collection programs.

Description

Under the variable can rate, residential rates per household would be based on the size of container the resident subscribes to for refuse collection. This would entail offering various-size solid waste containers to encourage residents to subscribe for a container that meets their basic household disposal needs, while simultaneously providing the correct price incentive to reduce waste. Residents who use a smaller size can would receive a price break, and residents who use larger sized containers would be charged more. A variable can rate program would provide financial incentives for residents to select a smaller container for refuse. It would, thereby, encourage them to separate their recyclables and yard trimmings more consistently. Depending on the level of pricing incentives to reduce waste, some customers could practice source reduction, in addition to recycling to reduce their solid waste collection costs.

Currently, the City of Walla Walla provides a reduced can size and rate for residents that subscribe to green waste collection. Green Waste subscribers can keep their 96-gallon garbage container or downsize to a 64-gallon container for a reduced rate. This program is in operation for nine months of the year, when the green waste collection service is provided. This program could be expanded to more options for can sizes and rates, coupled with year-round organics collection. A variable can rate could be adopted by other local jurisdictions Countywide.

This policy option could be reviewed and discussed by each jurisdiction whenever rate structures are evaluated. The City of Walla Walla for example typically reviews policy initiatives on a 5- to 6-year interval as part of the financial planning/cost of service process for sanitation, yard waste, and recycling.

Diversion Potential

The estimated increase in diversion potential is about 6 percent for recyclable materials, or approximately 90 tons/year. Diversion potential is 5 percent for yard waste, or approximately 200 tons/year.

Cost

Costs will depend upon the required level of infrastructure investments and would have to be factored into the financial planning/rate setting process either by the jurisdiction or through the Washington Utilities and Transportation Commission (WUTC) (for franchised/private waste haulers).

3.6.8 On-Site Audits and Technical Assistance

Targeted Streams

This program targets priority recyclable material in the commercial stream.

Description

Walla Walla County and cities could begin to work with larger businesses, institutions, and other large waste generators to identify opportunities for waste reduction and recycling, develop recommendations, and assist with implementing new programs. Technical assistance would:

- Include conducting on-site waste assessments to identify target materials for recycling and waste reduction, providing contact information for securing recycling services, and

distributing appropriate outreach materials describing best practices for setting up or expanding recycling services for different types of businesses.

- Help minimize or overcome various obstacles to recycling faced by commercial customers (space constraints, labor and sorting requirements, lack of information or training, etc.).
- Encourage more commercial customers to set up an effective recycling program that is best suited to their site.

This option recognizes the need to reach businesses and institutions regarding their handling of waste. The County and cities could publicize the technical assistance program and encourage businesses to use these services to better develop their in-house recycling or waste diversion programs. Outreach to businesses would identify opportunities to implement waste reduction and recycling and composting activities such as those listed below.

- Help nonresidential generators identify opportunities to reduce waste, purchase recycled content products, and locate appropriate recycling services.
- Promote local waste reduction successes through site visits, telephone contacts, and workshops as appropriate.

Diversion Potential

Estimated diversion potential for this program is 2 percent for the targeted stream, or approximately 150 tons/year.

Cost

Costs to implement this program vary depending on business needs and level of assistance. This work would only be undertaken with grant assistance. Grant writing would be $2,000/year, and 25 percent of the cost share would be $5,000/year.

3.7 Recommendations

The SWAC reviewed the options for education, outreach, waste reduction, and recycling and recommends the following options.

3.7.1 Education and Outreach (high priority)

- Continue to expand outreach methods to promote waste reduction, reuse, composting, and recycling on the City of Walla Walla website and online social media.
- Improve messaging for opportunities to reduce, reuse, compost, and recycle on other local jurisdiction's websites.
- Continue to host community events and coordinate with other community events.
- Continue to implement the CROP.
- Promote existing opportunities for residents and businesses to reduce, reuse, and recycle priority recyclables, as well as other materials, through opportunities such as BRS and other nonprofit organizations (e.g., thrift stores).

3.7.2 Backyard Composting (low priority)

- Continue to support and encourage backyard composting through educational materials and social media.

3.7.3 Support Extended Producer Responsibility (high priority)

- SWAC review and provide recommendations on EPR State Legislation.
- Support EPR to encourage a full life-cycle approach with an emphasis on the manufacturer's responsibility for ensuring the product is recyclable and recycled.

3.7.4 Promote Multifamily Recycling (low priority)

- Provide technical assistance to property owners and managers.
- Provide education and outreach.
- City of Walla Walla will continue to require multifamily recycling for up to 10 units at a location.
- Consider changing the building code to require multifamily and businesses to provide space for recycling and garbage.

3.7.5 Develop an Award and Recognition Program (low priority)

- Promote award and recognition programs provided by local nonprofits that recognize businesses that implement sustainable practices.

3.7.6 Expand Recycling Opportunities (high priority)

- Evaluate feasibility of expanding materials collected, facility expansion, and education and outreach.

3.7.7 Consider Variable Can Rate (low priority)

- Consider incentivizing recycling by establishing a variable can rate structure that rewards residents for waste reduction and recycling.

3.7.8 Provide On-Site Business Waste Audits and Technical Assistance (low priority)

- Explore options to support commercial recycling through/with local waste haulers.

4. Collection Services

This chapter provides a discussion of refuse collection in Walla Walla County, including background information on how refuse collection is regulated, the legal authority that counties and municipalities have in managing collection services for solid waste and recyclables, and existing conditions for these activities. The chapter concludes with a discussion of the potential options for meeting existing and future collection needs in the County.

4.1 Regulatory Authority and Jurisdiction

The WUTC, the County, and the municipalities regulate refuse collection in Walla Walla County. The regulatory authority and the jurisdiction of each of these entities are described below.

4.1.1 Washington Utilities and Transportation Commission Authority

The WUTC supervises and regulates solid waste collection companies. WUTC authority [RCW 81.77 and Washington Administrative Code (WAC) 480-70] is limited to private collection companies and does not extend to municipal collection operated by municipalities or their contractors. The WUTC requires reports, establishes rates, and regulates service areas and safety practices.

A private solid waste collection company must apply to the WUTC for a certificate of public convenience and necessity to operate in the unincorporated areas of the County or in incorporated areas that choose not to regulate refuse collection. The WUTC grants certificates within a designated service area to an applicant based on cost data, documented need for the service, and, if the service area is already served by a certificate holder, the ability or inability of the existing certificate holder to provide service to the satisfaction of the WUTC. The WUTC requires annual reports showing the refuse collection company's gross operating revenue. Certificates may have terms and conditions attached and may be revoked or amended after a hearing held by the WUTC.

WUTC regulation of solid waste collection companies does not include collecting or transporting of recyclable materials from a drop box or recycling buy-back center. It also does not include collecting or transporting recyclable materials by or on behalf of a commercial or industrial generator of recyclable materials to a recycler for use or reclamation (RCW 81.77.010(8)). Transportation of these materials is regulated under RCW 81.80, which governs the regulation of motor freight carriers. These carriers require a WUTC permit and proof of insurance to operate in the state. If the commercial recycling hauler also possesses a certificate to operate as a solid waste company, the WUTC is responsible for ensuring compliance with safety practices. For other commercial recycle haulers, the Washington State Patrol oversees hauler traffic safety practices.

4.1.2 Transportation of Recyclable Materials

WAC 173-345 establishes minimum standards for the transportation of recyclable materials, establishes notice and reporting standards for recycling facilities and MRFs, ensures that recyclable materials are not delivered for disposal, and establishes penalties for transporters of recyclable materials, recycling facilities, and MRFs that do not meet the standards of the chapter.

4.1.3 County Authority

The rights of the counties include the establishment of solid waste collection districts for the mandatory collection of solid waste (RCW 36.58A.010). However, solid waste collection districts cannot include incorporated areas without the consent of the legislative authority of the city or town.

To form a solid waste collection district, public hearings must be held, and the county legislative authority must determine that mandatory collection is in the public interest. County provision of collection services can be implemented only if the WUTC notifies the county that no qualified haulers are available for a district. Under mandatory collection, a hauler may request that the county collect fees from delinquent customers. Half of the fees collected by the county would go to the certified collection company, and the other half would go to the county's general fund.

In Walla Walla County, all unincorporated areas are covered by WUTC certificate holders; there are no solid waste collection districts. Although County authority to collect refuse in the unincorporated areas is limited, counties have the legal authority to assess fees for collection services provided in those areas. RCW 36.58.045 authorizes counties to assess such fees to fund administration and planning expenses associated with solid waste management.

4.1.4 Municipal (Cities and Towns) Authority

Cities and towns have several options for managing solid waste collection under state law, including the following:

- A City can provide solid waste collection using its own equipment and labor under a solid waste utility.
- A City may choose not to manage or regulate its own refuse collection services. Collection services may then be provided by the certificate hauler(s) with authority for that area under the regulation of the WUTC.
- A City may require a private company to obtain a refuse collection license from the City and to conform to all City collection guidelines.
- A City may award contracts to private companies for refuse collection in all or part of the City. The contract hauler does not have to hold a WUTC certificate for that area. Usually, contracts are awarded based on selection criteria as determined by the City. The City may decide to manage and maintain its own municipal collection system for all or part of its jurisdiction.

The WUTC would not have jurisdiction over the last two options (RCW 81.77.020).

Under RCW 35.21.120, municipalities have the authority to provide or contract for solid waste handling[11] within their boundaries and to manage, regulate, and fix the price of these services. State law also allows municipalities to require, through ordinance, that residents and businesses subscribe to designated refuse collection services (RCW 35.21.130).

The City of Walla Walla is the only municipality in the region that provides collection services through a City solid waste utility.

4.2 Existing Collection Services

This section describes collection services for refuse and green waste in the County, which are provided through a number of different mechanisms, including municipal public works, WUTC certificates, and municipal contracts. The existing collection services and arrangements for each jurisdiction are described below. For information on existing *recycling* collection in the County, reference Section 3.4.1.2 Community Recycling Programs.

[11] RCW 70A.205.015 defines *Solid Waste Handling* as *the management, storage, collection, transportation, treatment, utilization, processing, and final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery of energy resources from solid wastes or the conversion of the energy in solid wastes to more useful forms or combinations thereof.*

4.2.1 City of Walla Walla

The City of Walla Walla provides residential, commercial, and drop box refuse collection in the City of Walla Walla. Waste collected by the City is disposed at the SRL, which the City owns and operates. This section discusses the City's cost of service financial study, which influences the current cost of services to its customers and provides a description of the collection.

4.2.1.1 Cost of Service Financial Study

In 2018, the City of Walla Walla completed a Landfill and Sanitation Cost of Service and Financial Planning Study for landfill and sanitation (collection) services. To establish a rate structure, the study included the following:

- Revenue Requirement Analysis. Identified the total revenue needed to fund the landfill and collection services fully on a self-supporting basis. The analysis considered operating and "maintenance expenditures, capital/equipment needs, debt requirements, and fiscal policy objectives."
- Cost-of-Service Analysis. Analyzed the equitable distribution of costs to customer classes of service based on their "proportional demand and use of the system."
- Rate Design Analysis. Analyzed "the development of rates that generate sufficient revenue to meet each system's revenue requirement forecast and addresses the City's policy goals and objectives."

The analysis identified that the revenues at current levels are not sufficient to fund ongoing obligations and expenses for collection, and a 3 percent annual increase in revenue is needed for 2018 through 2023. In response to the analysis and recommendations, the City of Walla Walla increased some services to full cost of service, while other costs were reduced or kept at existing levels to advance policy objectives. The City reported that the increases sufficiently funded ongoing obligations and expenses for collection (Rohan 2021 personal communication). An updated Cost of Financial Services Study is in development.

4.2.1.2 Collection Services

Residents are provided a standard 96-gallon container for refuse, which is serviced weekly by an automated collection vehicle. A 64-gallon container is available at a reduced rate to residents who subscribe to the yard debris collection program.

Refuse service to commercial businesses and large multifamily complexes (greater than 10 units) is provided by the City of Walla Walla, with frequency and level of service dependent on the generator's needs. Container sizes range from 300-gallon containers to 8-cubic-yard bins. The City of Walla Walla also provides temporary drop box service for 10-, 20-, and 30-cubic-yard boxes for both commercial and residential customers.

Table 4-1. Waste Collected in the City of Walla Walla 2011 and 2022

Collection Stream	Tons 2011	Tons 2022
Residential	11,442	12,650
Commercial	4,277	5,322
Drop Box/Compactor	4,576	5.637
Total	**20,245**	**23,631**

As shown in Table 4-1 there was an increase of approximately 15 percent in residential waste, 6 percent in commercial waste, and 5 percent in drop box and compactor waste between 2011 and 2022. Residential collection showed an average yearly gain of about 1 percent, and the other two waste collection streams were about 2 percent. Overall, MSW increased approximately 17 percent over a span of 11 years, averaging about 1.4 percent increase per year. Comparatively, the official U.S. Censuses in 2010 and 2020 show a population of 31,731 and 34,060, respectively, for an average annual population increase of less than 1 percent, which demonstrates that annual waste generation is increasing at a slightly higher rate compared to population. The collected waste is disposed at the SRL.

Curbside yard debris collection is available to residents on a subscription basis. In 2022, an average of 1,257 residents subscribed to the service, and in 2011, there were 661 subscribers on average, with an increase of nearly 47 percent over a span of 11 years. The service is available from March 1 to November 30, with May and June representing peak tonnage collected. Residents are provided with a 96-gallon container for green waste, which is picked up on the same day as refuse. In 2022, City haulers collected approximately 671 tons of curbside subscription green waste compared to approximately 446 tons collected in 2011. The collected yard waste is brought to the compost facility located at the SRL for processing.

A free annual leaf pickup at curbside is provided to residents from November into December, and drop boxes are available in the community. In 2022, crews collected approximately 1,148 tons of leaves.

4.2.2 City of Waitsburg

The City of Waitsburg contracts with BDI for residential and commercial refuse collection. In 2022, BDI collected 924 tons of residential waste, 167 tons of commercial waste, and 55 tons of drop box and compactor waste, totaling 1,146 tons with a total of 445 residential customers and 37 commercial/multifamily customers. Waste collected in the City of Waitsburg is taken to the BDI transfer station in Pasco and disposed at the Finley Buttes Landfill in Oregon. Table 4-2 describes the size of waste collection receptacles provided to customers and the tonnage collected by type (residential, commercial, or drop box).

The City allows residents to drop off yard debris at the City's wastewater treatment plant and conducts an annual cleanup event for yard waste and Christmas trees, but an accounting of the tonnage collected is unavailable. The material is chipped for use as mulch for City purposes. No yard waste collection is offered.

For information on existing recycling collection in the City of Waitsburg, reference Section 3.3.1, Existing Conditions.

4.2.3 City of College Place

The City of College Place contracts with BDI for residential and commercial refuse collection. In 2022, BDI collected 4,390 tons of residential waste, 680 tons of commercial waste, and 844 tons of drop box and compactor waste, totaling 5,914 tons with 2,945 residential customers and 108 commercial/multifamily customers. Waste collected in the City of College Place is disposed at the SRL. Table 4-2 describes the size of waste collection receptacles provided to customers and the tonnage collected by type (residential, commercial, or drop box).

After the first freeze, the City collects unbagged leaves deposited along the street by residents. This activity is free of charge until December 31. Customers are charged for leaf piles that contain green waste other than leaves and for any piles that are deposited after December 31. There are no specific haul days. The collected leaves are hauled to a City-owned site adjacent to the wastewater treatment

plant for slow composting along the hillside. Farmers occasionally request leaves to incorporate into their compost operations. The City does not track the quantity of leaves that are collected.

4.2.4 Prescott and Unincorporated County

BDI collects residential and commercial waste in the City of Prescott and unincorporated Walla Walla County. Depending on the cost effectiveness to the hauler, waste collected is either disposed at the SRL or hauled to the BDI transfer station in Pasco for disposal at the Finley Buttes Landfill in Oregon. In 2022, BDI collected 6,484 tons of residential waste, 1,096 tons of commercial/multifamily waste, and 2,578 tons of drop box and compactor waste, totaling 10,158 tons disposed in the SRL. BDI collected 1,863 tons of residential waste, 1,505 tons of commercial waste, and 12,587 tons of drop box and compactor waste, totaling 15,955 tons of waste with the ultimate disposition in the Finley Buttes Landfill. The total customers for the City of Prescott and Walla Walla County in 2022 were 5,616 residential and 650 commercial/multifamily. Table 4-2 describes the size of waste collection receptacles provided to customers, and the tonnage collected by type (residential, commercial, or drop box).

Table 4-2. BDI Collection Receptacle Options and Tonnages by Jurisdiction

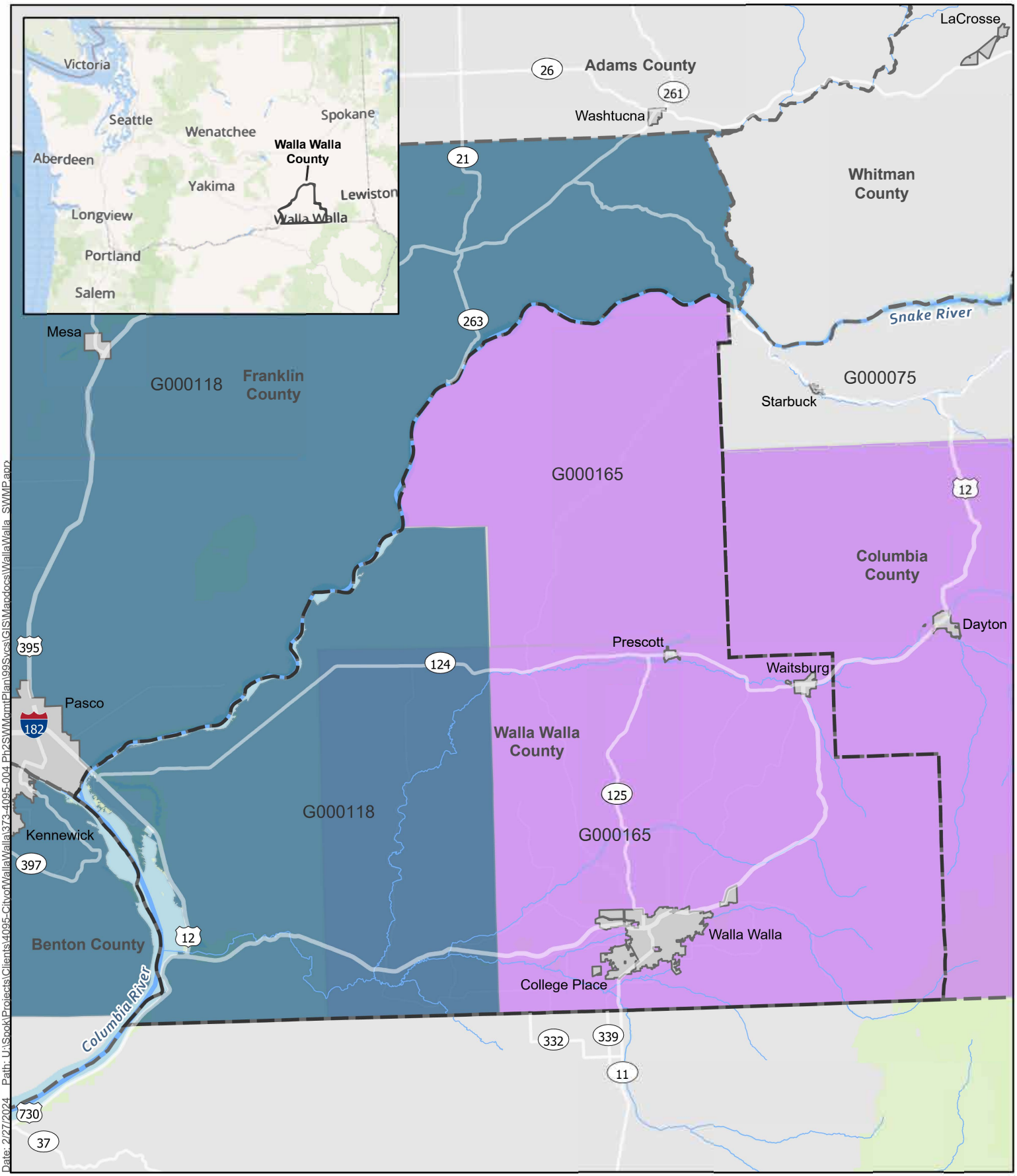
Jurisdiction/Destination	Residential	Commercial/Multifamily	Drop Box
Waitsburg	96-gallon container[1]	96-gallon container	11, 20, 30 yards
Tons (Finley Buttes Landfill)	924	167	55
College Place	96-gallon container 32-gallon container[2]	96-gallon container 1.5-, 2–4-, 6-, 8-yard containers	11, 20, 30, 40 yards
Tons (Sudbury Landfill)	4,390	680	844
Prescott/Unincorporated Walla Walla County	32-, 64-, 96-gallon container[1]	• Prescott: 32-, 96-, 200-gallon container; 1-, 1.5-, 2–6-, 8-yard containers • Walla Walla County: 96-gallon containers; 1.5-, 2–4-,6-, 8-yard containers	11, 20, 30, 40 yards
Tons (Sudbury Landfill)	6,484	1,096	2,578
Tons (Finley Buttes Landfill)	1,863	1,505	12,587

Source: BDI 2024

[1] Additional container for a nominal fee.

[2] Available as a grandfathered program for low-income seniors only.

Refuse collection in unincorporated Walla Walla County is provided under BDI's certificates G-118 and G-165, granted by the WUTC. Maps of the service areas for each certificate are provided in Figure 4-1.



Date: 2/27/2024 Path: U:\Spok\Projects\Clients\4095-CityofWallaWalla\373-4095-004 Ph2SWMgmtPlan\99Svcs\GIS\Mapdocs\WallaWalla_SWMP.aprx

Parametrix

Source: ©Esri, © Mapbox, © OpenStreetMap, State of Washington

Walla Walla County
City Boundary

WUTC Collection Areas

Basin Disposal Inc. (Certificate G000118)
Basin Disposal of Washington LLC (Certificate G000165)

0 2.5 5 10 Miles

Figure 4-1.
WUTC Collection Areas
Walla Walla County Solid Waste Management Plan

Walla Walla County, WA

4.3 Recycling and Green Waste Collection in Rural and Urban Areas

This section discusses state requirements (RCWs) and the viability of offering the collection of recycling and green waste in unincorporated and incorporated rural areas of the County.

Under RCW 70A.205.045, comprehensive SWMPs are required to identify programs for source separated materials from residences in *urban* and *rural* areas, with an understanding that there are differences in the solid waste services that can be offered based on such factors as population density. Municipalities designated as urban are required to collect recyclables from single- and multifamily residences or are required to have an equivalent program, unless there are situations where this is infeasible.[12] Services to rural areas require drop-off boxes or buyback centers at transfer and disposal sites. SWMPs are also required to discuss programs for the collection of yard waste and food waste if there are adequate markets or capacity to support the program.

In addition, RCW 70A.205.050 requires local governments to develop clear criteria to determine the designations for urban and rural areas for disposal and waste reduction and recycling. In designating urban areas, local governments should consider the following:

- Planning guidelines adopted by Ecology
- Total population
- Population density
- Applicable land use or utility service plans

For this plan, population and housing density are the key factors in determining the designation of urban versus rural. Urban is defined as 1) being an incorporated community and 2) qualifying as "urban" according to the U.S. Census Bureau, which defines urban as containing at least 2,000 housing units or having a population of at least 5,000 (U.S. Census 2023). As shown in Table 4-3, the only communities participating in the Plan that meet the designation of urban are College Place and the City of Walla Walla, all other participating jurisdictions are rural.

Table 4-3. Population and Housing Densities

Jurisdiction	2020[1]	2021[1]	# of Housing Units (2021)[1]	Area (sq mi)[2]	Population Density (ppl per sq mi)	Housing Density (units per sq mi)
College Place	9,780	9,675	4,200	3.14	3,081	1,337
Prescott	330	335	164	0.40	837	410
Waitsburg	1,240	1,255	530	1.16	1,082	457
City of Walla Walla	34,400	34,110	13,790	14.02	2,433	983
Walla Walla County (unincorporated)	16,830	16,975	6,653	1280.00	13	5

Notes: sq mi = square mile; ppl = people

Source: OFM 2021a

[1] Number of housing units is a culmination of one unit, two or more units, and mobile homes (OFM 2021a).

[2] Walla Walla County-provided GIS Data

[12] Per RCW 70A.205(7)(b)(i) criteria includes: Anticipated recovery rates and levels of public participation, availability of environmentally sound disposal capacity, access to markets for recyclable materials, unreasonable cost impacts on the ratepayer over the six-year planning period, utilization of environmentally sound waste reduction and recycling technologies, and other factors as appropriate.

As required in RCW 70A.205.045(5)(d), solid waste collection needs must be projected for the next 6 years, and the requirements for future collection services in both rural and urban areas will depend on population growth. Forecasted growth in population for Walla Walla County from 2024 through 2029 is provided in Table 4-4. As indicated, the population of Walla Walla County is estimated to reach 64,746 in 2029. With a level of growth at approximately 2 percent change overall, and less than 0.5 percent annual growth, it is expected that the communities of Prescott and Waitsburg will remain rural, and would not need to provide collection.

Given the existing and projected growth in the planning area (Walla Walla County and participating cities), the cities of Walla Walla and College Place are subject to collection requirements. The City of Walla Walla currently provides collection for all single-family residences and multifamily residences with up to 10 units. By way of resolution, College Place has suspended collection until market conditions are favorable. Until a solution is reached, the residents of College Place have the option of utilizing self-haul services as described in Chapter 3, Section 3.4.1.2.

Table 4-4. Population Growth Projections, 2024–2029

2024	2025	2026	2027	2028	2029
63,422	63,714	64,002	64,259	64,506	64,746

Source: OFM 2022

Finally, all SWMPs that are created or updated after July 1, 2024, need to consider new organic materials collection requirements that are scheduled to begin in 2027 (RCW 70A.205.540). The only jurisdiction in the County that would be subject to the requirements is the City of Walla Walla. A qualifying jurisdiction must adhere to the following specific organic waste collection requirements:

1) Source-separated organic solid waste collection every other week (26 weeks annually) for all residents and for nonresidential customers that generate more than 0.25 cubic yards of organic waste per week.
2) All collected organic waste must go through an organic waste management process.
3) Jurisdictions may charge and collect fees and rates for the organic waste collection services.

4.4 Options

The following options were considered for collection services in Walla Walla County.

4.4.1 Curbside recycling in Urban Growth Areas

Targeted Sector and Materials

This program targets curbside recycling in the residential sector of cities and UGAs

Description

Curbside residential recycling is presently provided and required for all residents in the City of Walla Walla. Voluntary recycling services could be reinstated in College Place and offered in Waitsburg and the UGAs as a means to offer more convenient recycling and to increase the County's recycling rate. When the market prices for recyclables improve, cities would work with the WUTC hauler to make recycling services available in these areas. Working with the haulers, a new minimum service level could be defined that expands recycling and encourages haulers to invest in additional equipment for the service.

Diversion Potential

The estimated increase in diversion is 5 to 6 percent of the residential waste stream.

Cost

The cost per household would range from $10 to $20 per month for single-family households. Costs will also depend upon service frequencies and number of accounts serviced.

4.4.2 Expand Curbside Organics Collection in Urban Growth Areas

Targeted Sector and Materials

This option targets the residential sector in the UGAs and organics (yard debris, waxed cardboard, compostable paper products, and food waste).

Description

Curbside yard waste recycling is presently offered on a subscription basis to residents in the City of Walla Walla. Collection could be expanded to include food waste and compostable paper if/when processing is expanded at SRL. Voluntary organics collection services could also be offered in College Place, Prescott, Waitsburg, and the UGAs as a means to offer more convenient collection of this material, and to increase the County's diversion rate. The County and the cities would work with the WUTC hauler to make organics collection services available in these areas. Working with the haulers, a new minimum service level could be defined that expands organics collection and encourages haulers to invest in additional equipment for the service.

A food waste composting pilot could be implemented to understand the feasibility of the program. This would involve collection of food and compostable paper waste from a small percentage of residential customers already subscribing to the green waste collection program in the City of Walla Walla. Adding food waste to the existing compost operations is discussed as an option in Chapter 5, Solid Waste Facilities, Sections 5.4.3 and 5.5.3.

Diversion Potential

The estimated increase in diversion, based on the waste characterization study, could be up to 23 percent of the residential waste stream.

Cost

The cost per household would range between $20 to $25 per month. Costs will also depend upon service frequencies and number of accounts serviced.

4.4.3 Mixed Paper and Cardboard Collection

Targeted Sector and Materials

This option targets the commercial sector and mixed paper and cardboard.

Description

The Ecology 2020–2021 Washington Waste Characterization Study shows that mixed paper was about 8 percent, and cardboard was just over 9 percent of the disposed waste stream from the commercial sector. This option would establish a program for the collection of these materials from commercial businesses, specifically large generators such as supermarkets, hospitals, universities,

and offices. To increase participation in the program, collection of mixed paper and cardboard could be provided at a reduced rate from refuse collection, providing an incentive for businesses to participate by reducing their overall refuse bill. The collection could be provided on a regularly scheduled basis, or on call, depending on the types and quantities of materials collected. Recycling technical assistance would help to facilitate the design and implementation of the program. See the option discussed in Section 3.6.8 regarding working with larger businesses, institutions, and other large waste generators to identify opportunities for waste reduction and recycling, develop recommendations, and assist with implementing new programs.

Diversion Potential

The estimated increase in diversion, based on the waste characterization study and considering typical participation and recovery rates, could range from 5 to 8 percent of the commercial waste stream.

Cost

The cost to implement is likely to be less than the existing refuse rates for businesses.

4.4.4 Organics Collection for Large Commercial Generators

Targeted Sector and Materials

This option targets the commercial sector and organics (yard debris, compostable paper, and food waste).

Description

The Ecology 2020–2021 Washington Waste Characterization Study shows that yard debris and food waste constituted about 14 percent of the commercial waste stream, with food waste the predominant organic at over 12 percent. This option incorporates a voluntary curbside food, yard waste, and compostable paper collection service for commercial customers. This option is intended to motivate large commercial generators to separate organic materials from the waste they generate at their businesses and to place it in the appropriate organics collection container on a regular basis for collection.

This option would incorporate educating landscapers and gardeners who service commercial businesses and residences on the importance of keeping their material separate from other refuse. Such separation would enable them to take advantage of the lower tipping fee for clean, green waste at the landfill.

Local food service establishments and grocers would be encouraged to participate with the understanding that the cost of this program would reduce their collection costs. This option could also encourage regular reporting of food waste diversion to local and state recycling agencies for monitoring and evaluation purposes.

The materials collected would be processed for mulch, composting, or other products at the SRL Compost Facility. Before this program could be implemented, the facility would have to make appropriate modifications to its processing method and equipment; these modifications are discussed in the SRL FMP. The County and cities could consider implementing a food waste composting pilot that would involve commercial or institutional entities. For example, the County and cities could team up with Whitman College and WWU to collect food waste from dining halls, but this would be limited to fall through spring to account for limited enrollment during the summer months. Adding food waste to the existing compost operations is considered as an option in Chapter 5, Solid Waste Facilities, Sections 5.4.3 and 5.5.3.

Diversion Potential

The estimated increase in diversion, based on the waste characterization study and typical participation and recovery rates, could range from 8 to 10 percent of the commercial waste stream.

Cost

A limited pilot project with processing at the SRL compost facility would cost up to $200,000, with funding coming from a mix of tip fees, collection fees, and grant funds. Grant funding would be applied to cover costs that exceed current cost of service for waste diverted through pilot operation.

4.5 Recommendations

The SWAC reviewed the options for collection services and recommends the following for implementation:

4.5.1 Curbside Recycling in Urban Growth Areas (low priority)

- Consider offering recycling services in the cities and the UGAs that do not have this service. This would involve working with the haulers to establish a new minimum service level.

4.5.2 Expand Curbside Organics Collection In Urban Growth Areas (low priority)

- Consider providing curbside yard waste collection for residents in the cities and the UGAs that do not have this service. This would involve working with haulers to establish a new minimum service level.
- Implement a food waste, waxed cardboard, and other compostable paper products collection pilot program in the City of Walla Walla if/when food waste processing is available.
- Consider bundling yard waste service with other waste collection services possibly incentivizing yard waste.

4.5.3 Mixed Paper and Cardboard Collection (low priority)

- Consider establishing a program for mixed paper and cardboard from large commercial generators.

4.5.4 Organics Collection for Large Commercial Generators (low priority)

- Consider implementing a food waste, waxed cardboard, and other compostable paper products composting pilot that would involve commercial or institutional entities.

5. Solid Waste Facilities

This chapter includes a discussion of solid waste facilities, including landfills (active and closed) and composting facilities, and the laws that govern them.

5.1 Regulatory Authority

On October 9, 1991, the EPA promulgated the Solid Waste Disposal Facility Criteria, Final Rule (40 Code of Federal Regulations [CFR] Parts 257 and 258). These standards, typically referred to as Subtitle D rules and issued under authority of the Resource Conservation and Recovery Act (RCRA) of 1976, set forth location restrictions, requirements for facility design and operations, groundwater monitoring, corrective action measures, and landfill closure standards. Under 40 CFR 239, Congress has assigned primary responsibility for managing solid waste to state governments. State standards must meet or exceed federal standards. In turn, local governments must comply with state standards that have the potential to be more stringent than federal standards.

Ecology responded to the new federal standards in November of 1993 with its revised Criteria for Municipal Solid Waste Landfills (WAC Chapter 173-351]). In general, the standard for MSW landfills must be at least as strict, in every way, as the federal standards. However, because the federal standards do not establish rules for non-MSW landfills (e.g., demolition and wood waste landfills), the state developed regulatory requirements for these landfills (WAC 173-350). As adopted in 2018, Ecology made several substantive and clarifying revisions to WAC 173-350. These changes involved waste in piles, inert wastes, contaminated soils, and waste versus commodities.

5.2 Existing Conditions

This section provides information on existing landfill and composting facilities located in Walla Walla County. C&D waste is discussed in Chapter 6.

5.2.1 Landfills

5.2.1.1 Sudbury Road Landfill

This section discusses the historic operations and current operations of the SRL, the 2018–2023 Landfill and Sanitation Cost of Service and Financial Planning Study, long-term planning efforts, and the SRL FMP.

Most waste generated in the County is disposed at the SRL, which opened for operation in 1978. SRL is a MSW landfill located in the very northwest corner of the City of Walla Walla, at 414 Landfill Road. The City of Walla Walla owns and operates the landfill. The landfill comprises approximately 125 acres on 829 acres of land zoned Public Reserve. The land is surrounded primarily by agriculture with some rural residential properties. Privately owned properties zoned for agricultural use lie to the north and west of the landfill. U.S. Highway 12 is to the south of the landfill. To the east of the landfill, the City of Walla Walla owns several hundred acres of land that is farmed under contract and is also utilized for the land application of class ‘B’ biosolids from the City of Walla Walla Wastewater Treatment Plant. The WSP is east of the City-owned property.

SRL is open Monday through Saturday from 8:30 a.m. to 6:00 p.m., March through October, and 8:30 a.m. to 4:00 p.m., November through February. The facility is permitted to accept MSW, and typically receives approximately 50,000 to 60,000 tons per year. The landfill is not permitted to accept the following wastes:

- Regulated dangerous or hazardous waste, as defined by the EPA and Ecology, from commercial or industrial sources
- Liquid wastes
- Radiation contaminated wastes
- Septage, sewage sludge, or biosolids, as defined and restricted under WAC 173-351-220(10)
- Asbestos or medical waste that is not properly contained

Table 5-1 provides a breakdown of the source and the tonnage of solid waste disposed in the SRL. Waste coming in from outside the County is no longer tracked separately.

Table 5-1. Sudbury Landfill Disposal 2022

Source	Tons 2022
Municipal Solid Waste - Self-haul	16,082
Other[1]	3,861
Basin Disposal	15,823
Sanitation Division (total)	23,609
Residential Household Waste	*12,650*
Commercial Waste	*5,322*
Dropbox & Compactor Waste	*5,637*
Total Landfill Tonnage	**59,377**

Source: Leno 2023 personal communication

[1] Includes construction debris, wood waste, asbestos, medical waste, cement/asphalt/rock, gravel or soil, self-haul flood debris, municipal flood debris, and compost overs (e.g., oversized woody material).

Over the years, MSW has been placed in five separate areas at the SRL—areas 1, 2, 5, 6, and 7. Areas 1, 2, 5, and 6 are closed, unlined cells. Area 7 is lined, has been in operation since 2006, and is actively receiving MSW. Area 7 has a projected capacity until 2030 at which time Area 7 will either be closed, or a revised permit will be submitted for vertical expansion to allow for continued operation. Area 6 reached its capacity in 2008 and was closed in accordance with WAC 173-351. The City of Walla Walla is currently monitoring Area 6 and conducting remediation monitoring of the other early use areas. Closed cell Area 3 contains medical waste, while closed cell Areas 4 and 4A contain asbestos. Area 7 is the first landfill unit at SRL with a composite base liner system and a leachate collection system.

A landfill gas collection system and flare were installed with the closure of Area 6. The flare is registered with the Climate Action Reserve for the sale of carbon credits. The SRL is currently not subject to the air quality regulations of 40 CFR 60, but it will be if vertical expansion of Area 7 occurs when waste in place exceeds 2,500,000 tons. The City of Walla Walla investigated various bioreactor/leachate recirculation options for implementation/trial in Cell 3 of Area 7, but ultimately deferred implementing the project until near-term master planning for Area 8 is accomplished.

Landfill facilities include an administration building/scale house, scales, equipment building, public drop off area, composting facility, and HHW facility. The facility environmental controls systems include leachate collection and storage, landfill gas collection system (discussed above), and surface water and groundwater management.

Recycling opportunities are provided to landfill customers at a separate drop off area near the scale house with bins currently provided for recycling the following materials:

- Aluminum
- Paper
- Cardboard
- Tin
- Plastics #1, #2, and #5.

A 20-yard ferrous metal recycling bin is located on the west side of the HHW building.

Containers are provided in a separate drop off area for public customers (small vehicles) to dispose of their waste rather than driving out to the active face of the landfill. It is not a requirement that small vehicles use the drop-off area, but many customers feel safer using the drop-off area rather than driving around mobile landfill equipment. Three bays (two covered, one uncovered) are grade-separated with a safety railing for customers to throw the waste down into a roll off bin. When the bins are full, they are hauled to the active face by City landfill staff, dumped, and returned to the drop off bay.

At the current fill rate, the site has a remaining capacity of approximately 240 years (FCS Group 2018). The facility is permitted to accept waste from within Walla Walla County, as well as waste from outside the County. From 1994 (when record-keeping started) to 2010, Columbia County sent approximately 700 to 2,000 tons per year to SRL. Beginning in 2010, Columbia County ceased sending waste to SRL, and the landfill presently is not importing waste from out of the County. As a result, the facility is underutilized in terms of the quantity of waste received and the resources allocated for operations and maintenance.

Planned uses of the facility during the post-closure period have not been fully evaluated. It is currently planned that the site will be designated as secured open space, not accessible to the public. Figure 5-1 shows the general layout of the landfill.

Landfill and Sanitation Cost of Service and Financial Planning Study

In 2018, the City of Walla Walla completed a Landfill and Sanitation Cost of Service and Financial Planning Study (2018–2023) for landfill and sanitation (collection) services. To establish a rate structure, the study included the following:

- Revenue Requirement Analysis. Identified the total revenue needed to fund the landfill and collection services fully on a self-supporting basis. The analysis considered operating and "maintenance expenditures, capital/equipment needs, debt requirements, and fiscal policy objectives."
- Cost-of-Service Analysis. Analyzed the equitable distribution of costs to customer classes of service based on their "proportional demand and use of the system."
- Rate Design Analysis. Analyzed "the development of rates that generate sufficient revenue to meet each system's revenue requirement forecast and addresses the City of Walla Walla's policy goals and objectives."

Figure 5-1. Sudbury Road Landfill: Existing Site Layout

City of Walla Walla, Washington

The rate study identified that the revenues at current levels (2018) were not sufficient to fund ongoing obligations and expenses and suggested an overall 3 percent increase to meet the financial obligation of providing these services. The findings of the study resulted in a change in rate structure and categorization of services and waste types. The City of Walla Walla applied the study's proposed rate changes in 2018, which have been extended through 2024.

The Landfill and Sanitation Cost of Service and Financial Planning Study (2018–2023) recommended that the City of Walla Walla revisit the "findings during each budget cycle to check that the assumptions used are still appropriate and no significant changes have occurred that would alter the results of the study. The City should use the study findings as a living document, continuously comparing the study outcomes to actual revenues and expenses. Any significant or unexpected changes will require adjustments to the rate strategy proposed (FCS Group 2018)." The City reported that the increases have sufficiently funded ongoing obligations and expenses for disposal with some refinement following application. Refinements included the following:

- Roughly doubling the rate for tractor and heavy equipment tires to better match market rates
- Reducing vehicle weighing rate from $46.30 to $10.30 (2022 rate) to account for improved capacity (A new two-scale in/out system was installed to replace a single in/out scale.)
- Adding new retail and wholesale rates for unscreened compost to meet customer demand and to account for the lower cost of unscreened product
- Establishing a bulk per ton tire disposal rate for tire loads of 20 or more tires (Rohan 2021 personal communication)

Long-Term Waste Disposal Approach

In 2011, the City of Walla Walla conducted an alternatives analysis and financial assessment to guide future use of the landfill and an approach to solid waste and recycling collections, transfer, processing, and disposal. Regarding the disposal, two primary options were considered: status quo and outsourcing for transfer, transport, and disposal by a private contractor. The latter would include establishing a long-term contract with a private company to provide solid waste disposal services, with the City acting as the manager (WIH Resource Group 2011). A subsequent study in 2015 considered the possibility of importing additional waste under four different scenarios, including the status quo – resulting in many tradeoffs and the need to study the possibility of import through a Market Waste Shed Radius Study (WIH Resource Group 2015). In 2020, an alternatives analysis was performed to consider continued SRL operation for County MSW (Landfill Alternative), or SRL closure and transfer station construction for long-haul export of MSW for out-of-county disposal (Transfer Station Alternative). The analysis was a high-level update to the 2011 Sudbury Road Landfill (SRL) Alternatives and Financial Assessment Final Report to assist in the City's decision-making process to determine a long-term waste disposal approach. The following were the findings coming out of the 2020 analysis (Parametrix 2020):

- Landfill Alternative shows a cost advantage over the Transfer Station Alternative.
- Landfill Alternative allows the City of Walla Walla to retain control over the solid waste management system, with less outside influences.
- The Landfill Alternative provides more flexibility for the City of Walla Walla, because the Transfer Station Alternative would require long-term contracts with service providers.
- The Transfer Station Alternative has the advantage of decreased solid waste management responsibilities for the City of Walla Walla.
- The Landfill Alternative provides better system resiliency.

- The Transfer Station Alternative requires more logistics for waste disposal and is subject to more opportunities for system disruption.
- Local landfill capacity associated with the Landfill Alternative also provides for immediate surge disposal capacity in the case of a natural disaster.
- The Transfer Station Alternative is the preferred option over the Landfill Alternative based on greenhouse gas (GHG) emissions.[13] However, when SRL reaches an MSW volume with sufficient landfill gas production to warrant energy recovery, the Landfill Alternative will become the preferred GHG option.

The City of Walla Walla determined that the continued operation of the SRL is the preferred alternative. Therefore, the City proceeded with contracting for the preparation of a SRL FMP (Parametrix 2020) to prioritize long-term investments alternatives at the landfill through closure.

Sudbury Road Landfill Facility Master Plan

As discussed above, the City of Walla Walla completed the SRL FMP in September 2023 to document the long-term planning approach for the landfill and surrounding facility. The FMP is intended to provide a comprehensive document to identify the current and planned facilities, operations, and development of the SRL Facility. Recommended projects include expansion of the current landfill cells and associated environmental controls such as the landfill gas control, collection and monitoring systems and the surface water and leachate management facilities, expansion or replacement of the MRW facility, self-haul waste drop-off area, and the support structures, such as the scale plaza (e.g., scale house) and the maintenance building. The FMP also recommends improvements to the compost facility, potentially constructing a recycled glass processing area, drop-off recycling area, and inert waste process yard. At a minimum, the FMP will be reviewed and updated in conjunction with future updates of the SWMP to ensure consistency between the plans (Parametrix 2023a).

The FMP will be used to help prioritize future projects and guide decisions for design and construction of site improvements as well as operational modifications. The document may be reviewed and updated as major changes occur in waste volume receipts, waste management processes and operations, funding availability, and capital improvement projects.

5.2.1.2 Tausick Way Landfill

Located on the east side of the City of Walla Walla, adjacent to Mill Creek, the Tausick Way Landfill (TWL) operated as the City of Walla Walla's municipal waste landfill from the late 1930s until it was closed in 1978. This closure occurred prior to implementation of WAC 173-304, which set new regulations for landfill closures. The site is estimated to have approximately 1.3 million cubic yards of waste interred within a footprint of 68 acres. The TWL is maintained through the City of Walla Walla Landfill's operations and management budget, which includes mowing, herbicide spraying, methane monitoring, and fence repair. Quarterly testing of groundwater and landfill gas monitoring are conducted and submitted to the Walla Walla County Health Department. In 2013, the City received an Early Notice letter from Ecology that the site is now listed in the state's Confirmed and Suspected Contaminated Sites database, and a site hazard assessment will be conducted. The site will require further investigation into its impact on groundwater and possible remediation in the future. The City is studying the viability of developing a solar energy farm at the site.

[13] According to the alternatives analysis, the Transfer Station Alternative requires additional hauling with increased GHG emissions; however, the energy recovery provided at large, regional landfills create significant emission offsets, which results in a net emissions reduction compared to the Landfill Alternative. Note: the GHG impacts associated with the construction and operation of a transfer station were not included in the emissions inventory model.

5.2.1.3 Isaacs Inert Waste Landfill

The Isaacs Inert Waste Landfill (IIWL) is adjacent to the closed TWL within the eastern portion of the City of Walla Walla. The site was formerly a private gravel mining operation until the City acquired the 15-acre property in 1999 after the property was foreclosed and, subsequently, MSW was discovered in a portion of the property. The City applied for an inert waste permit for the site to dispose of dirt, asphalt, and concrete generated from City projects. In 2011, the City received an Integrated Planning Grant from Ecology to determine whether the property could be redeveloped as a brownfield site. The study, completed in 2013, looked at two development scenarios and one scenario to cap and close the facility. The City decided on eventual closure. In 2019, the site was graded and received a final cover. The site was closed in 2021.

5.2.2 Compost Facilities

5.2.2.1 Sudbury Road Landfill Compost Facility

The City of Walla Walla operates the SRL–Compost Facility over Areas 3 and 4 of the SRL. The Compost Facility operates on the same schedule as the landfill, Monday through Saturday from 8:30 a.m. to 6:00 p.m., March through October, and 8:30 a.m. to 4:00 p.m., November through February. The facility receives municipal and commercial loads of green waste, including yard debris and other organic waste from local and regional sources. The facility is permitted to accept the following materials:

- Source-separated yard and garden wastes
- Compostable paper
- Agricultural crop residues, wax-coated cardboard, pre-consumer vegetative food wastes
- Manure and bedding from herbivorous animals (e.g., cows, horses – not dogs or cats)
- Meat and post-consumer source-separated food wastes
- Leaves
- Yard, garden, and wood waste
- Food waste

The Sudbury Compost Facility covers approximately 5 acres, and it is divided into areas for receiving/grinding, composting, screening, storage, and customer loading. The unprocessed materials are stockpiled on site, and a grinder is brought to the site two to three times per year to process the materials. After grinding, the materials are composted primarily by using the aerated static pile (ASP) method and secondarily by being placed into windrows for curing when the ASP system is at capacity. The total processing time for the piles is typically 100 to 120 days. The ASP system, which was first piloted in 2015, has been shown to fare slightly better than the windrowed material, most noticeably in nitrate concentrations. Since the pilot program, the City of Walla Walla purchased eight ASP systems. The City would eventually like to transition to using only the ASP system; however, even with the smaller footprint of the system, the compost facility only has enough space to add two more systems.

After curing and screening, compost is made available for sale in bulk quantities to the public, private compost dealers for resale, and interested local or state agencies. The facility produces a variety of products, including screened and unscreened compost, 50/50 soil amendment product, and fill dirt. The facility does not have an official marketing plan for the products; however, the SRL Compost Facility has made internal marketing changes, including adjusting rates, and temporarily sold out of products in 2021 for the first time in its 14-year history (Jensen 2021 personal

communication). Although not currently accepted, the compost facility is permitted to accept food waste and wax-coated cardboard.

Table 5-2 lists the materials currently accepted and not accepted at the Compost Facility as provided on the City of Walla Walla Public Work's webpage. In 2022, the facility received approximately 6,150 tons of materials and sold approximately 2,400 cubic yards of compost and 2,248 yards of 50/50 blend (mix of soil and compost) compared to receiving approximately 6,651 tons and selling approximately 1,874 cubic yards of compost and 2,806 yards of 50/50 blend in 2021 (Leno 2023 personal communication).

Table 5-2. Sudbury Compost Facility Materials

Acceptable Materials	Unacceptable Materials
Tree trimmings	Painted and/or treated wood products
Limbs (less than 16" in diameter)	Limbs (larger than 16" in diameter)
Grass clippings	Stumps
Thatch	Dirt/rocks/concrete/brick
Leaves	Food
Hay/straw/bedding	Landscaping fabric, twine, plastic bags, and other miscellaneous non-organic lawn debris
Garden waste	Carnivorous animal manure

Source: City of Walla Walla 2021

The 2018 Landfill and Sanitation Cost of Service and Financial Planning Study (2018–2023) referenced earlier in this chapter, provides options and recommendations for increasing sales of compost to be competitive with other facilities in the region. The study considered compost types that are normally sold in the market–high end versus low end, potential regional markets, and other compost facilities in the region (FCS Group 2018). Several recommendations evolved from the study as follows:

- Conduct market study to identify the potential users and the types of products that will enhance compost sales.
- Eliminate the tiered compost rate structure, and establish one rate for wholesale customers and one rate for retail customers.
- Use screening to produce fine, medium, and coarse compost products, as needed.
- Use results of a food waste composting pilot to determine if it will result in a higher quality product.
- Increase testing through the Seal of Testing Assurance Program to qualify the facility for inclusion on the Washington State Department of Transportation Preferred Provider List.
- Expand advertising of compost products by participating in local agriculture and viticulture associations and organizations.
- Market directly to the public through horticulture clubs and nurseries.
- Continue to participate in local organizations, associations, and events, such as International Compost Awareness Week.
- Continue to host educational seminars, provide useful educational material, and offer tours of the facility. (FCS Group 2018)

Of the above recommendations, the City of Walla Walla eliminated the tiered rate structure[14] for compost sales, and applied one rate structure for wholesale, and one for retail customers, comparable to other regional facilities. The City also began producing screened and unscreened compost to provide a product that can be used in a variety of applications. The City continues to participate in local organizations, associations, and events, as well as providing educational materials and hosting seminars and tours.

Building on these efforts, the SRL FMP recommends two alternatives for compost improvements. Both compost facility layouts include the following: customer drop-off, material process area, compost windrow area, finished material storage area, product sales and loading area, stormwater pond, and support office. Alternative 1 would expand the existing 5-acre site to approximately 7 acres and includes 16 200-foot-long compost windrows, and Alternative 2 would expand the existing footprint to approximately 25 acres with 56 200-foot-long compost windrows and a significantly larger storage area for finished compost (Parametrix 2023a).

5.2.2.2 Privately Operated Compost Facilities

In addition to the SRL Compost Facility, the County has four privately owned compost facilities that are not open to the public: the Envirocom Compost Facility located in Burbank, the PCA Compost Facility located in Wallula, the compost facility operated by the Washington State Penitentiary (WSP) in the City of Walla Walla, and the compost bin system operated by Walla Walla Community College in the City of Walla Walla.

The Envirocom facility is located in Burbank. The facility primarily composts yard debris and processed a total of 985 tons in 2023.

The PCA Compost Facility is located in Wallula. The facility handles approximately 90,000 cubic yards of primary and secondary sludge and 25,000 cubic yards of paunch manure per year. A windrow turner is used to aerate the piles. Some of the finished product is beneficially used; however, most are stockpiled on site. The facility hopes to sell the product as a soil amendment in the future. In addition, the dry sludge may be shipped to the Wasco Landfill in The Dalles, Oregon. Fly ash, lime waste, wood waste, and demolition debris are also stockpiled on site. Currently PCA is working with consultants to evaluate the properties of compost generated by the on-site facility to further determine beneficial use. The compost facility is operated by American Fiber Products, LLC, and the facility also has a limited-purpose landfill on the site (Butkus 2021 personal communication). Through an agreement with the Walla Walla County Department of Community Health, Ecology has assumed delegation for the PCA compost facility and limited purpose landfill in accordance with WAC 173-350-700.The WSP operates an on-site composting facility that includes composting post-consumer food scraps. The 7- to 8-acre site uses an ASP composting process. The compost is used on-site at the penitentiary because the WSP is legally constrained from selling the product to other government agencies or nonprofit organizations.

Walla Walla Community College operates a small-scale O2Compost Micro-Bin system. This is used to compost pre-consumer food waste from the campus culinary program and cafe. In addition, the Community College operates a freestanding ASP system for grape pomace from the campus enology and viticulture program. The finished compost is used in the culinary club's food garden beds and for the campus landscape beds.

[14] Compost sales are charged on tiered rates based on the amount purchased in a calendar year.

5.3 Waste Export

"Waste export" refers to the transfer of waste from Walla Walla County to a landfill located outside the area. There is currently no ordinance within the City of Walla Walla or the County that requires waste within the County to be flow controlled to the SRL. BDI of Pasco collects waste in unincorporated areas of Walla Walla County, Prescott, and Waitsburg. Waste collected by BDI is brought to the company's transfer station in Pasco and is long-hauled to the Finley Buttes Landfill in Oregon for final disposal. If the County flow-controlled this waste to SRL it would add approximately 25 percent to the tonnage and improve dollars per ton efficiencies.

5.4 Options

5.4.1 Use of Sudbury Road Landfill for Out-of-County Waste

Description

This option aims to refocus on waste import to the landfill. This approach would capitalize on the existing capacity of the SRL and would improve waste import to the facility. This would mean improved marketing for importing out-of-county waste for disposal.

In 2015, the City of Walla Walla studied four waste volume scenarios to understand the tipping fees and related costs for the SRL: status quo, 50,000 tons/year, 100,000 tons/year, and 150,000 tons/year. The study showed that import of an additional 150,000 tons/year would be necessary for the landfill to compete with the regional market price. The 2015 study recommended four sources/categories of waste streams to increase waste volumes at the SRL: large waste generators, local jurisdictions, private sector waste collection companies, and long-haul transport. The 2015 study recommends the City of Walla Walla prepare a Market Wasteshed Radius Study to understand the feasibility and likelihood of attracting waste from the sources/categories listed above (WIH Resource Group 2015). Under this option, the City of Walla Walla would prepare a Market Wasteshed Radius Study.

Cost

The cost to prepare a Market Wasteshed Study is estimated at $50,000.

5.4.2 Sudbury Road Landfill Facility Master Plan

Description

The City of Walla Walla finalized the SRL FMP in September 2023. The FMP details the planning and scheduling for landfill operations spanning the next 20 years.

The SRL FMP addresses compost operations/facilities, landfill gas, flare and leachate operations/facilities, and HHW operations/facilities. It includes a comprehensive assessment of all facilities at the landfill to develop a prioritized work plan to address identified deficiencies and upgrades (including future air permitting/compliance as applicable). Alternatives in the FMP fall into three categories:

- Core landfill element investments (essential to continued landfill operations).
- Landfill supporting element investments (important peripheral activities that contribute to successful landfill operations).
- Other solid waste management program investments (discretionary).

Core landfill element investments are necessary to continue operations at the SRL. These elements include constructing new cells and areas in accordance with projected waste disposal amounts, the closure of completed cell areas, and improvements to the current environmental controls. These environmental control facility improvements include collection, control, and management of leachate, surface water, and landfill gas, and monitoring the groundwater. Core landfill element investments are expected to be implemented between 2026 and 2041.

Landfill supporting investments are important peripheral activities that contribute to successful landfill operations. These investments include replacing the current maintenance building, replacing or upgrading the current moderate-risk waste building, replacing the self-haul waste drop-off area, and improvements to the scale plaza area. These investments are currently expected to be implemented between 2024 and 2026, excluding the scale plaza area improvements, which are not expected to be needed until 2073.

Other solid waste management program investments are not required for the continued operation of the facility but are recommended to expand the City of Walla Walla's current waste programs. They are considered discretionary in scope and timing. These recommendations include improvements to the compost facility, improvements to the recycling drop-off area, the addition of a recycled glass processing area, and the addition of an inert waste process yard and landfill. There were also a number of additional potential investments discussed such as construction of a sanitation shop for the sanitation fleet that includes EV charging stations, wood waste receiving and recycling areas, and solar power generation on closed landfill areas. Since these are discretionary, their implementation is variable; however, current implementation is expected between 2027 and 2030.

Cost

The cost to implement the alternatives discussed in the FMP are detailed in the table below (Table 5-3).

Table 5-3. Facility Master Plan Recommendation Costs

Facility Improvement	Capital Budget (2023 $)
Landfill Core And Supporting Element Investments (Non-Optional)	
Self-Haul Waste Drop-Off Area Replacement	$4.23 million
Design/Connect Existing Leachate Cleanout Locations to Existing Header	$0.06 million
Compost Facility Improvements Alternative 1	$3.84 million
Existing Moderate Risk Waste (MRW) Building Rehabilitation and Expansion Alternative 2 (7,500 Sf)	$2.5 to $3 million
Maintenance Building Replacement	$5.37 million
Permit for Area 7, Cell 4	$0.08 million
Compliance Monitoring System	$1.44 million
Design/Install New 300- to 800-cubic-feet-per-minute Landfill Gas Flare Facility	$1.94 million
Design/Install Landfill Gas Extraction System in Area 7 and Connect to Existing Header, Horizontal/Vertical.	$0.62 million
Design and Development of Area 8, Cell 1	$5.39 million
Design and Final Closure of Area 7	$3.62 million
Design/Install Passive Biofilter for Areas 1 and 2	$0.04 million
Design/Install Landfill Gas Extraction System In Area 8, Cell 1	$0.63 million
Scale Plaza Improvements	$0.60 million

Facility Improvement	Capital Budget (2023 $)
ALTERNATIVES TO PROPOSED CAPITAL PROJECTS	
Compost Facility Improvements Alternative 2 (First Phase, 60% Of Full-Buildout, 15 Acres)	$17.42 ($10.45) million[1]
MRW Building Replacement Alternative 1 (7,400 Sf)	$5.88 million
OTHER SOLID WASTE PROGRAM INVESTMENTS (DISCRETIONARY)	
Drop Off Recycling Area Improvements	$0.29 million
Recycled Glass Processing Area	$0.37 million
Design/Construct Inert Waste Receiving, Processing and Disposal Area	$0.61 million

[1] Total project cost is $17.42 million and first phase at around 60% buildout is approximately $10.42 million.

Source: Parametrix 2023a.

5.4.3 Sudbury Road Landfill Financial Stability

Description

As described earlier, the SRL is presently receiving waste from predominantly within Walla Walla County, with incidental waste from outside of Walla Walla County; and some in-county waste is being exported for disposal in Oregon. At the current fill rate, the facility has a remaining capacity of over 240 years. Presently, the facility's revenues are adequate to pay for operations and maintenance, including daily operations, as well as long-term maintenance and legacy costs associated with past uses of the facility.

As discussed in Section 5.2, Existing Conditions, the City of Walla Walla performed a Landfill and Sanitation Cost of Service and Financial Planning Study (2018–2023) that resulted in a change in rate structure and categorization of services and waste types. This has resulted in the City being able to fund ongoing obligations and expenses in the short term. Additional mechanisms include implementing disposal agreements with contract-based rates with public or private entities, establishing dedicated fees such as land-use fees (per household, business, parcel, or per jurisdiction, based on population), waste-export fees, or flow control.

The City of Walla Walla adopted/implemented the 2018 Cost of Service Analysis and Financial Plan (2018–2023). This option proposes to update the Cost of Service Analysis and Financial Plan in 2024, notably to consider the future capital investments outlined in the SRL FMP.

Cost

The estimated cost to update the financial plan is $80,000.

5.4.4 Expand Organic Materials Processed

Targeted Stream

The targeted waste stream for this option includes food waste, waxed cardboard, and other compostable paper products.

Description

This option would expand the existing operations at the SRL Compost Facility to incorporate additional materials. The objectives of the option are to facilitate diversion of additional organics, including food waste, waxed cardboard, and other compostable paper products, and to produce additional products for sale to the public. Sources of these additional organics include the residential

and commercial sectors. Sections 4.4.2 and 4.4.4 discuss the options for expansion of organics collection for residential and commercial customers, respectively. As discussed in Section 5.2.2, the existing compost facility is already permitted to accept food, waxed cardboard, and other compostable paper products.

This option would require new equipment, personnel, and other resources to handle the types and quantities of new materials. The SRL FMP includes two alternatives, one that increases the existing compost site to over 7-acres and the other that increases the compost operations on the site to 25 acres at the SRL. Implementation of the SRL FMP, which includes a high-level estimate of the cost and siting of compost facility alternatives is discussed in 5.4.2.

To understand the feasibility of this program, a food waste composting pilot could be implemented in advance of any major investments. This would involve collection of food waste from a small percentage of residential customers already subscribing to the green waste collection program in the City of Walla Walla.

Another option is for the operation of a private compost facility to process additional organics.

Diversion Potential

Food scraps make up approximately 12 percent of the County's disposed waste stream, and compostable paper and paper products comprises approximately 5 percent. As outlined in the SRL FMP, the compost facility improvements outlined in SRL FMP are projected to divert 25 percent organics from the landfill from 2028 through 2030, and 75 percent after 2030 (City of Walla Walla 2023).

Costs

Cost to implement this option would include capital costs for equipment and other improvements at the facility as well as operating costs including labor, operations, and maintenance. The recommended approach is through an implementation plan that clearly identifies the investments, budgeting, and permitting. The estimated cost for the implementation plan is $125,000, including grant writing for initial capital improvements.

5.4.5 Improve the Marketability of the Sudbury Compost Facility's Finished Product

Description

Substantial progress has occurred at the Sudbury Compost Facility with regard to compost sales following implementation of the 2018 Cost of Service Analysis and Financial Plan (2018–2023) with demand currently exceeding production. The City could further this progress by implementing additional recommendations provided in the 2018 Landfill and Sanitation Cost of Service and Financial Planning Study as discussed in Section 5.2.2.

Cost

Given the success of the operations following the 2018 Cost of Service Analysis and Financial Plan (2018–2023), the City of Walla Walla could continue to monitor production versus demand at no additional cost.

5.5 Recommendations

The SWAC evaluated the options for solid waste facilities and recommends the following for implementation by the City of Walla Walla:

5.5.1 Use of Sudbury Road Landfill for Out-of-County Waste (low priority)

- Consider increased import of out-of-county waste.
- Consider a Market Wasteshed Radius Study to understand the feasibility of being competitive with regional markets.

5.5.2 Sudbury Road Landfill Facility Master Plan (high priority)

- Implement FMP recommendations.

5.5.3 Sudbury Road Landfill Financial Stability (high priority)

- The City of Walla Walla will update the adopted/implemented 2018 Cost of Service Analysis and Financial Plan (2018–2023) in 2024.

5.5.4 Expand Organics Processing to Include Additional Materials (low priority)

- Evaluate expanding the existing composting operations to include additional materials, with consideration toward the expansion being economical relative to other disposal options.

5.5.5 Improve the Marketability of the Sudbury Compost Facility's Finished Product (low priority)

- Continue to monitor production and demand at Sudbury Compost Facility.

6. Miscellaneous Waste

The purpose of this chapter is to review the generation, handling, and disposal methods for several miscellaneous wastes in Walla Walla County. These wastes require special handling and disposal and are generally managed separately from MSW. The wastes addressed in this chapter are as follows:

- Agricultural wastes
- Asbestos
- Biomedical wastes
- Construction, demolition, inert, and disaster debris
- Tires
- Electronic wastes

Wastes such as low-level radioactive wastes and biosolids are not addressed in this 2024 Plan. Universal waste is addressed in Chapter 7, Moderate Risk Waste, of the Plan. There may be other items for the special waste category, but they have not been identified, nor have they caused a problem in the County. The nature and sources of these wastes as well as the existing programs for managing them in Walla Walla County are described, and where warranted, options are presented.

6.1 Existing Conditions

6.1.1 Agricultural Waste

Agricultural wastes are by-products of farming and ranching. They include crop harvesting waste and manure.

According to the 2022 Census of Agriculture (USDA NASS 2024), the number of farms in Walla Walla County is decreasing slightly. The number decreased by about 1 percent, from 903 farms in 2017 to 894 farms in 2022. The total acreage in farms increased by about 1.5 percent, totaling 713,416 acres in 2022, compared to 702,537 acres in 2017. Approximately 81 percent of the land on farms is cropland, with the remainder being pasture and other uses.

Agricultural wastes result from farming and ranching activities, and they consist primarily of crop residues and manure. In 2022, the top crop items in acreage are listed in Table 6-1.

Table 6-1. Primary Agricultural Acreage in Production

Crop	Acreage
Wheat for grain	219,473
Vegetables harvested for sale	21,778
Potatoes	12,682
Peas (dried, edible)	11,191
Corn for grain	6,317
Chickpeas	8,923
Orchards	13,983

Source: 2022 Census of Agriculture, US Department of Agriculture, National Agricultural Statistics Service 2024

6.1.2 Asbestos

Asbestos is a material that was used for thermal insulation, surfacing materials, and other purposes in buildings throughout the 1950s, 1960s, and 1970s. When asbestos-containing material (ACM) becomes easily crumbled by hand pressure, it is called friable, and it is dangerous because it can release asbestos fibers into the air. Likewise, cutting or sanding of non-friable ACM can release asbestos fibers into the air. Friable asbestos fibers are a known carcinogen, which can cause lung cancer and other disabling and fatal diseases.

Federal regulations governing handling, transportation, and disposal of ACM are known as the National Emissions Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 61). Requirements for asbestos disposal include, but are not limited to, standards for covering the waste, maintenance of waste shipment records, and maintenance of records concerning location and quantity of waste disposed.

Ecology Regulations (WAC 173-401-531) state that asbestos waste that contains 0.00004 percent of friable asbestos exceeds the thresholds for hazardous air pollutants and must be regulated for disposal per the asbestos management standards of NESHAP (40 CFR 61). Friable asbestos wastes are exempt from regulation as dangerous wastes, provided these wastes are managed in compliance with, or in a manner equivalent to, the asbestos management standards of NESHAP (40 CFR 61). The Washington State Department of Labor and Industries is responsible for asbestos handling, and disposal is regulated by the federal government, as well as by local asbestos regulations and the local health district.

The SRL is permitted to dispose of asbestos wastes. The wastes are disposed in designated locations of Area 7 of the landfill. Asbestos material must be properly bagged and is charged as a special fee in addition to the normal tip fee based on weight.

6.1.3 Biomedical Waste

Medical treatment and research facilities generate a wide range of special wastes that require handling and disposal. Because of the variety of waste streams, several different regulatory agencies at the local, regional, state, and federal levels have regulations pertaining to best management practices, and they apply their own definitions to waste types. For the purpose of this plan update, biomedical waste means, and is limited to, the following types of waste in accordance with RCW 70A.228.010:

Animal Waste: Waste animal carcasses, body parts, and bedding of animals that are known to be infected with or that have been inoculated with, human pathogenic microorganisms infectious to humans.

Biosafety Level 4 Disease Waste: Waste contaminated with blood, excretions, exudates, or secretions from humans or animals which are isolated to protect others from highly communicable infectious diseases that are identified as pathogenic organisms assigned to biosafety Level 4 by the Centers of Disease Control, National Institute of Health, Biosafety in Microbiological and Biomedical Laboratories, current edition.

Cultures and Stocks: Wastes infectious to humans, including specimen cultures, cultures and stocks of etiologic agents, wastes from production of biologicals and serums, discarded live and attenuated vaccines, and laboratory waste that has come into contact with cultures and stocks of etiologic agents or blood specimens. Such waste includes but is not limited to culture dishes, blood specimen tubes, and devices used to transfer, inoculate, and mix cultures.

Human Blood and Blood Products: Discarded waste human blood and blood components, and materials containing free-flowing blood and blood products.

Pathological Waste: Waste human source biopsy materials, tissues, and anatomical parts that emanate from surgery, obstetrical procedures, and autopsy. "Pathological waste" does not include teeth, human corpses, remains, and anatomical parts that are intended for interment or cremation.

Sharps Waste: All hypodermic needles, syringes with needles attached, IV tubing with needles attached, scalpel blades, and lancets that have been removed from the original sterile package.

The handling, transport, treatment, and disposal of infectious waste are regulated in some fashion by the following entities:

- U.S. Environmental Protection Agency
- Washington Department of Ecology
- Washington Department of Health
- Washington Department of Transportation
- Washington Utilities and Transportation Commission (WUTC)
- Local government agencies, including health districts/departments

Major generators of biomedical wastes in Walla Walla County dispose of their wastes through a licensed state franchise service provider. One franchise hauler, Stericycle, has a certificate granted by the WUTC (certificate G-244) to collect biomedical waste material throughout the state. The collection service is provided on an on-call and regular basis. At this time, there have neither been reported problems with biomedical wastes, nor identification of biomedical waste disposed improperly in the waste stream.

While most medical facilities are informed about proper management of biomedical wastes, residential generators may not be informed about proper management for sharps. In addition, although not considered biomedical waste, residents may not be informed about the proper management of outdated pharmaceuticals. Pharmaceutical wastes present both wastewater and solid waste management issues. See Section 7.1.4.3, Pharmaceutical Take-back Program, regarding disposal options for pharmaceuticals.

6.1.4 Construction, Demolition, Inert, and Disaster debris

C&D debris comprises approximately 18 percent of the County's waste stream according to Ecology's 2020–2021 Washington Statewide Waste Characterization Study (Ecology 2021c). C&D debris consists of the materials generated during the construction, renovation, and demolition of buildings, roads, and bridges and is included within the definition of solid waste (WAC 173- 350-100). This waste stream often contains the following:

- Concrete
- Wood (from buildings)
- Asphalt (from roads and roofing shingles)
- Gypsum (the main component of drywall)
- Metals
- Bricks

- Glass
- Plastics
- Salvaged building components (doors, windows, and plumbing fixtures)
- Trees, stumps, earth, and rocks from clearing sites

A category closely related to C&D is inert waste. Inert waste includes the following:

- Cured concrete that has been used for structural and construction purposes, including embedded steel reinforcing and wood, and was produced from mixtures of Portland cement and sand, gravel, or other similar materials.
- Asphaltic materials that have been used for structural and construction purposes (e.g., roads, dikes, and paving) that were produced from mixtures of petroleum asphalt and sand, gravel, or other similar materials.
- Brick and masonry that have been used for structural and construction purposes.
- Ceramic materials produced from fired clay or porcelain, and glass composed primarily of sodium, calcium, silica, boric oxide, magnesium oxide, lithium oxide, or aluminum oxide.
- Glass presumed to be inert includes, but is not limited to, window glass, glass containers, glass fiber, glasses resistant to thermal shock, and glass-ceramics. Glass containing significant concentrations of lead, mercury, or other toxic substances are not presumed to be inert.
- Stainless steel and aluminum.

The primary difference between the two types of waste is that C&D waste has the potential to be tainted through chemical, physical, biological, or radiological substances that may present a threat to human health or the environment, whereas inert waste is not considered to be tainted; thus, it is not expected to be a threat to human health or the environment.

6.1.4.1 Disposal Options

This section discusses disposal options for C&D, inert waste, and disaster debris as regulated in the State of Washington.

Limited Purpose Landfill

In general, limited purpose landfills (LPLs) do not allow for MSW, incinerator ash, dangerous waste, or disposal of polychlorinated biphenyls. LPLs have very specific siting requirements relative to the proximity to sensitive areas, including faults, water supply wells, surface water bodies (e.g., wetlands, streams), and runways. The design standards are stringent with specific requirements related to landfill gas control, liner system design and construction, and leachate collection and control.

Under WAC 173-350-400, LPLs means the following:

> *. . . a landfill that is not an inert waste landfill and receives or has received only solid wastes designated as nonhazardous and are not municipal solid wastes. Limited purpose landfills include, but are not limited to, landfills that receive or have received segregated industrial solid waste, construction, demolition and land clearing debris, wood waste, ash (other than special incinerator ash), contaminated soil and contaminated dredged material* (WAC 173-350-400).

Inert Landfill

Disposal of inert wastes is addressed specifically in WAC 173-350-410. The requirements for inert sites are significantly reduced from those required for LPLs. For example, no liners, leachate collection, or treatment systems are required for inert landfills. The less stringent requirements result in cost savings in all aspects of construction, operation, and maintenance of inert landfills. It is often advantageous to divert inert wastes from the MSW stream for disposal at an inert landfill. This reduces the amount of costly landfill space consumed by wastes that do not necessarily require disposal in a solid waste landfill. A higher level of regulatory overview should be part of any permitted inert waste landfill so that non-permitted material (i.e., non-inert solid waste) does not get deposited in an unlined landfill.

Construction, Demolition and Inert Waste Disposal Options

Options for disposal of C&D and inert wastes include the following:

- Use of Inert Waste as Fill Material: WAC 173-350-410 provides for use of limited amounts (less than 250 cubic yards) of inert waste as general unregulated fill material.
- Disposal in Inert Waste Landfills: Inert landfills may only manage concrete, asphalt, masonry, ceramics, glass, aluminum, and stainless steel. The waste must meet the definition of "inert" as provided earlier.
- Disposal in LPLs: LPLs are available to accept many other types of wastes. These materials include industrial waste, demolition waste, problem waste, and wood waste. Design criteria for LPLs are performance based, subject to location standards, design and operating criteria, groundwater monitoring, and financial assurance. Limited-purpose landfill design specifications may often include a liner and leachate collection system.

6.1.4.2 Existing Conditions

As discussed in Chapter 5, the IIWL was graded and received a final cover. The site was formally closed in 2021.

With the IIWL closed, inert materials generated in the County are delivered to the SRL, where the materials are presently stockpiled.

Currently, the landfill sets aside concrete that is disposed for use on the site to construct access roads in the pit area, as allowed per WAC 173-350-410 (use of inert waste as general unregulated fill material). If the concrete pile exceeds 250 cubic yards which is the limit for a solid waste handling permit exemption, landfill operators plan to rent a crusher to process the material into a usable nonregulated product to set aside for later use. The City has considered purchasing a crusher bucket to alleviate the need for an outside company to crush the concrete. The objective would be to fund this practice using available grant funding. Excess material above the amount needed for road maintenance purposes would be disposed of in the proposed inert disposal area.

New and used C&D materials are accepted at the SLC's BRS in the City of Walla Walla for resale to the community at a discounted price. Stubblefield's and Walla Walla Recycling recycle scrap metal. Except for the BRS, limited recycling and reuse opportunities exist for other C&D materials in Walla Walla County. Additional opportunities for recycling concrete, asphalt, and scrap metals are located in Benton and Franklin Counties, about 50 miles from the City of Walla Walla.

During the summer/fall of 2021, the landfill partnered with the BRS on a pilot project to allow customers to donate suitable materials directly to the BRS. During landfill business hours, BRS stationed a small van truck at the landfill's community recycling center to collect acceptable building materials. In addition to accepting building materials while at the landfill, BRS informed landfill users

that BRS is available to take new or used reusable building materials donations directly (at the site) or by customer delivery to BRS. BRS promoted the reuse of building materials to the community via fliers and social media in advance of starting the pilot project and throughout the pilot period.

6.1.5 Tires

Accumulated waste tires have the potential to harbor mosquitoes and vermin that could pose health risks, including the mosquito-transmitted West Nile Virus, and they could present a fire hazard that could cause smoke pollution. In 2005, Washington State established legislation that created the Department of Ecology's Tire Fund Account to help clean up illegally discarded tires through a $1 fee charged for each new vehicle tire sold in the state. These funds are used to provide resources for tire removal services; to assist local governments in tire prevention, education, and hosting tire recycling amnesty events; to manage fees collected when new tires are sold; and to provide licenses to businesses that manage tire disposal.

In the spring of 2021, two tire amnesty collection events were held through the partnership of Walla Walla County, the City of College Place, and City of Walla Walla, with events held in each city. The events were open to residents, excluding commercial businesses. The two events allowed up to 15 tires to be disposed of for free, excluding semi-truck tires and tires with rims/wheels. In total, approximately 2,870 tires were collected and hauled away by Castle Tire Disposal & Recycling. The tire collection was funded through a grant from the State's Department of Ecology's Tire Fund Account.

In addition, tires are also accepted at the SRL. The Municipal Solid Waste Landfill permit for SRL authorizes the stockpiling of up to 800 tires, the tires are stockpiled in an area just north of the HHW facility. With the arid climate of Walla Walla County and staff sorting and moving the tires, the health risks associated with potential mosquitos or other vermin being harbored in the pile has not been problematic. The landfill operating budget allows for quarterly shipments of stockpiled tires to Castle Tire, located in Portland, Oregon for processing and recycling.

6.1.6 Electronic Waste

Electronic waste refers to discarded computers, monitors, printers, fax machines, cell phones, electronic cables, and other electronic products. In 2006, the Washington State Legislature passed Engrossed Substitute Senate Bill 6428, which established the Washington State Electronics Product Recycling Law. The law requires manufacturers of electronic products sold in Washington State to finance and implement electronics collection, transportation, and recycling programs in Washington State no later than January 1, 2009.

This program, E-Cycle Washington, provides free recycling of computers, monitors, laptops, e-readers, and televisions to residents, charitable organizations, small businesses, and small government agencies. The business locations that accept and recycle or reuse electronic materials in Walla Walla County are indicated in Table 6-2. In addition, the Cities of Walla Walla and College Place hold a biannual Drug Take Back Event in October and April of each year that also accepts computers and other electronics such as TVs, printers, monitors, and cell phones.

Table 6-2. Electronic Materials Recyclers

Business Name	Location	Materials Accepted	E-Cycle Washington Site[1]
Sudbury Road Landfill	414 Landfill Rd., Walla Walla	Computers, television	No
Walla Walla Recycling	827 N. 12th St., Walla Walla	Computers, tablets, monitors, televisions, portable DVD players	Yes
CEP Recycle Walla Walla	1090 W. Rose St., Walla Walla	Computers, tablets, monitors, televisions, portable DVD players	Yes
Home Depot	1100 NE C St., College Place	Rechargeable batteries	No
Batteries Plus	632 S. 9th Avenue Walla Walla	Lead acid batteries, nickel cadmium batteries, nickel metal hydride batteries, lithium ion and polymer batteries, household batteries, specialty batteries (e.g., watch and hearing aid batteries), LED lightbulbs, CFL lightbulbs, fluorescent lightbulbs, incandescent lightbulbs, ballast lightbulbs, plastic-coated and shatter-shield lightbulbs, germicidal and UV lightbulbs, mercury vapor lightbulbs, cold cathode lightbulbs, halogen lightbulbs, metal halide lightbulbs, high-pressure sodium lightbulbs, tablets, phones, laptops, portable tools, power cords, and charging accessories	No
Goodwill Walla Walla Store	1017 NE C St, College Place, WA 99324	Computers, monitors, televisions, tablets, portable DVD players	Yes
Staples	420 N. Wilbur St., Ste 116, Walla Walla	Computers, VCR and DVD players, coffee brewers less than 40lbs., copiers, telephones, tablets, fax machines, video game consoles, keyboards and mice, cell phones, monitors, printers, scanners, stereo equipment, accessories, adapters, cables, cable/satellite receivers, calculators, camcorders, connected home devices, digital cameras, digital projectors, flash drives, hard drives, MP3 players, modems, routers, and webcams	No

Source: Ecology 2021e

[1] Indicates E-Cycle Washington sites that take computers, monitors and TVs free of charge from households, small businesses, charities, schools and small governments.

6.2 Options

6.2.1 Agriculture waste

6.2.1.1 Identify Opportunities for Beneficial Use of Organic Residuals

Description

Given the rural nature of Walla Walla County, the potential exists for the generation of significant quantities of agricultural waste. Although little agricultural waste requires disposal in Walla Walla County, opportunities exist for use of the materials for energy generation and/or establishment of regional organics management centers, either in the County or on the County perimeter.

The County and cities, in conjunction with growers and processors, could support the feasibility of developing a facility for the production of biofuels, biopower, or bioproducts. To further this effort, the County, in conjunction with the Port of Walla Walla, could consider assembling interested parties that discuss potential opportunities in the County for developing these types of alternative energy industries.

Interested and affected stakeholders to be included in the discussions may include city and County representatives, farmers, processors, energy industry representatives, and the waste and recycling industry.

6.2.2 Asbestos Options

6.2.2.1 Provide Education to Homeowners on Proper Handling and Disposal

Description

Much of the asbestos waste is generated as a result of demolition and remodeling projects. The quantities generated are a direct result of the amount of this type of work that is conducted. While private contractors are generally aware of asbestos handling requirements, homeowners doing their own project work may not recognize asbestos-containing materials (ACMs). Some homeowners may be unknowingly placing ACMs from small remodeling projects in with their trash. There may be a need to educate homeowners about proper identification of ACMs and proper handling and disposal methods. The Washington State Department of Health provides information on its website, but a source for local outreach to residents regarding the proper handling and disposal of asbestos waste is limited. The cities and the County could provide education to homeowners on the proper handling and disposal of asbestos as a component of building permit issuance.

Cost

The cost of this option is included with overall public outreach and education efforts.

6.2.3 Construction and Demolition Options

According to Ecology's 2020–2021 Waste Characterization Study, approximately 18 percent of waste disposed in the County is C&D and wood debris (including natural wood, dimensional lumber). The following options are intended to reduce the amount of this material—which oftentimes can be reused or recycled—that enters the landfill.

6.2.3.1 Inert Waste Collection at Sudbury Road Landfill

Targeted Streams

The targeted waste stream for this program is self-hauled concrete, asphaltic materials, brick and masonry, ceramic materials, and metals.

Description

The SRL FMP proposes to develop a 27-acre inert waste process yard and landfill in accordance with WAC 173-350-410. It is envisioned that residential and commercial customers would drop off inert materials (concrete, asphaltic materials, brick and masonry, ceramic materials, and metals) in a processing yard where the materials could be separated by type, consolidated, and possibly resized (crushed) as part of a recycling program. Materials not being recycled would be placed and compacted into a separately permitted LPL. Materials being recycled would be loaded into transport vehicles and/or containers for transport to a material processing facility off site.

Cost

The estimated cost is $0.61 million.

6.2.3.2 Commingled Construction and Demolition Drop-Off Site

Targeted Streams

The targeted waste stream for this program is self-hauled C&D materials.

Description

The City of Walla Walla could encourage a private entity to develop and manage a C&D landfill, or the City could develop and manage a separate drop-off site at the landfill to accept commingled C&D including wood, metals, drywall, and other recyclables. Wood, metals, and other salvageable materials could be sorted and processed at the landfill and then sent to recycling facilities or partnerships, such as the BRS, Stubblefield Co., or Walla Walla Recycling for reuse, material exchange, or recycling. Shingles, aggregates, soil, recycled asphalt pavement, and cured concrete could be accepted as source separated materials for processing.

To encourage the diversion of materials to a C&D landfill, the City of Walla Walla could institute a C&D ban at SRL. Further, the City of Walla Walla and other participating jurisdictions could institute a C&D ordinance that would target materials that are typically generated during construction that could be reused or recycled rather than landfilled. Adoption of C&D ordinances have been successfully used in California and western Washington to divert substantial amounts of C&D wastes. Adoption of a countywide C&D ordinance would require all sponsors of C&D projects throughout the County to recycle or reuse minimum thresholds of debris generated from those projects.

The City of Walla Walla and the other participating jurisdiction's adoption of a C&D ordinance would create an immediate need for drop-off or collection of C&D materials plus processing capacity. Contractors could either source separate or recycle materials such as wood and inert waste, or they could haul mixed C&D loads to a processing site. As with Seattle or King County, the framework of the ordinance should allow for modification of the implementation schedule for any recyclable materials according to availability of end markets and processing capacity. The City of Walla Walla could prepare a feasibility study to determine the viability of such a program in Walla Walla County.

Diversion Potential

Diversion potential through this program is 55 to 60 percent of the targeted materials, or approximately 3,000 tons of self-haul and 800 tons of commercially collected waste.

Cost

Cost to study the feasibility of a C&D landfill is approximately $60,000.

6.2.3.3 On-Site Separation of Construction Materials for Reuse and Material Exchange

Targeted Streams

The targeted waste stream for this program is commercial and self-hauled C&D materials.

Description

Building on the BRS pilot project described in Section 6.4.2, Existing Conditions, the County could continue to expand and support the BRS. The County could work with other nonprofit organizations, such as Iron Straw, Ecoguild, or Habitat for Humanity, to further promote a materials exchange program for C&D materials.

The City of Walla Walla could allow BRS to permanently establish a collection station at the landfill on an as-needed basis. This operation could be expanded to allow Habitat for Humanity to collect materials for its store in Richland, Washington. This would entail establishing an area at the landfill that could be utilized for intermittent collection events. It is assumed the events would be coordinated in advance based on the need of the reuse store to expand its inventory, with stipulations such as an accounting of materials/tonnage collected and number of customers. As with the pilot program, the materials exchange would involve providing literature about the reuse store and benefits of the program. It could also be expanded to provide awareness around asbestos, the paint stewardship program, and HHW.

Diversion Potential

Diversion potential for this program is between 2 and 3 percent.

Cost

The estimated cost to administer this private program is $3,000.

6.2.3.4 Provide Education Programs for Contractors

Description

A straightforward method to help divert C&D and inert waste is to provide general contractors with educational material and information about alternative facilities that take C&D and inert waste. This could be as simple as providing a brochure listing the diversion facilities in the region with hours, location, cost, and material types accepted. Providing information on reuse opportunities, such as exchange programs, can also be useful. A key opportunity for informing contractors about reduction and recycling opportunities is during the permitting process. In addition to general reduction and recycling opportunities, contractors could be provided information about deconstruction and green building practices:

Deconstruction: This involves dismantling of a structure, salvaging building contents and components, and finding viable markets and outlets for materials. This practice can be used to varying degrees, which can range from reuse of an entire structure or foundation, to select assemblies and systems, to the careful removal of specific materials or items.

Green Building: A green building, also known as a sustainable building, is a structure that is designed, built, renovated, operated, or reused in an ecological and resource-efficient manner. Green buildings are designed to meet certain objectives such as protecting occupant health; improving employee productivity; using energy, water, and other resources more efficiently; and reducing the overall impact to the environment. Builders could be provided with information on methods to incorporate environmentally friendly practices into the construction of a home.

Diversion Potential

The diversion potential of this option is between 2 and 3 percent.

Cost

The cost of this option is included with overall public outreach and education efforts.

6.2.3.5 Develop a Disaster Debris Management Plan

In the aftermath of a disaster, the primary focus of government response teams is to restore and maintain public health and safety. As a result, debris diversion programs, such as recycling and reuse, can quickly become secondary. Advance planning, through a Disaster Debris Management Plan, can help Walla Walla County identify options for collecting, handling, storing, processing, transporting, diverting, and disposing of debris. Preparing a plan before an emergency happens can save valuable time and resources if needed. Further, as described in the Federal Emergency Management Agency (FEMA) Debris Management Guide, *communities with a debris management plan are better prepared to restore public services and ensure the public health and safety in the aftermath of a disaster, and they are better positioned to receive the full level of assistance available to them from FEMA and other participating entities* (FEMA 2021). A typical plan includes three major sections:

- Government coordination, pre-disaster planning, and debris management programs
- The emergency management system
- Checklists that summarize the tasks to be undertaken by the local government, primarily the designated debris manager and team

Cost

The estimated cost to prepare a Disaster Debris Management Plan is $75,000.

6.2.4 Biomedical Option

6.2.4.1 Educational Materials for Correct Management of Medical Waste Generated by Residents

Description

Educational materials should continue to inform residents about the risks associated with their wastes and the services available to store and dispose of them properly. Residential sharps generators can use information about correct containers and collection opportunities. The City of Walla Walla and the County will continue to hold prescription takeback events twice a year, and the City of Walla Walla will continue to provide outreach to dentists regarding the proper handling of their mercury containing amalgam waste.

Cost

Budget for this is estimated at $3,000 for basic website and social media communications. Shred/prescription take-back events are organized by local law enforcement agencies. Amalgam waste is addressed through wastewater regulations.

6.2.5 Tire Option

6.2.5.1 Develop a Plan for Management of Tires

Description

Although tires currently are not a major concern in Walla Walla County, the collection of tires at individual residences or businesses has the potential to become a nuisance. The County and cities should continue to address the accumulation of tires on individual properties through the pursuit of state grants, if available, to assist in tire pile cleanup. Cities and County staff should coordinate tire recycling activities with programs in other jurisdictions.

Cost

The cost to manage tires is typically $20,000 per year, depending on the quantity received.

6.2.6 E-Waste options

6.2.6.1 Monitor and Evaluate E-Waste Program

Description

The County and cities should monitor the current implementation of the E-Cycle program for effectiveness.

Beginning in 2010, local governments were encouraged to voluntarily submit an annual "Satisfaction Report" to Ecology by March 1. The entity responsible for preparing the solid waste management plan for an area is responsible for submitting the Satisfaction Report. The report must use a template provided by Ecology and include the following information:

- Accessibility and convenience of services and how they are working in the community
- What services aren't working and why
- Suggestions for improvements to services provided
- Description of public outreach and education
- Any other relevant information

One copy is to be submitted electronically, and an additional paper copy is to be submitted by mail. Within 90 days, Ecology will either approve the report or request additional information. Ecology will use information in these reports when evaluating recycling plan service levels and revisions.

Cost

The Satisfaction Report, prepared by city staff, would cost approximately $3,000 to prepare.

6.2.6.2 E-Waste Education

Description

Ecology requires local governments to provide their citizens with information about the E-Cycle program through existing educational methods typically used by local government. This includes listing locations and hours of operation of local collection sites and services. Ecology has developed a Local Government Toolkit to promote E-Cycle Washington. This toolkit is available on Ecology's web site. This public education program will promote the existing drop-off locations in the County that are part of the state program. The information should be regularly updated to ensure it is accurate. The City of Walla Walla provides information on the proper recycling of these materials through handouts at the landfill and the City of Walla Walla Website.

Cost

The cost of this option is included with overall public outreach and education efforts.

6.3 Recommendations

The SWAC has evaluated the options for miscellaneous waste, and it recommends the following for implementation:

6.3.1 Agricultural Waste (low priority)

- County will support others regarding the feasibility of developing a facility for the production of biofuels, biopower, or bioproducts, and work with local entities to further discussions and development of such facilities.

6.3.2 Asbestos Waste (high priority)

- Provide education to homeowners on the proper handling and disposal of asbestos waste as a component of building permits.

6.3.3 Construction and Demolition – Feasibility Study (high priority)

- Study the feasibility of developing a C&D drop-off site for sorting and processing wood, metals, and other salvageable materials, with consideration toward the service being economical relative to other disposal options.

6.3.4 Construction and Demolition – Inert Waste Disposal (low priority)

- Design and construct an inert waste receiving, processing, and disposal area at SRL.

6.3.5 Construction and Demolition – County Support to Existing Programs (low priority)

- Continue to expand and support the BRS and other nonprofit organizations for reuse and recycling of C&D materials.

6.3.6 Construction and Demolition Options – Contractor Education (low priority)

- Provide education to contractors about alternatives to landfilling for C&D and inert materials.

6.3.7 Develop a Disaster Debris Management Plan (high priority)

- Consider developing a Countywide disaster debris management plan.

6.3.8 Biomedical Waste – Education and Outreach (low priority)

- Provide education and outreach to residents on the correct management of medical waste.

6.3.9 Tire Management Funding (low priority)

- Continue to pursue state grants, if available, to assist in tire pile cleanup.

6.3.10 Monitor and Evaluate E-Waste Program (low priority)

- The City of Walla Walla could complete a satisfaction report to monitor the effectiveness of the existing e-cycle program and determine the need to modify or alter the program (low priority).

6.3.11 E-Waste Education (high priority)

- Continue to educate consumers on the e-cycle program and the opportunities available for recycling of these materials (high priority).

7. Moderate Risk Waste

Moderate Risk Waste (MRW) is hazardous waste produced in small quantities by businesses and households: 220 pounds per month of materials classified as Dangerous Wastes, or 2.2 pounds per month of materials classified as Extremely Hazardous Waste. "Moderate risk waste" does not mean the waste is moderate in risks to human health and the environment; instead, it means it is moderate in quantity, or "small volume hazardous wastes." The Hazardous Waste Management Act (HWMA) (RCW 70.105) and The Solid Waste Management and Reduction and Recycling Act (RCW 70A.205) require all local governments to develop and implement MRW plans. This chapter updates the 2014 Plan.

"Moderate Risk Waste" (MRW) means (a) any waste that exhibits any of the properties of hazardous waste, but is exempt from regulation under this chapter solely because the waste is generated in quantities below the threshold for regulation, and (b) any household wastes that are generated from the disposal of substances identified by Ecology as hazardous household substances.

"Household Hazardous Wastes" (HHWs) are substances identified by Ecology as hazardous household substances in the guidelines developed under RCW 70.105.220.

"Small Quantity Generators" (SQGs) are businesses or residents in Washington that generate less than 220 pounds of dangerous waste, or less than 2.2 pounds of certain kinds of highly toxic waste, in any month. SQGs may accumulate up to 2,200 pounds (or up to 2.2 pounds for wastes regulated at the 2.2-pound limit). The rules for this category of dangerous waste generators are less complex than they are for medium or large quantity generators.

This chapter describes the existing MRW programs and services in Walla Walla County, presents the overall program philosophy (goals and objectives), and lists potential MRW program services to be considered for inclusion in the Walla Walla County Moderate Risk Waste Management Plan. The information contained in this Chapter has been formatted to meet the requirements of the combined MRW/SWMP, as established by Ecology.

7.1 Regulations and Guidance

Hazardous Waste Management Act (RCW 70.105) and Solid Waste Management and Reduction and Recycling Act (RCW 70.95) require all local governments to develop and implement moderate risk waste plans.

Solid Waste Handling Standards (WAC 173-350-360) provides regulatory guidance on MRW handling procedures for fixed facilities and mobile collection events. Handlers are subject to measures that meet specific performance and design standards, including spill prevention, prevention of public exposure, handling procedures, and labeling. Handlers are required to submit a copy of an annual report detailing collection activities (e.g., quantities and types) to the local health department.

Guidelines for Developing and Updating Local Hazardous Waste Plans provides guidelines to help local governments to update their hazardous waste plans (Ecology 2010b).

Hazardous Waste and Toxics Reduction Program is the primary authority that regulates hazardous waste in the state with an emphasis on pollution prevention, compliance with regulations, and permitting/corrective action at facilities that manage hazardous wastes.

The State Solid Waste and Hazardous Waste Management Plan – Moving Washington Beyond Waste and Toxics addresses regulated hazardous waste generators, pollution prevention plans, and moderate risk waste (Ecology 2021a).

Walla Walla County Comprehensive Emergency Management Plan includes an Emergency Support Function for hazardous materials. The County's hazardous materials response plan was developed as required under the Emergency Planning and Community Right-to-Know Act. The purpose of the plan is to develop policies and procedures for responding to a spill of hazardous materials. The plan addresses incidents involving transportation, use, and storage of hazardous materials, including waste materials. The plan provides for the coordination of local government action in response to an incident and outlines procedures to protect emergency workers and the population at large (2017 Walla Walla County).

7.2 Existing Conditions

In Walla Walla County, MRW is handled by the City of Walla Walla; for HHW, only businesses that qualify as SQGs must ship their materials to permitted dangerous waste recyclers or to treatment, storage, and disposal facilities. Guidance for businesses on how to safely dispose of MRW is provided on Ecology's website.

This section discusses existing services and programs for MRW available in the County.

7.2.1 Sudbury Road Landfill – Moderate Risk Waste Facility

The City of Walla Walla operates an MRW facility at the SRL, located at 414 Landfill Road in Walla Walla County. The facility is open Monday through Saturday from 8:30 a.m. to 6:00 p.m. March through October and from 8:30 a.m. to 4:00 p.m. November through February.

The facility includes a 960-square-foot paved and covered customer unloading area, and a 2,400-square-foot enclosed materials processing and storage building. The existing facility is at capacity in terms of storage limitations. The current facility manages nearly 100,000 pounds of materials annually, with estimates projecting an increase to 107,000 pounds by 2042 and 121,000 pounds by 2072. Despite the modest increase in average daily customers, the existing facility is undersized for the size of its customer base. The City of Walla Walla SRL FMP includes a recommendation to upgrade or replace the MRW facility to accommodate for projected increases in waste drop-off and to improve safety. If implemented, this expansion or replacement could begin in 2025.

The facility accepts hazardous waste from households in Walla Walla County at no fee to the customer.[15] The facility will also accept medical sharps (syringes) from residents for proper disposal if containerized and labeled properly. Except for mercury-containing lights, no business-related MRW is accepted. The facility does not accept radioactive materials (such as smoke detectors), asbestos, ammunition, or explosives. Materials are shipped offsite for disposal approximately once per quarter.

Details of daily operations for the MRW Facility, including waste acceptance, packing, shipping, training, and emergency procedures, are provided in the Moderate Risk Waste Collection Facility Final Operations Plan (Parametrix 2023b). A copy of the Operations Plan is available on site at the MRW Facility, as well as in the landfill administration office.

The types and quantities of materials collected at the Sudbury HHW Collection Facility in 2020 are included in Table 7-1. Some of the collected HHW is reused in part through such means as exchange.

[15] A fee is charged for freon-containing items: refrigerators, freezers, air conditioners, televisions, and computer hardware. Smoke detectors, which also require special handling for safe disposal, must be recycled through the manufacturer. Ammunition and explosives must be disposed of through the local law enforcement agency. Asbestos must be properly bagged as hazardous material and disposed at the Sudbury Landfill. See Chapter 6, Miscellaneous Waste, for more information.

Table 7-1. Materials Accepted at Sudbury Road Landfill, Moderate Risk Waste Facility, 2020

Material	Quantity (lbs)
Motor oil (non-contaminated)	28,150
Antifreeze	4,241
Flammable Liquids	7,111
Flammable Solids	12
Latex Paint	21, 942
Oil Base Paint	8,804
Other paint Items	4,250
Batteries (auto lead acid)	4,600
Batteries (small lead acid)	981
Batteries (household dry cell- alkaline/carbon)	728
Batteries (NiCad/NIMH/Lithium)	300
Pesticide Poison (liquid)	2,137
Pesticide Poison (solid)	967
Acids	674
Bases (hydroxides)	1,003
Oxidizers (solid)	37
Flammable Butane, Propane, etc.	80
Aerosol (consumer commodities)	385
Mercury – Pure (elemental)	10
Mercury Thermometers, Thermostats	16
Mercury Fluorescent Tubes and Compact Fluorescent Lights (compact fluorescent lights)	1,229
Non-polychlorinated Biphenyl Light Ballasts	190
Used Cooking Oil	680
Chlorofluorocarbons (average of 2012–2018, no report for 2019/20)	117
Cathode ray tubes (CRTs)	600
E-Waste (except CRTs)	900
Total	**90,114**

Source: City of Walla Walla 2020.

The quantities of materials collected at the facility from 2016 through 2020 are indicated in Figure 7-1.

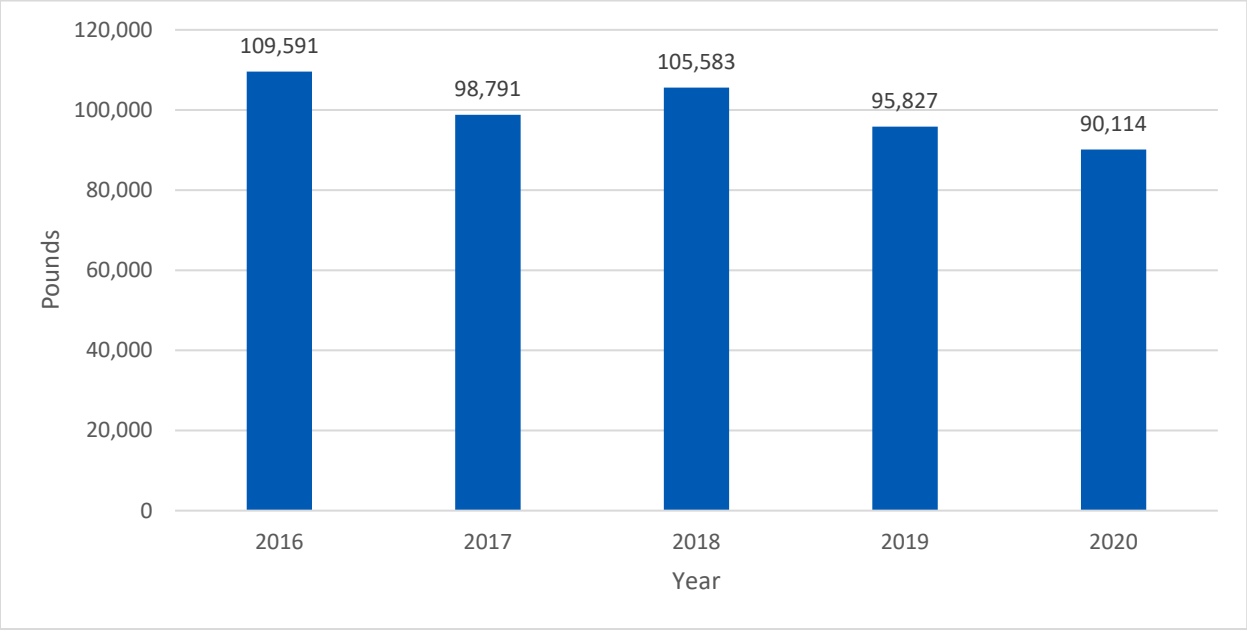


Figure 7-1. Historical Pounds of Materials Collected at the Sudbury Moderate Risk Waste Facility

Figure 7-2 provides annual data on the number of customers from 2016 to 2020, which shows that the MRW facility served an average of 1,980 customers annually.

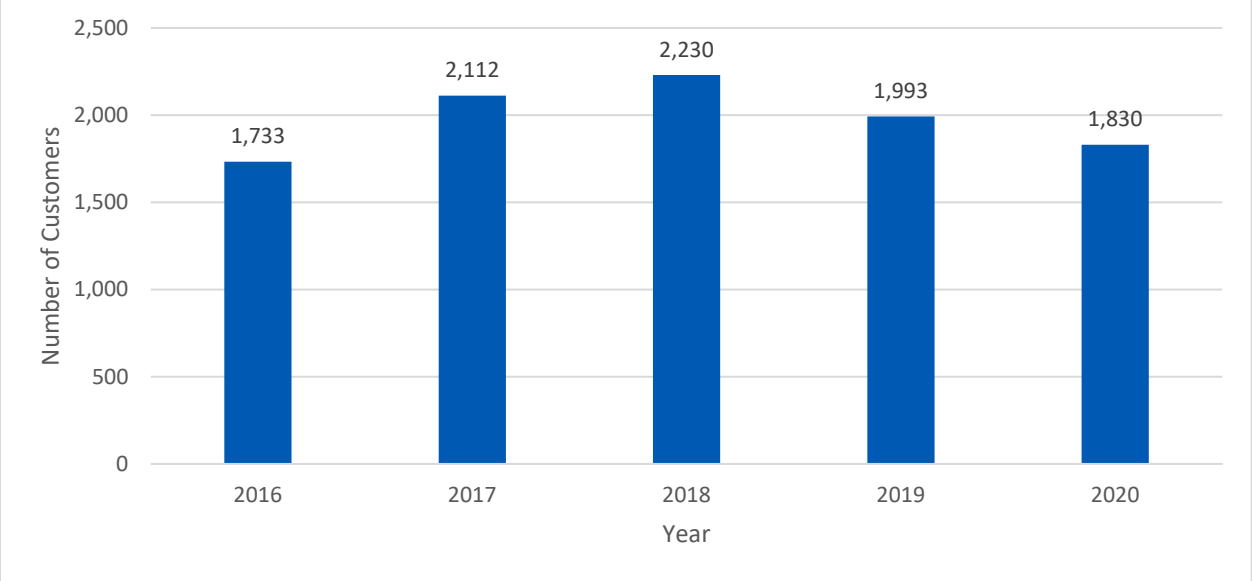


Figure 7-2. Historical Customer Count for Sudbury Moderate Risk Waste Facility

7.2.2 Collection Events

Walla Walla County offers mobile/tailgating HHW collection events to provide additional disposal opportunities for residents. HHW mobile/tailgating collection events have been held in Burbank, Prescott, Waitsburg, and at the City of Walla Walla Service Center in the past. Currently, HHW collection events are scheduled on an as-needed basis while the County determines program funding that would establish recurring events each year.

7.2.3 Business Small Quantity Generator Assistance

Through a partnership with Ecology, the City of College Place provides technical pollution prevention assistance (PPA) to businesses and organizations that qualify as SQGs in their community. Activities include free site visits and calls, with the expectation that the City will conduct about 14 site visits per year. These activities, as overseen by a Local Source Control Specialist, are intended to reduce pollution, including spill prevention, explanation of regulations, and help locating recycling or disposal sources for hazardous waste. Businesses targeted by the program include automotive and repair shops, landscaping businesses, and restaurants (Myrlie 2021 Personal Communication).

The $mart Business Partner Program, as operated by the local nonprofit SLC, includes MRW educational outreach and recognition of businesses that reduce the amount of MRW generated. The program provides information on less toxic, alternative products businesses can use to substitute for hazardous materials that are often difficult and/or expensive to dispose of, and to provide technical assistance to businesses on reducing and properly managing MRW.

7.2.4 Product Stewardship Programs

Product stewardship is an environmental management strategy that directs those involved in the design, production, sale, and use of a product to take responsibility for minimizing the product's impact to human health and the natural environment throughout the life of the product. EPR is a core principle of product stewardship, where producers' responsibility for their products extends to the post-consumer management of those products, including responsible management of those products and their packaging at the end of their useful life. Currently the City of Walla Walla is involved in the Paint Stewardship Program, battery collection, and the Mercury-Containing Lights Product Stewardship Program (including compact fluorescent light [CFL], high-intensity discharge [HID] lights, and fluorescent bulbs). The following subsections describe existing programs, or programs that will be implemented within a few years.

7.2.4.1 Mercury – Containing Lights Product Stewardship Program

The Mercury-Containing Lights Law (RCW 70.275), implemented on January 1, 2015, requires that all mercury-containing lights be recycled, as mercury is a potent neurotoxin. Through a product stewardship program, consumers are provided with recycling services for mercury-containing lights. The program provides a network of collection sites across the state. The sites allow residents and businesses to recycle up to 10 mercury-containing lights for free per day. This program is financed through an environmental handling charge of $0.95 that is added to the price for each mercury-containing light purchased in Washington State.

The main categories of lights that are accepted through the program include the following:

- Fluorescent tubes up to 8 feet in length, including straight (linear), u-shaped, circular and other curved shapes
- All types and sizes of CFLs
- HIDs

In Walla Walla County, two locations provide mercury-containing light recycling: SRL, and Batteries Plus—both in the City of Walla Walla. The program is managed by the nonprofit Product Stewardship Incorporated.

7.2.4.2 Photovoltaic Module Stewardship/Take-back Program

Washington State Senate Bill 5939, passed in 2017, promotes the local renewable energy industry through tax incentives. A component of the bill is the Photovoltaic (PV) Module Stewardship and Take-back Program (Chapter 70.355 RCW). This program requires manufacturers of solar panels (also referred to as PV modules), to provide the public a convenient and environmentally friendly way to recycle the equipment. Key elements of the program include the following elements:

- The program applies to all PV modules purchased after July 1, 2017.
- The manufacturer is responsible for the cost of the takeback/recycling program.

Through coordination with manufacturers, stewardship organizations, and stakeholders; Ecology completed stewardship guidance for manufacturers to implement the program in 2019. Either through a designated stewardship organization, or acting on their own behalf, manufacturers must prepare and submit a stewardship plan to Ecology by July 1, 2024, or within the first 30 days of the first sale of a PV module in or into Washington State. Beginning on July 1, 2025, no manufacturer, distributor, retailer, or installer may sell or offer for sale a PV module (in or into the state) unless the manufacturer has submitted a stewardship plan to Ecology and received plan approval.

7.2.4.3 Pharmaceutical Take-back Program

Washington State offers the “Safe Medication Return Program” at no cost to residents. The program was passed by the legislature as Engrossed Substitute House Bill No. 1047, which requires drug manufacturers that sell drugs into Washington to operate a drug take-back program to collect and dispose of prescription and over-the-counter drugs. The program was updated in 2021 to specify that the program can be facilitated through multiple drug take-back programs that meet the requirements of the law. The program is currently facilitated by MED-Project and overseen by the Washington Department of Health. The program has several benefits:

- Limits prescription medication being obtained by drug abusers.
- Prevents accidental poisoning of children.
- Protects the environment (contamination of groundwater and surface water contributes to long-term negative effects to the environment and animal life).

Residents have two options to participate in the program: they can request a free prepaid envelope through MED-Project and mail in the package or take the medication to the nearest drop off site. Drop off sites in Walla Walla County include the following:

- Family Medical Center Pharmacy – City of Walla Walla
- PSMMC Pharmacy – City of Walla Walla
- Safeway Pharmacy – City of Walla Walla

Additionally, the Drug Enforcement Administration sponsors the Prescription Drug Take-Back Days, which are run by the Walla Walla Police Department and the College Place Police Department during the months of October and April. In 2021, the Walla Walla Police Department hosted the Drug Take-Back Day at the Walla Walla Police Station, and the College Place Police Department hosted the event at the College Place Walmart parking lot. It was reported that 611 pounds of drugs were dropped off during the April event (Union-Bulletin 2021).

In addition to medication, the Drug Take-Back events also accept and safely dispose of computers and other electronics (see Section 6.6, Electronic Waste, for additional information), and offer a free paper shredding service.

7.2.4.4 Paint Stewardship Program

Industry-supported paint stewardship programs ensure environmentally responsible, end-of-life management for leftover architectural paint. Such programs relieve local and state governments of the economic burden of post-consumer paint management.

Washington State signed HB 1652 into law on May 9, 2019, and established the Paint Stewardship Program for leftover architectural paint in April 2021. The nonprofit PaintCare currently operates the Paint Stewardship Program on behalf of paint manufacturers in Washington, as well as in nine other states with paint stewardship laws. In September 2021, Washington State had 190 year-round drop-off sites, and collected 220,000 gallons of unwanted paint. The goal of the program is to conserve resources and increase the amount of paint that is recycled.

The mandate requires paint retailers to pass on a fee to consumers for the sale of products covered by the program[16], and to sell only products registered with PaintCare (Table 7-2). All paint retailers are required to do this.

Table 7-2. PaintCare Fee Schedules

Half pint or smaller	Larger than half pint up to smaller than 1 gallon	1 gallon up to 2 gallons	Larger than 2 gallons up to 5 gallons
$0.0	$0.45	$0.95	$1.95

Retailers in Washington are also mandated to provide customers with information about the program and end-of life paint management. At no cost, PaintCare provides program materials for retailers to share with customers, including brochures, fact sheets, and posters. In addition to collection sites, the program provides education on buying the correct quantity of paint and tips on using up leftover paint.

Retailers have the option to volunteer as a drop-off site, which not only offers a valued service to the community but could also benefit the business by drawing in customers. Participation in collection is contingent on available space for collection storage, and staffing. The program also supports collection at solid waste facilities (e.g., recycling facilities, landfills) and HHW facilities, with the benefit of relieving local governments the cost of managing leftover paint. In Walla Walla County, the following entities provide collection services:

- Rodda Paint
- Sherwin-Williams
- SRL
- BRS

PaintCare also offers a pickup service for businesses (e.g., contractors) and households with at least 100 gallons of eligible paint products.

[16] The PaintCare program accepts house paint as well as primers, stains, sealers, and clear coatings such as shellac and varnish. It does not accept aerosols, solvents, or other products labeled for industrial or non-architectural use.

7.3 Regulated Generators, Transporters, and Sites

This section provides a hazardous waste inventory of dangerous waste generators, transporters, and sites. While there are no hazardous waste recycling or disposal facilities in Walla Walla County, Section 7.3.4 discusses the potential zoning and Comprehensive Plan designation should it become necessary for a facility to be located within the county.

7.3.1 Hazardous Waste Generators

Businesses and institutions producing or accumulating hazardous waste above the quantity exclusion limits must meet a stringent set of regulations when storing, handling, and disposing of their hazardous wastes.

The RCRA and the HWMA regulate hazardous waste for large generators and transporters of hazardous waste. Businesses that generate, transport, or own/operate a hazardous waste treatment facility have an EPA/state identification number, which allows regulators to ensure they are properly tracking and reporting.

Appendix H includes a list of the active hazardous waste generators registered in the County (Ecology 2024c).

7.3.2 Hazardous Waste Remedial Action Sites

Ecology publishes the Hazardous Sites List as required by WAC 173-340-330. The list is updated twice per year. It includes all sites that have been assessed and ranked using the Washington Ranking Method. National Priorities List (NPL) sites are also listed. Most sites on the Hazardous Sites List have undergone a preliminary study called a Site Hazard Assessment (SHA). An SHA provides Ecology with basic information about a site. Ecology then uses the Washington Ranking Method (WARM) to estimate the potential threat the site poses, if not cleaned up, to human health and the environment. The estimate is based on the amount of contaminants, how toxic they are, and how easily they can come in contact with people and the environment.

Sites are ranked relative to each other on a scale of one to five. A rank of one represents the highest level of concern relative to other sites, and a rank of five the lowest. Hazard ranking helps Ecology target where to spend cleanup funds. However, a site's actual impact on human health and the environment, public concern, a need for an immediate response, and available cleanup staff and funding also affect which sites get first priority for cleanup. A site may be removed from the list only if the site is cleaned up. In some cases, long-term monitoring and periodic reviews may be required to ensure the cleanup is adequate to protect the public and the environment. The placing of a site on the list does not, by itself, imply that persons associated with the site are liable under Chapter 70.105D RCW. A list of remedial action sites within the County are included in Appendix H (Ecology 2024c).

7.3.3 Transporters and Facilities

Hazardous waste transportation, storage, disposal and recycling companies registered with Ecology that serve Walla Walla County are included in Appendix H (Ecology 2024c) All transporters of hazardous waste require a common carrier permit issued by the WUTC, under RCW 81.80. Hazardous waste transporters can be researched and verified through EPA's online search tool, Enforcement and Compliance History Online, to ensure they have a good record of compliance.

7.3.4 Hazardous Waste Recycling and Disposal Facilities

Presently there are no hazardous waste recycling or disposal facilities registered within the County. The Walla Walla County Comprehensive Plan designates specific areas for industrial land uses should it became necessary to site an MRW treatment facility in the County. Approximately 7,600 acres in Walla Walla County are zoned as industrial lands, consisting of the following zoning districts: Industrial Agriculture Heavy, Industrial Agriculture Mixed, Industrial/Business Park, Light Industrial, and Heavy Industrial. This includes the Heavy Industrial lands designation in the Attalia Industrial Urban Growth Area, west of College Place, totaling approximately 6,080 acres. Heavy industrial districts, as specified in the Walla Walla County Comprehensive Plan, are primarily for manufacturing, processing, fabrication and assembling of products or materials; warehousing and storage; and transportation facilities (Walla Walla County 2019).

According to the City of Walla Walla's 2018 Walla Walla Comprehensive Plan, approximately 346 acres of land in the City are zoned for Heavy Industrial and approximately 21 acres of land is designated for Light Industrial/Commercial land uses. Concentrations of industrial uses are located on the west side of the City, both north and south of U.S. Highway 12, and along U.S. Highway 12 south of the airport. Most of the Heavy Industrial land, located north of town near the WSP, is active farmland (City of Walla Walla 2018). The City's municipal code (Walla Walla Municipal Code [WWMC] 20.50.070) defines the heavy industrial zone as an area for industrial uses that may create a greater degree of hazard or nuisance to surrounding areas. Residential uses and certain commercial uses, which might hinder the development of these industrial uses, are not permitted within the heavy industrial district.

7.4 Program Goals and Objectives

The primary goal of the MRW plan for Walla Walla County is to protect natural resources and public health by eliminating the discharge of MRW into solid waste systems, wastewater treatment systems, and into the environment through indiscriminate disposal. The MRW program also ensures compliance with state and local solid and MRW regulations. The supplemental goals addressed by the MRW program are listed below:[17]

- Manage MRW in a manner that promotes, in order of priority: waste reduction; recycling; physical, chemical, and biological treatment; incineration; solidification and stabilization; and landfilling.
- Increase public awareness of available alternatives and the importance of proper disposal of MRWs.
- Improve opportunities for the safe disposal of MRW by citizens and businesses within the County.
- Improve disposal options available to farmers and ranchers for small quantities of agricultural chemical waste.
- Reduce health risks for workers coming in contact with MRW that may be disposed of in the solid waste stream or in wastewater treatment systems.
- Coordinate MRW management programs with existing and planned systems for waste reduction, recycling, and other programs for solid waste management.
- Encourage cooperation and coordination among all levels of government, citizens, and the private sector in managing MRW.

[17] Source: 1991 Walla Walla and Columbia Counties MRW Plan

- Emphasize local responsibility for solving problems associated with MRW, rather than relying on the state or federal government to provide solutions.
- Comply with the requirements of the HWMA (RCW 70.105) directing each local government to prepare a local hazardous waste management plan.

The County's and cities' overall vision is to reduce the generation of MRW and to eliminate its improper disposal. Through education and outreach, the County envisions a change in behavior and habits that will accomplish these goals and objectives.

7.5 Potential Program Services

The County and cities will consider a number of options for MRW public education, collection, and business technical assistance. These options are described below.

7.5.1 Public Education

The existing MRW educational outreach efforts will be continued, which include the following:

- Classroom presentations on HHW
- Information booths at community events
- Recycling hotline
- Agency newsletters
- Newspaper articles
- Website postings

Existing educational outreach materials should be made available to the community in public buildings such as libraries, post offices, and government facilities. Continuous reminders and dissemination of information will help make resources accessible to the community. Outreach efforts can also be expanded to include social media. For example, announcements of events and resources can be posted on County and/or City Facebook pages, X (formerly known as Twitter), and LinkedIn pages. Expanding the outreach efforts will help ensure that the information is disseminated to a wider audience within the community.

Partnerships with existing nonprofit organizations (i.e., SLC and Walla Walla Area Resource Conservation Committee) could expand educational outreach opportunities. MRW resources are available from Ecology and the Washington Toxics Coalition to distribute information to residents and businesses.

Cost

The cost of this option is included with overall public outreach and education efforts.

7.5.2 School Curriculum

Expanding HHW outreach in K-12 classrooms would provide students with information on how to identify HHW and how to reduce and safely dispose of materials. The educational outreach format could include classroom presentations, assignments, and science projects. The goal of educational outreach in schools will be to emphasize the reduction and proper disposal of common HHW products. School resources on HHW are available from Ecology and the Washington Toxics Coalition.

Cost

The cost of this option is included with overall public outreach and education efforts.

7.5.3 Business Technical Assistance

The $mart Business Partner Program, as operated by the local nonprofit SLC would continue to provide MRW educational outreach and recognition of businesses that make an effort to reduce the amount of MRW generated. The City of College Place would continue to provide technical assistance to businesses and organizations through Ecology's PPA program.

Walla Walla County and cities or nonprofit organizations in the County that are not participating in the program could apply to Ecology's PPA or other grant-funded programs to expand the reach of technical assistance to businesses and organizations that qualify as SQGs. Participation in the program will reduce pollution, including spill prevention; explain regulations; and help locate recycling or disposal sources for hazardous waste generated by SQGs. Businesses that could benefit from the program include automotive and repair shops, construction contractors, gas stations, automobile dealers, landscaping businesses, and restaurants. Ecology is particularly interested in expanding their partnership to communities east of the Cascades.

Cost

Estimated cost of $10,000 to $20,000 depending upon the number of site visits and level of involvement. Participation would be dependent upon receiving grant funding or technical assistance for outreach, with a typical local match of 25 percent.

7.5.4 Small Business Collection Opportunities

The City of Walla Walla is considering developing an area at the SRL HHW facility to handle hazardous materials from SQGs. This would provide a dedicated location for SQGs to bring MRW for proper handling and disposal. Prior to development of this resource, the City could work with a hazardous waste collection contractor to establish a system whereby businesses are provided with the opportunity to properly dispose of their materials at periodic events hosted by the licensed contractor. The businesses would be required to make an appointment directly with the contractor and bring their materials at the appointed time. The businesses would pay all disposal charges to the contractor at the time they leave their waste, and they would receive a disposal record to show that they are properly managing their hazardous waste. The City would provide information about the event and provide the contact information for the collector.

Cost

Estimated cost of $10,000 to $20,000.

7.5.5 Household Hazardous Waste Collection Events and Locations

Expanding the number of HHW collection events throughout the County would provide residents with more opportunities to properly dispose of HHW. Another option would be to increase the number of collection locations throughout the County, including at businesses that sell hazardous materials or generate MRW (e.g., office supply stores, hardware stores.) and government facilities. Materials collected at these locations can include CFLs, batteries, and medical sharps. The number and frequency of such events will depend on the availability of funding.

Cost

Estimated cost of $5,000 per event.

7.6 Process for Updating Implementation Plan

The SWAC will review the plan on a regular basis to identify any necessary changes to the goals, objectives, and implementation plan. Changes may be deemed necessary due to changes in state law, conditions in the County, budgets, and/or other issues. If changes are identified, the County and SWAC will work together to develop the changes for review and approval by the County and local jurisdictions.

7.7 Recommended Implementation Plan

The following constitutes the Implementation Plan for the Walla Walla County MRW Plan.

7.7.1 Public Education (high priority)

- Continue the existing education and outreach programs. The information will continue to be made available through a variety of methods and venues, including social media and partnerships with other organizations.

7.7.2 School Curriculum (low priority)

- Expand outreach in the K-12 classrooms including presentations, assignments, and projects.

7.7.3 Business Technical Assistance (low priority)

- Continue to use the $mart Business Program to provide education and outreach, technical assistance, and recognition of businesses on reducing the generation of MRW.
- Expand participation in Ecology's PPA program to provide technical assistance to businesses and organizations that qualify as SQGs by others.

7.7.4 Small Business Collection Opportunities (low priority)

- Consider developing an area at the landfill for SQG hazardous materials collection. This would include working with a contractor to establish a collection system for businesses.

7.7.5 Household Hazardous Waste Collection Events and Locations (low priority)

- Work towards expanding the number of collection events or locations, depending on the availability of funding.

7.8 Annual Budget

The County's budget for the Implementation Plan is included in Table 7-3. Actual budgets and staff needed to carry out the Implementation Plan will vary from year to year as specific programs are defined and will depend upon availability of grant funding and the budget approved by participating local governments. As shown in Table 5-3 and included in the recommendation to implement the SRL FMP, the City of Walla Walla has proposed two alternatives for improvements to the existing MRW building at the SRL. Alternative 1, which is not the preferred alternative, would replace the

existing structure. Alternative 2 would rehabilitate and expand the existing structure at a lower cost. Although only one alternative would be constructed, Table 7-3 provides both alternatives, including the schedule for implementation.

Table 7-3. Moderate Risk Waste Plan Implementation Budget and Schedule

Activity	Projected Costs	Funding Mechanism (Tip Fees/Grants/Others)	Implementation Year
Public Education	$25,000	Grants, Tip Fee	2022–2027
Business Technical Assistance (Pollution Prevention Assistance Program)	$125,000	Interagency Agreement (Ecology)	2023
Collection Events (4 x Year)	$20,000	Grants, Tip Fee, Jurisdictional Sponsorship	2022–2027
Small Business Small Quantity Generator Collection at the Sudbury Road Landfill	$20,000	Grants, Tip Fee	2027
Household Hazardous Waste Facility Operation & Maintenance	$277,000	Grants, Tip Fee	2024
Existing Moderate Risk Waste (MRW) Building Rehabilitation and Expansion	$2.5 to 3 million	Tip Fee, Grants, Loans, Bond Sales	2025
Replace Existing MRW Building	$5.88 million	Tip Fee, Grants, Loans, Bond Sales	2025

Sources: FCS Group 2018, Parametrix 2023a

8. Administration and Enforcement

This chapter describes the entities that are responsible for implementing and enforcing solid waste policies, programs, and facilities in Walla Walla County.

8.1 Administration

The Washington State Solid Waste Management Act, RCW 70A.205, assigns local government with the primary responsibility of managing solid waste. Administrative responsibility for solid waste management in Walla Walla County is divided among several agencies and jurisdictions. This section describes the administrative structure for solid waste management planning and permitting in Walla Walla County.

8.1.1 Solid Waste Advisory Committee

Washington State requires that counties establish a SWAC to assist in the development of programs and policies concerning solid waste handling and disposal (RCW 70A.205). The Walla Walla County SWAC is an advisory board to the Board of Walla Walla County Commissioners and makes recommendations to the Commissioners on matters relative to the development of solid waste handling programs and policies. One of its main functions is to provide a forum within the community for the expression of opinions regarding solid waste handling and disposal plans, ordinances, resolutions, and programs prior to their adoption. SWAC members represent citizens, public interest groups, business, the waste management industry, and local government. The SWAC has a role in developing and updating Walla Walla County's Comprehensive SWMP. The SWAC should receive progress reports on the implementation of the 2024 Plan and should be asked to review and recommend any necessary adjustments or revisions to planned activities.

8.1.2 Incorporated Cities

RCW 35.21.152 allows cities to develop, own, and operate solid waste handling systems and to provide for solid waste collection services within their jurisdictions. There are four incorporated cities in Walla Walla County: College Place, Prescott, Walla Walla, and Waitsburg. Only the City of Walla Walla operates its own refuse collection system; the other three contract with a hauler for refuse collection and disposal.

8.1.3 Walla Walla County Department of Community Health

The Department of Community Health's responsibilities extend to the following areas for solid waste management:

Solid Waste Facilities: The Department of Community Health issues operating permits for waste handling facilities, including landfills, transfer stations, and recycling facilities. It responds to complaints regarding these facilities.

Special Wastes: The Department of Community Health issues permits for demolition and inert waste landfills and facilities for managing street wastes (decant facilities).

The specific permit requirements for solid waste disposal facilities are defined in WAC 173-351 and WAC 173-350. The Department of Community Health's responsibilities for processing and evaluating these permits are defined in RCW 70A.205.125. These state regulations require jurisdictional health departments to evaluate solid waste permit applications for their compliance with all existing laws and regulations and their conformance with the SWMP and all zoning requirements. Ecology's review and appeal process for a permit issued by the Health Department is explained in RCW 70A.205.130.

8.1.4 Washington State Department of Ecology

Ecology has the primary authority for solid waste at the state level. Ecology assists local governments in the planning process by reviewing, providing comments, and approving preliminary and final drafts of solid waste management plans. This review is conducted to ensure that local plans conform to applicable state laws and regulations. In its Guidelines for the Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions, Ecology offers recommendations on the preparation of SWMPs.

Regarding facilities, Ecology makes recommendations and comments on reviews of solid waste handling and disposal permits to ensure that the proposed site or facility conforms with applicable laws and regulations. Ecology also reviews and issues the statewide general permit for biosolids management.

8.1.5 Washington Utilities and Transportation Commission

The WUTC regulates solid waste collection activities under RCW 81.77, through the issuance of certificates entitling private companies to provide solid waste collection services within specified geographic areas of the state. RCW 70A.205.065 also grants the WUTC the authority to review solid waste management plans to assess solid waste collection cost impacts on rates charged by collection companies regulated under RCW 81.77 and to advise the County and Ecology of the probable effects of the Plan's recommendations on those rates.

The WUTC has a 45-day review period of the County's Comprehensive Solid Waste and Moderate Risk Waste Management Plan during the approval process.

8.1.6 Washington Department of Agriculture

The Washington Department of Agriculture has oversight of solid waste management plans to ensure compliance with RCW 17.24 as related to insect pests and plant diseases. In particular, the apple maggot quarantine was amended in 2016 to include MSW, yard debris, organic feedstock, organic materials, and agricultural wastes to the list of commodities regulated under the apple maggot quarantine (WAC 16-470-101). These regulated commodities are prohibited from moving from the quarantine area into pest-free areas without a special permit. Walla Walla County and all adjacent counties in Washington State are in a pest-free, non-quarantine area. Lincoln and Yakima Counties are the closest counties in quarantine.

The Department of Agriculture also has a 45-day review period of the County's Comprehensive Solid Waste and Moderate Risk Waste Management Plan during the approval process. This review period is used to ensure compliance with the apple maggot quarantine.

8.2 Enforcement

Numerous different entities are responsible for enforcing solid waste management regulations and requirements within Walla Walla County: the Walla Walla County Department of Community Health, the Walla Walla County Community Development Department, Ecology, the WUTC, and the incorporated cities.

Cities and counties have the authority to establish solid waste programs, pass ordinances, and provide resources to monitor compliance and take corrective action where necessary. For instance, within the City of Walla Walla, the Public Works Department is responsible for enforcing compliance with refuse collection regulations. The department monitors compliance of daily operations at the landfill. Cities

and counties are also responsible for enforcing local ordinances covering zoning, land use, illegal dumping, and littering. The enforcement responsibilities of these entities are discussed below.

8.2.1 Walla Walla County Community Development Department

The Walla Walla County Community Development Department provides land use planning, building, permitting, and code compliance services for Walla Walla County. The department is responsible for enforcement of County codes regarding solid waste management. Solid waste policies are included in WWCC, Chapter 8.08, Solid Waste Handling and Facilities. Pursuant to the code, the criteria for MSW landfills, WAC 173-351, the solid waste handling standards, WAC 173-350 and the minimum functional standards for solid waste handling, WAC 173-304, are adopted by reference as the solid waste handling code of Walla Walla County.

WWCC 8.24.010, Debris and Excess Vegetation, prohibits the accumulation of debris and excess vegetation. It establishes civil infraction penalties, with the ability to issue notices of civil infraction given to the Walla Walla County sheriff, the public health department, the County, or the Walla Walla County prosecuting attorney.

Walla Walla County and the City of Walla Walla signed an interlocal agreement in October 2011 regarding prevention, removal, and abatement of nuisances in the Walla Walla UGA. The purpose of the agreement is to prevent, remove, and abate nuisances in the UGA, and to recover costs expended by the public for any prevention, removal, and abatement activities.

8.2.2 City of Walla Walla

WWMC Section 8.20, Garbage Collection and Disposal, establishes administration and enforcement authority for the City of Walla Walla. WWMC 8.20.040 establishes authority for the regulation of solid waste handling in the City, including the days of collection of solid waste, location of waste containers, and any other regulations pertaining to the collection and disposal of waste, subject to the approval of the City manager or as delegated by the City manager. According to WWMC 8.05, junk and litter are a nuisance, and the existence of the materials on property stored in a manner that is harmful to the surrounding neighborhood, could be considered a fire, safety, health, or sanitary issue subject to enforcement. WWMC 8.20.230 addresses abatement of nuisances, and gives the City manager, or a designee, the authority to order the abatement or removal of any nuisance detrimental to the public health, and, if such nuisance is not properly abated or removed, to cause its removal or abatement at the expense of the owner of the property on which the nuisance is maintained.

WWMC 9.13.020 asserts that it is unlawful to litter. Someone who willfully engages in this activity may be subject to a misdemeanor.

8.2.3 Walla Walla County Department of Community Health

The County Department of Community Health issues and renews permits and makes periodic inspections of solid waste handling facilities. Inspections ensure that these facilities do not create public health problems, nuisances, or environmental contamination. When a complaint is received, the department will call the facility and talk to the operator to see if the problem can be corrected over the phone. If the issue has to be addressed through a site visit, a department representative will contact the operator and arrange for a meeting at the site to address the issue.

8.2.4 Washington State Department of Ecology

Although primary enforcement for solid waste management is through jurisdictional health departments, Ecology has a range of enforcement authorities under various statutes to address existing or potential sources of pollution, including those that result from improper solid waste handling and management. For instance, Ecology has broad authority to take enforcement actions under the State Water Pollution Control Act, the HWMA, Model Toxics Control Act, and the Waste Reduction, Recycling, and Model Litter Control Act (WRRLA). Collectively, these laws allow Ecology to issue orders and impose penalties for noncompliance. Under some circumstances, Ecology may also take direct action to remedy threats to public health and the environment and can seek to recover costs from potentially liable parties.

In some instances, Ecology may assume the duties and responsibilities of jurisdictional health departments. RCW 70A.205.105 authorizes local health departments to enter into an agreement with Ecology to assume some, or all, of their solid waste regulatory responsibilities and authorities, such as biosolids and septage permitting and enforcement. The WRRLA, as codified in RCW 70A.200, allows for the funding of eligible programs at the local level for costs related to waste reduction, litter cleanup and prevention, and recycling activities. Through an application process, Ecology evaluates funding requests according to specific criteria outlined in RCW 70A.200.170; essentially providing funds according to the efficiency and effectiveness of local programs.

8.2.5 Washington Utilities and Transportation Commission

The WUTC regulates the collection of solid waste in unincorporated areas of the County. The WUTC's enforcement mechanisms include fines and revocation of the right of private collectors to collect solid waste. The WUTC also takes enforcement actions against companies that illegally collect solid waste without a certificate.

8.3 Solid Waste System Financing

The County's solid waste system is funded almost entirely through tipping fees at the SRL. As described in Chapter 4, Collection Services, and Chapter 5, Solid Waste Facilities, the City of Walla Walla contracted for the completion of a rate study in 2018 for the landfill and sanitation utilities to identify revenues that would fund ongoing obligations and expenses through 2023. As detailed in the 2018 Cost of Service Analysis and Financial Plan (2018–2023), solid waste tipping fees are used for essentially all solid-waste-related expenses, including landfill disposal, construction debt service, post-closure fund contributions, recycling, MRW, public education, and administration. Ecology grants are used for planning, recycling, and other programs, with the City's match obtained from disposal tipping fees.

The LSWFA Program provides financial assistance to local governments to help them properly manage solid waste, improve recycling, enforce solid waste laws, and safely manage HHW. The approved proposed 2023–2025 budget sets the LSWFA funding level at $24 million, which shows a $14 million increase from the previous funding cycle. Based on population, Walla Walla County was allocated approximately $285,000 for solid waste planning and implementation and $115,000 for solid waste enforcement, totaling approximately $400,000 in financial assistance. The use of the solid waste planning and implementation funding requires that the project being implemented is identified in the local solid and hazardous waste management plan.

Other potential sources of funding could be leveraged through state funds generated through the Solid Waste Collection Tax and the Litter Tax.

The solid waste collection tax is a consumer tax remitted to the Washington State Department of Revenue on the collection, transfer, storage, or disposal of solid waste. The current tax rate is 3.6 percent. These funds are earmarked to provide financial assistance to local governments for "repair and maintenance" of public works projects.

The Waste Reduction, Recycling and Litter Control Act ("litter tax") is a tax collected from manufacturers, wholesalers, and retailers of certain products sold in the state (e.g., groceries and soft drinks), which contribute to the litter problem in the state. The current tax rate is 0.15 percent. The funding is used by Ecology for litter control and public education and awareness programs relating to litter control and recycling.

The E-Cycle Washington and the Paint Stewardship programs are other mechanisms used within the state to offset the cost of managing electronics and latex paint. Although these materials are still managed at the SRL, the increased availability of collection by others is expected to lessen the burden of local governments managing these waste streams over the long term.

Known capital funding needs as well as funding mechanisms are provided in Chapter 9. The specific small capital improvement priorities are reevaluated yearly during the City of Walla Walla's budget process and are implemented as funding allows. Longer range projects, such as obtaining additional disposal capacity, are funded through a combination of loans, reserves, grants, and tipping fee revenues.

8.4 Options

The following options address potential administration and enforcement of solid waste issues in Walla Walla County.

8.4.1 Evaluate Existing Interlocal Agreement for Coordination of Programming and Planning and Revise as Necessary

Description

The Interlocal Agreement with Walla Walla County, dated May 24, 2021, authorizes the City of Walla Walla to continue coordination of regional pollution prevention and waste prevention programs and to act on the County's behalf to update and implement the Walla Walla County SWMP. Furthermore, the SWMP has been developed with the City as the lead agency, and participation and cooperation are defined in the interlocal agreement among the County and the Cities of College Place, Prescott, and Waitsburg. Responsibilities for implementing the SWMP reside primarily with the City, with other local agencies participating in programs specific to their jurisdiction.

The cities and the County should periodically evaluate the existing agreement to ensure that it meets the needs of the existing and future solid waste system in the County. Each jurisdiction has to recognize the importance of carrying out all tasks in a manner that ensures efficient use of resources (by avoiding duplication of effort), avoids gaps in program activities, and avoids conflicts or inconsistencies. This can be accomplished by holding regular coordination meetings, sharing informational materials, and briefing the SWAC. Participating jurisdictions should track progress as they implement each recommendation contained in the 2024 Plan to determine the effectiveness of each of its elements and the need for adjustments or revisions. As programs are implemented, participating agencies should also solicit comments and suggestions from citizens and participating businesses, regarding the programs' adequacy and effectiveness. The SWAC should receive progress reports on the implementation of the 2024 Plan. The SWAC should be asked to review and recommend any necessary adjustments or revisions to planned activities.

Costs

The cost to implement this option is minimal outside of standard administrative costs.

8.4.2 Coordinate Enforcement Activities to Attain Maximum Impact without Duplication

Description

Complex environmental issues, increased emphasis on clean recycling and waste reduction programs, more complicated operational requirements at sanitary landfills, and the need to coordinate all aspects of the solid waste system, including hazardous waste, have drawn attention to enforcement. Jurisdictions must take the time and effort, not only to understand the laws, but also to examine their organizations and staffing levels to adequately address the requirements of the laws.

Costs

The cost to implement this option is minimal.

8.4.3 Improve Agency Coordination for Illegal Dumping Cleanup, Education, and Prevention Programs

Description

Several Washington communities have addressed illegal dumping concerns by convening a task force to evaluate the roles of the County, the Cities, and other relevant public agencies responsible for illegal dumping cleanup, education, and prevention programs. Such an effort can lead to better coordination, reduced overlap of responsibilities, and reduced gaps in coverage. This can also lead to uniform enforcement capabilities and quicker response to halt illegal activities.

Costs

The cost to implement this option is minimal.

8.5 Recommendations

The SWAC has reviewed the options for administration and enforcement and recommends the following for implementation:

8.5.1 Evaluate Existing Programming and Planning (high priority)

- SWAC members should maintain an open dialog regarding solid waste issues and challenges to ensure effective provision and management of solid waste programs and activities and amend or update agreements as needed.

8.5.2 Coordinate Enforcement Activities to Attain Maximum Impact Without Duplication (not prioritized)

- Each agency will continue to address code enforcement in their respective jurisdictions.

9. Financing and Implementation

The purpose of this chapter is to outline the actions and budget necessary to implement the recommendations contained in this 2024 Plan.

9.1 Implementation Schedule

The implementation of the recommendations contained in this 2024 Plan will begin upon its approval by the jurisdictions and Ecology. The schedule for implementation is included as Table 9-1. As indicated, for some recommendations, the programs have been or will be implemented within the first planning year; for other recommendations, implementation will span many years.

Table 9-1. Recommendation Implementation Schedule

Chapter		Recommendation	Implementation Year(s)
Chapter 3: Education and Outreach, Waste Reduction, Recycling	3.7.1	**Education and Outreach (high priority)**	
	a.	Continue to expand outreach methods to promote waste reduction, reuse, composting, and recycling on the City of Walla Walla website and online social media.	Ongoing
	b.	Improve messaging for opportunities to reduce, reuse, compost, and recycle on other local jurisdiction's websites.	2025–2026
	c.	Continue to host community events or discussion forums and coordinate with other community events.	Ongoing
	d.	Continue to implement the Contamination Reduction and Outreach Plan.	Ongoing
	e.	Promote existing opportunities for residents and businesses to reduce, reuse, and recycle priority recyclables, as well as other materials, through opportunities such as Builders ReSupply Store (BRS) and other nonprofit organizations (e.g., thrift stores).	Ongoing
	3.7.2	**Backyard Composting (low priority)** – Continue to support and encourage backyard composting through educational materials and social media.	Ongoing
	3.7.3	**Support Extended Producer Responsibility (EPR) (high priority)**	
	a.	Solid Waste Advisory Committee (SWAC) review and provide recommendations on EPR State Legislation.	2025–2029
	b.	Support EPR to encourage a full life-cycle approach with an emphasis on the manufacturer's responsibility for ensuring the product is recyclable and recycled.	2025–2029
	3.7.4	**Promote Multifamily Recycling (low priority)**	
	a.	Provide technical assistance to property owners and managers.	Ongoing
	b.	Provide education and outreach.	2025–2029
	c.	City of Walla Walla will continue to require multifamily recycling for up to 10 units at a location.	Ongoing
	d.	Consider changing the building code to require multifamily and businesses to provide space for recycling and garbage.	2026–2027
	3.7.5	**Develop an Award and Recognition Program (low priority) –** Promote award and recognition programs provided by local nonprofits that recognize businesses that implement sustainable practices.	2026–2029

Table 9-1. Recommendation Implementation Schedule (continued)

Chapter		Recommendation	Implementation Year(s)
	3.7.6	**Expand Recycling Opportunities (high priority)** – Evaluate feasibility of expanding materials collected, facility expansion, and education and outreach.	Ongoing
	3.7.7	**Consider Variable Can Rate (low priority)** – Consider incentivizing recycling by establishing a variable can rate structure that rewards residents for waste reduction and recycling. This policy option could be reviewed and discussed by each jurisdiction whenever rate structures are evaluated. The City of Walla Walla, for example, typically reviews policy initiatives on a 5-6-year interval as part of the financial planning/cost of service process for sanitation, yard waste, and recycling.	2024–2029
	3.7.8	**Provide On-Site Business Waste Audits and Technical Assistance (low priority)** – Explore options to support commercial recycling through/with local waste haulers.	2026–2027
Chapter 4: Collection Services	4.5.1	**Curbside Recycling in Urban Growth Areas (low priority)** – Consider offering recycling services in the cities and the Urban Growth Areas (UGAs) that do not have this service. This would involve working with haulers to establish a new minimum service level.	2026–2027
	4.5.2	**Expand Curbside Organics Collection in Urban Growth Areas (low priority)**	
	a.	Consider providing curbside yard waste collection for residents in the cities and the UGAs that do not have this service. This would involve working with haulers to establish a new minimum service level.	2027–2029
	b.	Implement a food waste collection pilot program in the City of Walla Walla if/when food waste processing is available.	To be determined
	c.	Consider bundling yard waste service with other waste collection services, possibly incentivizing subscriptions for yard waste collection.	2026–2029
	4.5.3	**Mixed Paper and Cardboard Collection (low priority)** – Consider establishing a program for mixed paper and cardboard from large commercial generators.	2026–2027
	4.5.4	**Organics Collection for Large Commercial Generators (low priority)** – Consider implementing a food waste composting pilot that would involve commercial or institutional entities.	2028–2029
Chapter 5: Solid Waste Facilities	5.5.1	**Use of Sudbury Road Landfill for Out-of-County Waste (low priority)** – Consider increased import of out of County waste. Consider a Market Wasteshed Radius Study to understand the feasibility of being competitive with regional markets.	2025–2026
	5.5.2	**Sudbury Road Landfill Facility Master Plan (high priority)** – Implement the 2023 Facility Master Plan.	2024–2029
	5.5.3	**Sudbury Road Landfill Financial Stability (high priority)** –The City of Walla Walla adopted/implemented the 2018 Cost of Service Analysis and Financial Plan (2018–2023). Update the Cost of Service Analysis and Financial Plan in 2024.	2024
	5.5.4	**Expand Organics Processing to Include Additional Materials (low priority)** – Evaluate expanding the existing composting operations to include additional materials, with consideration toward the expansion being economical relative to other disposal options.	2024–2025
	5.5.5	**Improve the Marketability of the Sudbury Compost Facility's Finished Product (low priority)** – Substantial progress has occurred with regard to compost sales following implementation of the 2018 Cost of Service Analysis and Financial Plan (2018–2023) with demand	Ongoing

Chapter		Recommendation	Implementation Year(s)
		currently exceeding production. Continue monitoring production vs. demand.	
Chapter 6: Miscellaneous Waste	6.3.1	**Agricultural Waste (low priority)** – County will support others regarding the feasibility of developing a facility for the production of biofuels, biopower, or bioproducts, and work with local entities to further discussions and development of such facilities.	Ongoing
	6.3.2	**Asbestos Waste (high priority)** – Provide education to homeowners on the proper handling and disposal of asbestos waste as a component of building permits.	2025–2026
	6.3.3	**Construction and Demolition – Feasibility Study (high priority) –** Study the feasibility of developing a C&D drop-off site for sorting and processing wood, metals, and other salvageable materials, with consideration toward the service being economical relative to other disposal options.	2026–2028
	6.3.4	**Construction and Demolition – Inert Waste Disposal (low priority)** – Design and construct an inert waste receiving, processing, and disposal area at Sudbury Road Landfill.	2027–2030
	6.3.5	**Construction and Demolition – County Support to Existing Programs (low priority) –** Continue to expand and support the BRS and other opportunities for reuse and recycling of C&D materials.	Ongoing
	6.3.6	**Construction and Demolition – Contractor Education (low priority) –** Provide education to contractors.	2027–2029
	6.3.7	**Develop a Disaster Debris Management Plan (high priority) –** Consider developing a County-wide disaster debris management plan.	2026–2027
	6.3.8	**Biomedical Waste – Education and Outreach (low priority)** – Provide education and outreach to residents on the correct management of medical waste.	2024–2026
	6.3.9	**Tire Management Funding (low priority)** – Continue to pursue state grants, if available, to assist in tire pile cleanup.	Ongoing
	6.3.10	**Monitor and Evaluate E-Waste Program (low priority) –** Complete the satisfaction report to monitor the effectiveness of the existing E-Cycle program.	Ongoing
	6.3.11	**E-Waste Education(high priority) –** Continue to educate consumers on the E-Cycle program.	Ongoing
Chapter 7: Moderate Risk Waste	7.7.1	**Moderate Risk Waste (MRW): Public Education (high priority) –** Continue the existing education and outreach programs. The information will continue to be made available through a variety of methods and venues, including social media and partnerships with other organizations.	Ongoing
	7.7.2	**MRW: School Curriculum (low priority) –** Expand outreach in the K-12 classrooms including presentations, assignments, and projects.	2026–2027
	7.7.3	**MRW: Business Technical Assistance (low priority)**	
	a.	Continue to use the $mart Business Program to provide education and outreach, technical assistance, and recognition of businesses on reducing the generation of MRW.	Ongoing
	b.	Expand participation in the Washington State Department of Ecology pollution prevention assistance program to provide technical assistance to businesses and organizations that qualify as small quantity generators (SQGs).	2025–2026
	7.7.4	**Small Business Collection Opportunities (low priority)** – Consider developing an area at the landfill for SQG hazardous materials	2024

Table 9-1. Recommendation Implementation Schedule (continued)

Chapter		Recommendation	Implementation Year(s)
		collection. This would include working with a contractor to establish a collection system for businesses.	
	7.7.5	**Household Hazardous Waste Collection Events and Locations (low priority) –** Work towards expanding the number of collection events or locations, depending on the availability of funding.	2026–2027
Chapter 8: Administration and Enforcement	8.5.1	**Evaluate Existing Interlocal Agreement for Coordination of Programming and Planning (high priority) –** SWAC members should maintain an open dialog regarding solid waste issues and challenges to ensure effective provision and management of solid waste programs and activities. Amend or update agreements as needed.	Ongoing
	8.5.2	**Coordinate Enforcement Activities to Attain Maximum Impact Without Duplication (N/A) –** Each agency will continue to address code enforcement in their respective jurisdictions.	Ongoing

9.2 Six-Year Capital and Operating Financing

The RCW 70A.205.075 requires the solid waste management plan to contain a six-year construction and capital acquisition program for public solid waste handling facilities, including development and construction or purchase of publicly financed solid waste management facilities. The legislation further requires plans to contain a means for financing both capital costs and operations expenditures of the proposed solid waste management system. Any recommendation for the development, construction, and/or purchase of public solid waste management and recycling facilities or equipment should be included in this discussion. Financing operation expenditures should also be added to this section of the plan.

Capital expenses over the next 6 years and beyond are summarized in Table 9-2. Actual budgets to carry out the recommendations will vary from year to year. Based on the 2023 SRL FMP, the implementation schedule in Table 9-2 assumes that funding for the capital investments will come from four primary sources, including Washington State public works trust fund loans; state and federal grants; the capital improvement fee component of customer tipping fees; and bond sales. The schedule assumes an average annual capital improvements investment of between $1.5 million and $2 million (2023 estimate) over the 20-year period 2023 through 2042, or between $30 million and $40 million (2023 estimate). The largest component of the investments over this period will be directed to landfill core and supporting elements (Parametrix 2023a).

The implementation schedule for the discretionary investments could be stretched out over a longer period, if necessary, to match the available capital and reflect the City's willingness to take on long-term debt. Stretching out the implementation period for the discretionary investments would also lower the workload of the staff responsible for managing the implementation processes. The overall cost of implementation stretched over a longer period would result in higher total cost because of construction cost inflation, which generally has run several percentage points higher than the general inflation level (Parametrix 2023a).

Table 9-2 does not include the cost of the City of Walla Walla administration of the proposed capital improvements, nor does it include the costs related to the City's landfill operations and maintenance. The Cost of Service Analysis and Financial Plan that is scheduled for completion in 2024 will provide greater definition to the strategy for funding the proposed capital investments, including administration and operations.

Table 9-2. Capital Improvement Expenses and Implementation Schedule

Facility Improvement	Approximate Implementation Duration (months)	Implementation Commencement Year	Capital Budget (2023 $)
Landfill Core And Supporting Element Investments (Non-Optional)			
Self-Haul Waste Drop Off Area Replacement	22	2024	$4.23 million
Design/Connect Existing Leachate Cleanout Locations to Existing Gas Header	24	2024	$0.06 million
Compost Facility Improvements Alternative 1	30	2024	$3.84 million
Existing Moderate Risk Waste (MRW) Building Rehabilitation and Expansion Alternative 2 (7,500 square feet [Sf])	36	2025	$2.5 to $3 million
Maintenance Building Replacement	36	2026	$5.37 million
Permit for Area 7, Cell 4	36	2026	$0.08 million
Compliance Monitoring System	24	2028	$1.44 million
Design/Install New 300–800 cubic feet per minute Landfill Gas Flare Facility	30	2028	$1.94 million
Design/Install Landfill Gas Extraction System in Area 7 and Connect to Existing Header, Horizontal/Vertical.	28	2028/2030	$0.62 million
Design and Development of Area 8, Cell 1	36	2028	$5.39 million
Design and Final Closure of Area 7	30	2029	$3.62 million
Design/Install Passive Biofilter for Areas 1 and 2	16	2030	$0.04 million
Design/Install Landfill Gas Extraction System In Area 8, Cell 1	18	2041	$0.63 million
Scale Plaza Improvements	36	Not likely to occur before 2073	$0.60 million
ALTERNATIVES TO PROPOSED CAPITAL PROJECTS			
Compost Facility Improvements Alternative 2 (First Phase, 60% of Full-Buildout, 15 Acres)	30	2024	$17.42 (10.45) million
MRW Building Replacement Alternative 1 (7,400 Sf)	40	2025	$5.88 million
OTHER SOLID WASTE PROGRAM INVESTMENTS (DISCRETIONARY)			
Drop Off Recycling Area Improvements	20	2027	$0.29 million
Recycled Glass Processing Area	20	2029	$0.37 million
Design/Construct Inert Waste Receiving, Processing and Disposal Area	36	2030	$0.61 million

Source: Parametrix 2023a.

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Appendix A

Interlocal Agreements

INTERLOCAL AGREEMENT

This agreement is executed by and between Walla Walla County ("County") and the Cities of College Place, Walla Walla, Prescott and Waitsburg, (Cities) (hereinafter jointly referred to as "the parties") for the purpose of establishing an integrated and coordinated solid waste management program for Walla Walla County; fulfilling the Cities and County's obligations under Chapter 70A.205 RCW, and other state and federal laws and regulations governing solid waste management; and contributing to the health and safety of all Walla Walla County residents. The parties make and enter into this Interlocal Agreement ("Agreement") effective the 23rd day of June, 2021, for the purposes and under terms contained herein.

1. Definitions

For the purposes of this Agreement and any related agreements, contracts, and documents executed, adopted, or approved pursuant to the Agreement, the parties shall use the definitions found in RCW 70A.205.015 and WAC 173-304-100, unless the context indicates otherwise.

2. Recital and Purpose

WHEREAS, Walla Walla County and each municipality within Walla Walla County are authorized and directed to prepare a Comprehensive Solid Waste Management Plan ("the Plan"), and are further authorized to enter into an Interlocal Agreement pursuant to Chapter 39.34 RCW for the administration and management of said Plan; and

WHEREAS 70.95 RCW has been recodified as 70A.205 RCW.

WHEREAS, RCW 70A.205.040(3)(b) allows cities to, "[E]nter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management;" and

WHEREAS, City of Walla Walla is in the process of updating the Walla Walla County Comprehensive Solid and Moderate Risk Waste Management Plan, which includes recycling and waste management elements for the County and the cities therein; and

WHEREAS, programs of solid waste reduction and recycling can be most effective when carried out as defined in a coordinated Plan; and

WHEREAS, the City of Walla Walla has been authorized by *the Interlocal Agreement for the Continued Coordination of Regional Pollution Prevention and Waste Prevention Programs* dated June 23, 2008, as modified on August 5, 2009, December 14, 2015, and September 23, 2019, to act on the County's behalf to update and implement the Plan; and

WHEREAS, the City of Walla Walla is updating the comprehensive solid and moderate risk waste plan for all of Walla Walla County as part of its responsibilities under the *Interlocal Agreement for the Continued Coordination of Regional Pollution Prevention and Waste Prevention Programs* dated June 23, 2008, as modified on August 5, 2009, December 14, 2015, and September 23, 2019, to ensure compliance with the requirements of RCW 70A.205 which includes periodic review and revision of the Plan; and

WHEREAS, for the duration of this Agreement, the Cities shall participate in preparing a joint city-county plan for solid waste management.

THEREFORE, in consideration of mutual promises and covenants herein, it is hereby agreed that the Cities will operate within the scope of the joint Cities/County planned Comprehensive Solid Waste Plan prepared by the City of Walla Walla.

3. Authorities and Responsibilities

Authority and Responsibility of the County: All references to the County include the City of Walla Walla, acting as the County's fiscal and lead agent under the terms and conditions of the *Interlocal Agreement for the Continued Coordination of Regional Pollution Prevention and Waste Prevention Programs* dated June 23, 2008, as modified on August 5, 2009, December 14, 2015, and September 23, 2019. The County hereby assumes the following authorities and obligations to be exercised on behalf of the Cities, with only such limits as are herein specifically enumerated or provided by law. The County shall:

a. Facilitate the preparation and submit for approval on behalf of each of the Cities and the County the joint Cities/County planned comprehensive solid waste management plan as provided in RCW 70A.205.040 and related provisions of law. Such plan shall include elements related to the Cities in regards to recycling and/or reduction of solid waste and management of the solid waste generated within each of the Cities.

b. Implement and coordinate with each of the Cities elements in the Plan related to reduction and recycling within each of the Cities.

c. Facilitate management of the reduction and recycling program for both the County and the Cities and facilitate maintenance of accounts and records in accordance with the requirements of the Washington State Auditor.

Authority and Responsibility of the Cities: The Cities hereby assume the following authorities and obligations to be exercised with only such limits as are herein specifically enumerated or provided by law. Each of the Cities shall:

a. Continue to administer the municipal solid waste collection program ("collection program") within the municipality's incorporated boundaries and shall work with the County to plan and implement recycling and reduction programs outlined in the Plan.

b. Maintain accounts for collection programs in accordance with the requirements of the Washington State Auditor.

c. As a Plan participant and as required by law, review the Plan at least once every five years following approval of the Plan by the Washington State Department of Ecology.

Mutual Responsibilities of Both the Cities and the County:

a. Should any revisions to the Plan become necessary due to any action anticipated or taken by any Plan participant, the instigating participant will process such amendments through the Solid Waste Advisory Committee (SWAC). Any amending action will require a majority vote by the Plan participants, with any disputes being referred to a third party mediator, one mutually agreed upon by the Plan participants, to resolve any such disputes.

b. Should any additional municipality be added to this agreement, it must be under the same terms and conditions as the original participating municipalities and the new party is required to agree to same in writing.

c. Each Plan participant shall indemnify and hold harmless the other Plan participants in any liability, in connection with this agreement, for any and all injuries to persons or property arising from negligent acts or omissions of any participant's agents or employees.

d. Each Plan participant shall contribute to the cost of updating the Plan based upon a population-derived percentage as outlined in Table 1 below:

Jurisdiction	Population	% of Population
College Place	9,665	15.5%
Prescott	330	0.5%
Waitsburg	1,230	2%
Walla Walla	34,240	55%
Unincorporated	16,735	27%
Total:	**62,200**	**100%**

Based on OFM 2019 Population of Walla Walla County

e. Any municipality may exercise the option to terminate involvement in this Agreement within thirty- (30) days following the 45-day final review period by the Department of Ecology. Should such involvement as a Plan participant be terminated, that municipality shall not be considered a Plan participant and will not be considered as having adopted the Plan and will begin immediately upon termination to begin preparing that municipality's Solid Waste Plan. Such Plan is to be prepared in accordance with all Plan regulations and guidelines for approval by the Department of Ecology.

f. This Agreement shall be effective upon its execution by the Walla Walla Board of County Commissions after execution by all other Participating Municipalities.

g. With the exception of the *Interlocal Agreement for the Continued Coordination of Regional Pollution Prevention and Waste Prevention Programs* dated June 23, 2008, as modified August 5, 2009, December 14, 2015, and September 23, 2019, between the City of Walla Walla and the County, this Agreement replaces and supersedes any previous agreements between the named parties regarding the subject of solid waste plans and shall remain in effect until replaced by any new Interlocal Agreement.

4. Miscellaneous

This Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute one and the same instrument.

Dated this 25th day of June, 2021.

WALLA WALLA COUNTY

By _____
Chair, Board of Commissioners

Attest _____
Clerk of the Board

CITY OF COLLEGE PLACE

By _____
Mayor

Attest _____
City Clerk

CITY OF PRESCOTT

By _____
Mayor

Attest _____
City Clerk

CITY OF WAITSBURG

By _____
Mayor

Attest _____
City Clerk

CITY OF WALLA WALLA

By _____
Nabiel Shawa
City Manager

Attest _____
City Clerk

Approved as to form:

_____
Prosecuting Attorney's Office

_____
College Place City Attorney

_____
Prescott City Attorney

_____
Waitsburg City Attorney

_____
Walla Walla City Attorney

Appendix B

Detailed Waste Composition

Central Waste Generation Area Composition Tables

Table 24: Central WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**20.2%**	**2.2%**	**119,478**	**13,144**
PAPER PACKAGING	**12.0%**	**1.8%**	**71,053**	**10,353**
Newspaper Packaging	0.0%	0.0%	6	10
Cardboard & Kraft Packaging	6.6%	1.3%	39,287	7,774
Mixed/Low-grade Paper Packaging	2.1%	0.4%	12,157	2,472
Aseptic Containers	0.1%	0.0%	467	120
Gable Top Containers	0.6%	0.8%	3,553	4,438
Other Polycoated Packaging	0.2%	0.0%	1,006	253
Compostable Paper Packaging	1.9%	0.4%	11,442	2,602
R/C Paper Packaging	0.5%	0.2%	3,134	902
PAPER PRODUCTS	**8.2%**	**1.3%**	**48,425**	**7,896**
Newspaper Products	0.3%	0.1%	1,522	334
Cardboard & Kraft Paper Products	0.0%	0.0%	29	46
Magazines	0.6%	0.4%	3,693	2,238
High-Grade Paper Products	0.3%	0.1%	1,863	859
Other Groundwood Paper Products	0.1%	0.1%	461	744
Mixed/Low-grade Paper Products	2.7%	0.8%	15,779	4,689
Compostable Paper Products	3.4%	0.5%	19,856	2,829
R/C Paper Products	0.9%	0.4%	5,222	2,462
PLASTIC	**14.8%**	**1.6%**	**87,713**	**9,356**
PLASTIC PACKAGING	**9.0%**	**1.0%**	**52,962**	**5,927**
#1 PETE Plastic Bottles	1.1%	0.2%	6,226	1,000
#1 PETE Plastic Non-bottles	0.5%	0.1%	2,790	399
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	1,783	412
#2 HDPE Plastic Jars and Tubs	0.6%	0.3%	3,435	1,539
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	1,780	359
#3 PVC Plastic Packaging	0.0%	0.0%	8	8
#4 LDPE Plastic Packaging	0.0%	0.0%	8	7
#5 PP Plastic Packaging	0.8%	0.1%	4,518	878
#6 PS Plastic Packaging	0.1%	0.0%	703	204
#7 Other/Unknown Plastic Packaging	0.5%	0.3%	3,157	1,689
Expanded Polystyrene Packaging	0.6%	0.2%	3,450	1,162
PLA Compostable Packaging	0.0%	0.0%	94	59
Plastic Merchandise Bags	0.3%	0.1%	1,966	351
Packaging Film Plastic	3.1%	0.7%	18,344	4,184
Transportation Packaging Film Plastic	0.6%	0.3%	3,671	1,573
Flexible Plastic Packaging	0.1%	0.1%	712	384
R/C Plastic Packaging	0.1%	0.1%	318	385
PLASTIC PRODUCTS	**5.9%**	**1.1%**	**34,751**	**6,523**
#1 PETE Plastic Products	0.0%	0.0%	1	2
#2 HDPE Plastic Products:	0.0%	0.0%	126	204
#3 PVC Plastic Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	4	7
#5 PP Plastic Products	0.0%	0.0%	13	14
#6 PS Plastic Products	0.0%	0.0%	172	69
#7 Other/Unknown Plastic Products	1.1%	0.3%	6,485	1,598
PLA Compostable Products	0.0%	0.0%	61	62
Plastic Garbage Bags	1.2%	0.2%	7,242	1,192
Plastic Non-bag Film Products	0.7%	0.6%	4,021	3,476
Bulky Rigid Plastic Products	2.0%	0.7%	11,951	3,924
R/C Plastic Products	0.8%	0.2%	4,676	1,461
GLASS	**3.8%**	**0.9%**	**22,649**	**5,099**
Clear Glass Containers	1.6%	0.3%	9,484	1,935
Green Glass Containers	0.7%	0.2%	3,849	1,238
Brown/Other Colored Glass Containers	0.8%	0.3%	4,530	1,690
Plate Glass	0.6%	0.7%	3,606	4,162
Non-glass Ceramics	0.1%	0.1%	536	317
R/C Glass	0.1%	0.1%	644	387
METAL	**7.3%**	**1.6%**	**43,048**	**9,221**
Aluminum Beverage Cans	0.6%	0.1%	3,647	852
Aluminum Foil/Containers	0.2%	0.1%	1,477	363
Other Aluminum	0.1%	0.1%	568	521
Other Non-ferrous Metal	0.0%	0.0%	230	177
Food Cans - Tinned	0.9%	0.2%	5,203	1,164
Food Cans - Coated	0.0%	0.0%	264	176
White Goods	0.4%	0.6%	2,239	3,640
Other Ferrous Metal	2.6%	0.9%	15,488	5,161
R/C Metal	2.4%	1.1%	13,931	6,468
ORGANICS	**21.2%**	**2.6%**	**125,510**	**15,526**
Edible Food Waste- Vegetative	9.5%	1.9%	56,400	11,060
Inedible Food Waste- Vegetative	3.6%	0.7%	21,406	4,393
Edible Food Waste- Meats/Fats/Oils	3.2%	0.8%	18,988	4,832
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.2%	2,782	956
Yard/Garden Waste- Leaves and Grass	1.7%	0.6%	9,916	3,798
Yard/Garden Waste- Prunings	0.2%	0.1%	1,387	764
Animal Manure	2.1%	0.7%	12,455	4,389
Animal Carcasses & Offal	0.0%	0.0%	10	14
Food Processing Wastes	0.0%	0.0%	0	0
R/C Organics	0.4%	0.2%	2,166	1,169
WOOD DEBRIS	**11.1%**	**3.0%**	**65,389**	**17,848**
Natural Wood	0.1%	0.1%	535	569
Treated Wood	0.6%	0.7%	3,370	4,311
Painted Wood	0.9%	0.4%	5,415	2,356
Dimensional Lumber	2.7%	1.5%	16,168	8,756
Engineered Wood	2.4%	1.1%	14,241	6,668
Pallets & Crates	3.2%	1.7%	18,953	9,916
Other Untreated Wood	0.0%	0.0%	166	94
Wood By-products	0.3%	0.3%	1,812	1,900
R/C Wood Debris	0.8%	0.4%	4,730	2,401
CONSTRUCTION MATERIALS	**6.6%**	**2.1%**	**39,165**	**12,402**
Plastic Lumber	0.1%	0.1%	375	362
Insulation	0.4%	0.3%	2,236	1,643
Asphalt Paving	0.0%	0.0%	0	0
Concrete	0.1%	0.1%	477	682
Drywall	1.8%	1.4%	10,802	8,299
Carpet	0.8%	0.5%	4,745	2,836
Carpet Padding	0.0%	0.0%	0	0
Soil, Rocks, & Sand	0.8%	0.6%	4,444	3,588
Asphalt Roofing	0.6%	0.6%	3,745	3,572
Plastic Floor Covering	0.0%	0.0%	128	208
Ceramics & Brick	0.4%	0.5%	2,556	2,863
R/C Construction Materials	1.6%	0.9%	9,657	5,177
CONSUMER PRODUCTS	**10.5%**	**2.5%**	**61,917**	**14,695**
Televisions - LCD	0.4%	0.5%	2,388	2,732
Televisions - CRT	0.6%	0.4%	3,291	2,627
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.1%	0.1%	362	588
Computer Peripherals	0.0%	0.0%	153	249
Computer Printers	0.1%	0.1%	676	776
Audio Equipment	0.2%	0.2%	1,026	1,445
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.2%	0.2%	1,322	1,004
Textiles- Organic	2.7%	0.7%	15,659	4,235
Textiles- Synthetic/Mixed/Unknown	1.3%	0.4%	7,697	2,333
Shoes/Purses/Belts	0.3%	0.2%	1,641	1,005
Tires & Other Rubber	0.4%	0.2%	2,324	1,283
Furniture	3.4%	1.7%	20,251	10,093
Mattresses	0.9%	1.0%	5,127	6,113
R/C Consumer Products	0.0%	0.0%	0	0
HAZARDOUS AND SPECIAL WASTES	**1.4%**	**0.6%**	**8,128**	**3,618**
Pesticides	0.0%	0.0%	21	34
HID/UV/Germicidal Lamps	0.0%	0.0%	38	60
Compact Florescent Lamps	0.0%	0.0%	76	71
Florescent Tubes	0.0%	0.0%	157	231
Water-based Paint	0.0%	0.0%	192	250
Solvent-based Adhesives/Glues	0.0%	0.0%	80	96
Water-based Adhesives/Glues	0.0%	0.0%	34	39
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.0%	0	0
Water Repellents & Waterproofers	0.0%	0.0%	0	0
Solvents	0.0%	0.0%	59	79
Caustic Cleaners	0.0%	0.0%	38	61
Dry-cell Batteries- Single Use	0.0%	0.0%	223	108
Dry-cell Batteries- Rechargeable	0.0%	0.0%	260	295
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	0	0
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	65	105
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.0%	0.0%	232	219
Explosives	0.0%	0.0%	0	0
Medical Wastes	0.7%	0.6%	4,096	3,396
Sharps	0.0%	0.0%	1	1
Pharmaceuticals & Vitamins	0.0%	0.0%	189	102
Other Cleaners/Chemicals	0.0%	0.0%	9	15
Personal Care Products	0.0%	0.0%	268	169
Other Potentially Hazardous Wastes	0.4%	0.2%	2,092	1,333
RESIDUALS	**3.0%**	**0.5%**	**17,824**	**3,156**
Disposable Diapers	2.0%	0.5%	11,891	3,018
Ash	0.0%	0.0%	87	122
Dust	0.0%	0.0%	144	95
Fines/Sorting Residues	1.0%	0.3%	5,685	1,748
Sludges & Other Special Industrial Wastes	0.0%	0.0%	17	28

Estimated Origin Specified Disposed Tons	**590,822**
Sample Count	**104**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 25: Central WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**23.3%**	**4.3%**	**57,997**	**10,633**
PAPER PACKAGING	**15.8%**	**3.2%**	**39,486**	**8,071**
Newspaper Packaging	0.0%	0.0%	6	10
Cardboard & Kraft Packaging	10.0%	2.5%	24,842	6,286
Mixed/Low-grade Paper Packaging	1.4%	0.5%	3,553	1,135
Aseptic Containers	0.0%	0.0%	103	69
Gable Top Containers	1.2%	1.8%	2,871	4,436
Other Polycoated Packaging	0.1%	0.1%	174	202
Compostable Paper Packaging	2.7%	1.0%	6,791	2,384
R/C Paper Packaging	0.5%	0.3%	1,144	814
PAPER PRODUCTS	**7.4%**	**2.6%**	**18,512**	**6,432**
Newspaper Products	0.1%	0.1%	293	202
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0
Magazines	0.6%	0.8%	1,506	2,027
High-Grade Paper Products	0.4%	0.2%	1,026	589
Other Groundwood Paper Products	0.0%	0.0%	0	0
Mixed/Low-grade Paper Products	2.5%	1.6%	6,130	3,874
Compostable Paper Products	2.3%	0.8%	5,776	1,976
R/C Paper Products	1.5%	1.0%	3,780	2,378
PLASTIC	**15.3%**	**2.9%**	**38,204**	**7,161**
PLASTIC PACKAGING	**7.7%**	**1.7%**	**19,240**	**4,306**
#1 PETE Plastic Bottles	0.7%	0.3%	1,818	661
#1 PETE Plastic Non-bottles	0.3%	0.1%	796	218
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	572	226
#2 HDPE Plastic Jars and Tubs	1.0%	0.6%	2,392	1,434
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	616	282
#3 PVC Plastic Packaging	0.0%	0.0%	2	4
#4 LDPE Plastic Packaging	0.0%	0.0%	2	2
#5 PP Plastic Packaging	0.5%	0.2%	1,251	511
#6 PS Plastic Packaging	0.1%	0.1%	271	180
#7 Other/Unknown Plastic Packaging	0.2%	0.1%	536	161
Expanded Polystyrene Packaging	0.6%	0.3%	1,471	727
PLA Compostable Packaging	0.0%	0.0%	60	49
Plastic Merchandise Bags	0.2%	0.1%	405	135
Packaging Film Plastic	2.5%	1.0%	6,131	2,429
Transportation Packaging Film Plastic	1.0%	0.6%	2,388	1,451
Flexible Plastic Packaging	0.1%	0.1%	304	363
R/C Plastic Packaging	0.1%	0.1%	226	366
PLASTIC PRODUCTS	**7.6%**	**2.2%**	**18,963**	**5,517**
#1 PETE Plastic Products	0.0%	0.0%	1	2
#2 HDPE Plastic Products:	0.1%	0.1%	126	204
#3 PVC Plastic Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0
#5 PP Plastic Products	0.0%	0.0%	1	2
#6 PS Plastic Products	0.0%	0.0%	78	47
#7 Other/Unknown Plastic Products	1.3%	0.5%	3,158	1,367
PLA Compostable Products	0.0%	0.0%	56	62
Plastic Garbage Bags	1.3%	0.3%	3,126	812
Plastic Non-bag Film Products	1.3%	1.4%	3,255	3,416
Bulky Rigid Plastic Products	2.6%	1.3%	6,433	3,138
R/C Plastic Products	1.1%	0.5%	2,729	1,270
GLASS	**2.2%**	**1.6%**	**5,533**	**4,008**
Clear Glass Containers	0.8%	0.3%	1,927	682
Green Glass Containers	0.1%	0.1%	344	258
Brown/Other Colored Glass Containers	0.2%	0.1%	590	288
Plate Glass	1.0%	1.6%	2,607	4,012
Non-glass Ceramics	0.0%	0.0%	41	68
R/C Glass	0.0%	0.0%	24	28
METAL	**8.0%**	**2.7%**	**19,963**	**6,830**
Aluminum Beverage Cans	0.4%	0.2%	973	382
Aluminum Foil/Containers	0.3%	0.1%	655	326
Other Aluminum	0.2%	0.2%	398	481
Other Non-ferrous Metal	0.0%	0.1%	124	128
Food Cans - Tinned	0.6%	0.4%	1,484	951
Food Cans - Coated	0.0%	0.0%	79	96
White Goods	0.9%	1.5%	2,239	3,640
Other Ferrous Metal	3.4%	1.6%	8,398	3,894
R/C Metal	2.3%	1.3%	5,611	3,167
ORGANICS	**18.7%**	**5.0%**	**46,645**	**12,573**
Edible Food Waste- Vegetative	10.1%	4.1%	25,073	10,234
Inedible Food Waste- Vegetative	1.9%	1.0%	4,812	2,557
Edible Food Waste- Meats/Fats/Oils	3.8%	1.7%	9,574	4,216
Inedible Food Waste- Meats/Fats/Oils	0.4%	0.3%	1,071	768
Yard/Garden Waste- Leaves and Grass	1.0%	0.6%	2,599	1,432
Yard/Garden Waste- Prunings	0.1%	0.1%	168	190
Animal Manure	1.2%	1.1%	3,104	2,730
Animal Carcasses & Offal	0.0%	0.0%	1	2
Food Processing Wastes	0.0%	0.0%	0	0
R/C Organics	0.1%	0.1%	243	160

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
WOOD DEBRIS	**16.8%**	**6.1%**	**41,881**	**15,241**
Natural Wood	0.0%	0.0%	105	121
Treated Wood	0.3%	0.4%	732	1,060
Painted Wood	1.1%	0.8%	2,708	1,904
Dimensional Lumber	4.8%	3.2%	12,091	7,924
Engineered Wood	5.0%	2.6%	12,396	6,556
Pallets & Crates	4.0%	2.5%	10,070	6,172
Other Untreated Wood	0.0%	0.0%	67	65
Wood By-products	0.3%	0.4%	755	1,081
R/C Wood Debris	1.2%	0.8%	2,957	2,050
CONSTRUCTION MATERIALS	**5.8%**	**2.8%**	**14,584**	**6,895**
Plastic Lumber	0.1%	0.1%	211	249
Insulation	0.4%	0.4%	889	997
Asphalt Paving	0.0%	0.0%	0	0
Concrete	0.0%	0.0%	0	0
Drywall	0.8%	1.0%	2,119	2,405
Carpet	0.3%	0.4%	821	874
Carpet Padding	0.0%	0.0%	0	0
Soil, Rocks, & Sand	0.3%	0.3%	764	823
Asphalt Roofing	0.2%	0.3%	594	786
Plastic Floor Covering	0.1%	0.1%	128	208
Ceramics & Brick	1.0%	1.1%	2,515	2,862
R/C Construction Materials	2.6%	1.5%	6,544	3,709
CONSUMER PRODUCTS	**6.2%**	**2.3%**	**15,511**	**5,688**
Televisions - LCD	0.0%	0.0%	0	0
Televisions - CRT	0.6%	0.7%	1,575	1,801
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.0%	0.0%	0	0
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.0%	0.0%	0	0
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.2%	0.2%	421	613
Textiles- Organic	1.9%	1.0%	4,853	2,422
Textiles- Synthetic/Mixed/Unknown	1.1%	0.6%	2,838	1,600
Shoes/Purses/Belts	0.1%	0.1%	223	251
Tires & Other Rubber	0.4%	0.3%	1,105	787
Furniture	1.8%	1.6%	4,496	3,951
Mattresses	0.0%	0.0%	0	0
R/C Consumer Products	0.0%	0.0%	0	0
HAZARDOUS AND SPECIAL WASTES	**2.4%**	**1.4%**	**5,877**	**3,534**
Pesticides	0.0%	0.0%	0	0
HID/UV/Germicidal Lamps	0.0%	0.0%	37	60
Compact Florescent Lamps	0.0%	0.0%	0	0
Florescent Tubes	0.1%	0.1%	141	230
Water-based Paint	0.0%	0.0%	22	36
Solvent-based Adhesives/Glues	0.0%	0.0%	52	85
Water-based Adhesives/Glues	0.0%	0.0%	0	0
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.0%	0	0
Water Repellents & Waterproofers	0.0%	0.0%	0	0
Solvents	0.0%	0.0%	48	77
Caustic Cleaners	0.0%	0.0%	0	0
Dry-cell Batteries- Single Use	0.0%	0.0%	51	83
Dry-cell Batteries- Rechargeable	0.0%	0.1%	102	166
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	0	0
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.0%	0.0%	55	72
Explosives	0.0%	0.0%	0	0
Medical Wastes	1.5%	1.4%	3,776	3,391
Sharps	0.0%	0.0%	0	0
Pharmaceuticals & Vitamins	0.0%	0.0%	20	25
Other Cleaners/Chemicals	0.0%	0.0%	0	0
Personal Care Products	0.0%	0.0%	59	70
Other Potentially Hazardous Wastes	0.6%	0.5%	1,515	1,281
RESIDUALS	**1.3%**	**0.5%**	**3,132**	**1,312**
Disposable Diapers	0.6%	0.3%	1,399	867
Ash	0.0%	0.0%	0	0
Dust	0.0%	0.0%	0	0
Fines/Sorting Residues	0.7%	0.4%	1,716	910
Sludges & Other Special Industrial Wastes	0.0%	0.0%	17	28

Estimated Origin Specified Disposed Tons	**249,328**	*Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.*
Sample Count	**48**	

Table 26: Central WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**20.6%**	**2.3%**	**43,452**	**4,925**
PAPER PACKAGING	**9.2%**	**1.5%**	**19,309**	**3,132**
Newspaper Packaging	0.0%	0.0%	0	0
Cardboard & Kraft Packaging	2.8%	0.7%	5,965	1,570
Mixed/Low-grade Paper Packaging	2.9%	0.6%	6,106	1,340
Aseptic Containers	0.2%	0.0%	347	98
Gable Top Containers	0.3%	0.1%	568	130
Other Polycoated Packaging	0.4%	0.1%	755	147
Compostable Paper Packaging	1.9%	0.5%	4,024	1,009
R/C Paper Packaging	0.7%	0.1%	1,545	309
PAPER PRODUCTS	**11.4%**	**1.9%**	**24,143**	**4,106**
Newspaper Products	0.5%	0.1%	1,103	249
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0
Magazines	0.9%	0.4%	1,960	937
High-Grade Paper Products	0.1%	0.1%	291	116
Other Groundwood Paper Products	0.2%	0.4%	461	744
Mixed/Low-grade Paper Products	3.5%	1.1%	7,416	2,317
Compostable Paper Products	5.8%	0.9%	12,203	1,826
R/C Paper Products	0.3%	0.2%	707	358
PLASTIC	**15.1%**	**1.7%**	**31,830**	**3,652**
PLASTIC PACKAGING	**11.2%**	**1.1%**	**23,547**	**2,283**
#1 PETE Plastic Bottles	1.7%	0.3%	3,514	614
#1 PETE Plastic Non-bottles	0.8%	0.2%	1,713	318
#2 HDPE Plastic Natural Bottles	0.5%	0.2%	1,080	337
#2 HDPE Plastic Jars and Tubs	0.1%	0.1%	303	133
#2 HDPE Plastic Colored Bottles	0.4%	0.1%	927	202
#3 PVC Plastic Packaging	0.0%	0.0%	2	3
#4 LDPE Plastic Packaging	0.0%	0.0%	6	7
#5 PP Plastic Packaging	1.3%	0.3%	2,713	625
#6 PS Plastic Packaging	0.2%	0.0%	375	93
#7 Other/Unknown Plastic Packaging	1.0%	0.8%	2,172	1,668
Expanded Polystyrene Packaging	0.4%	0.1%	937	281
PLA Compostable Packaging	0.0%	0.0%	33	34
Plastic Merchandise Bags	0.6%	0.1%	1,269	286
Packaging Film Plastic	3.7%	0.5%	7,842	1,091
Transportation Packaging Film Plastic	0.2%	0.1%	365	276
Flexible Plastic Packaging	0.1%	0.0%	275	95
R/C Plastic Packaging	0.0%	0.0%	21	34
PLASTIC PRODUCTS	**3.9%**	**0.7%**	**8,283**	**1,462**
#1 PETE Plastic Products	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	4	7
#5 PP Plastic Products	0.0%	0.0%	4	7
#6 PS Plastic Products	0.0%	0.0%	60	30
#7 Other/Unknown Plastic Products	0.9%	0.2%	1,898	521
PLA Compostable Products	0.0%	0.0%	4	7
Plastic Garbage Bags	1.7%	0.4%	3,611	858
Plastic Non-bag Film Products	0.0%	0.0%	48	78
Bulky Rigid Plastic Products	0.8%	0.4%	1,780	841
R/C Plastic Products	0.4%	0.2%	874	406
GLASS	**6.2%**	**1.2%**	**13,144**	**2,498**
Clear Glass Containers	2.7%	0.6%	5,785	1,364
Green Glass Containers	1.5%	0.6%	3,173	1,166
Brown/Other Colored Glass Containers	1.7%	0.8%	3,504	1,637
Plate Glass	0.0%	0.0%	0	0
Non-glass Ceramics	0.2%	0.1%	432	304
R/C Glass	0.1%	0.1%	251	159
METAL	**6.2%**	**2.1%**	**13,136**	**4,374**
Aluminum Beverage Cans	1.1%	0.3%	2,233	734
Aluminum Foil/Containers	0.3%	0.1%	694	154
Other Aluminum	0.0%	0.0%	6	10
Other Non-ferrous Metal	0.0%	0.1%	99	122
Food Cans - Tinned	1.5%	0.3%	3,256	643
Food Cans - Coated	0.1%	0.1%	182	147
White Goods	0.0%	0.0%	0	0
Other Ferrous Metal	1.1%	0.6%	2,363	1,218
R/C Metal	2.0%	2.1%	4,303	4,475
ORGANICS	**32.7%**	**3.9%**	**68,970**	**8,249**
Edible Food Waste- Vegetative	13.1%	1.9%	27,562	3,906
Inedible Food Waste- Vegetative	7.4%	1.7%	15,504	3,518
Edible Food Waste- Meats/Fats/Oils	3.8%	1.0%	8,029	2,180
Inedible Food Waste- Meats/Fats/Oils	0.6%	0.2%	1,369	504
Yard/Garden Waste- Leaves and Grass	2.7%	1.5%	5,752	3,210
Yard/Garden Waste- Prunings	0.2%	0.2%	442	338
Animal Manure	4.1%	1.6%	8,660	3,391
Animal Carcasses & Offal	0.0%	0.0%	8	14
Food Processing Wastes	0.0%	0.0%	0	0
R/C Organics	0.8%	0.5%	1,644	1,150
WOOD DEBRIS	**0.9%**	**0.4%**	**1,998**	**840**
Natural Wood	0.0%	0.0%	61	70
Treated Wood	0.0%	0.0%	0	0
Painted Wood	0.2%	0.1%	518	311
Dimensional Lumber	0.1%	0.1%	256	268
Engineered Wood	0.2%	0.2%	424	388
Pallets & Crates	0.0%	0.0%	0	0
Other Untreated Wood	0.0%	0.0%	2	3
Wood By-products	0.0%	0.0%	50	81
R/C Wood Debris	0.3%	0.3%	688	722
CONSTRUCTION MATERIALS	**2.1%**	**2.3%**	**4,502**	**4,747**
Plastic Lumber	0.1%	0.1%	164	263
Insulation	0.2%	0.2%	363	373
Asphalt Paving	0.0%	0.0%	0	0
Concrete	0.0%	0.0%	0	0
Drywall	1.2%	1.9%	2,617	4,073
Carpet	0.6%	0.7%	1,210	1,376
Carpet Padding	0.0%	0.0%	0	0
Soil, Rocks, & Sand	0.0%	0.1%	75	122
Asphalt Roofing	0.0%	0.0%	13	20
Plastic Floor Covering	0.0%	0.0%	0	0
Ceramics & Brick	0.0%	0.0%	0	0
R/C Construction Materials	0.0%	0.0%	61	98
CONSUMER PRODUCTS	**9.3%**	**4.2%**	**19,698**	**8,898**
Televisions - LCD	0.6%	1.0%	1,279	2,060
Televisions - CRT	0.0%	0.0%	0	0
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.0%	0.0%	0	0
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.0%	0.0%	0	0
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.0%	0.0%	17	27
Textiles- Organic	4.0%	1.6%	8,486	3,287
Textiles- Synthetic/Mixed/Unknown	1.4%	0.6%	3,009	1,370
Shoes/Purses/Belts	0.6%	0.5%	1,237	957
Tires & Other Rubber	0.3%	0.4%	633	774
Furniture	2.4%	2.7%	5,036	5,677
Mattresses	0.0%	0.0%	0	0
R/C Consumer Products	0.0%	0.0%	0	0
HAZARDOUS AND SPECIAL WASTES	**0.6%**	**0.2%**	**1,276**	**482**
Pesticides	0.0%	0.0%	0	0
HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
Compact Florescent Lamps	0.0%	0.0%	67	70
Florescent Tubes	0.0%	0.0%	0	0
Water-based Paint	0.1%	0.1%	153	246
Solvent-based Adhesives/Glues	0.0%	0.0%	27	44
Water-based Adhesives/Glues	0.0%	0.0%	34	39
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.0%	0	0
Water Repellents & Waterproofers	0.0%	0.0%	0	0
Solvents	0.0%	0.0%	0	0
Caustic Cleaners	0.0%	0.0%	38	61
Dry-cell Batteries- Single Use	0.1%	0.0%	130	58
Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	0	0
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.1%	0.1%	107	173
Explosives	0.0%	0.0%	0	0
Medical Wastes	0.1%	0.1%	265	184
Sharps	0.0%	0.0%	1	1
Pharmaceuticals & Vitamins	0.1%	0.0%	109	68
Other Cleaners/Chemicals	0.0%	0.0%	0	0
Personal Care Products	0.1%	0.1%	143	144
Other Potentially Hazardous Wastes	0.1%	0.1%	203	223
RESIDUALS	**6.1%**	**1.2%**	**12,862**	**2,567**
Disposable Diapers	4.4%	1.2%	9,383	2,607
Ash	0.0%	0.0%	0	0
Dust	0.0%	0.0%	94	84
Fines/Sorting Residues	1.6%	0.7%	3,384	1,470
Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0

Estimated Origin Specified Disposed Tons	**210,869**	*Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.*
Sample Count	**24**	

Table 27: Central WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**13.8%**	**4.6%**	**18,029**	**5,954**	**WOOD DEBRIS**	**16.5%**	**7.1%**	**21,509**	**9,249**
PAPER PACKAGING	**9.4%**	**4.3%**	**12,258**	**5,676**	Natural Wood	0.3%	0.4%	369	551
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	2.0%	3.2%	2,638	4,178
Cardboard & Kraft Packaging	6.5%	3.3%	8,480	4,295	Painted Wood	1.7%	1.0%	2,189	1,352
Mixed/Low-grade Paper Packaging	1.9%	1.3%	2,498	1,739	Dimensional Lumber	2.9%	2.8%	3,821	3,717
Aseptic Containers	0.0%	0.0%	18	16	Engineered Wood	1.1%	0.9%	1,421	1,155
Gable Top Containers	0.1%	0.0%	114	57	Pallets & Crates	6.8%	5.9%	8,883	7,761
Other Polycoated Packaging	0.1%	0.0%	77	41	Other Untreated Wood	0.1%	0.1%	97	67
Compostable Paper Packaging	0.5%	0.2%	627	262	Wood By-products	0.8%	1.2%	1,007	1,560
R/C Paper Packaging	0.3%	0.2%	445	235	R/C Wood Debris	0.8%	0.8%	1,085	1,019
PAPER PRODUCTS	**4.4%**	**1.6%**	**5,771**	**2,031**	**CONSTRUCTION MATERIALS**	**15.4%**	**7.0%**	**20,079**	**9,151**
Newspaper Products	0.1%	0.1%	126	93	Plastic Lumber	0.0%	0.0%	0	0
Cardboard & Kraft Paper Products	0.0%	0.0%	29	46	Insulation	0.8%	1.0%	984	1,252
Magazines	0.2%	0.1%	227	149	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.4%	0.5%	545	613	Concrete	0.4%	0.5%	477	682
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	4.6%	5.2%	6,067	6,819
Mixed/Low-grade Paper Products	1.7%	1.0%	2,233	1,270	Carpet	2.1%	1.8%	2,714	2,321
Compostable Paper Products	1.4%	0.7%	1,877	873	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	0.6%	0.4%	735	525	Soil, Rocks, & Sand	2.8%	2.7%	3,605	3,490
PLASTIC	**13.5%**	**3.7%**	**17,679**	**4,786**	Asphalt Roofing	2.4%	2.7%	3,139	3,484
PLASTIC PACKAGING	**7.8%**	**2.6%**	**10,175**	**3,373**	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.7%	0.3%	894	432	Ceramics & Brick	0.0%	0.1%	41	65
#1 PETE Plastic Non-bottles	0.2%	0.1%	281	105	R/C Construction Materials	2.3%	2.8%	3,053	3,610
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	131	73	**CONSUMER PRODUCTS**	**20.4%**	**7.8%**	**26,708**	**10,218**
#2 HDPE Plastic Jars and Tubs	0.6%	0.4%	740	544	Televisions - LCD	0.8%	1.4%	1,109	1,795
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	237	92	Televisions - CRT	1.3%	1.5%	1,716	1,913
#3 PVC Plastic Packaging	0.0%	0.0%	4	6	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.4%	0.3%	554	345	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.0%	0.0%	57	30	Computers	0.3%	0.5%	362	588
#7 Other/Unknown Plastic Packaging	0.3%	0.2%	448	215	Computer Peripherals	0.1%	0.2%	153	249
Expanded Polystyrene Packaging	0.8%	0.7%	1,042	861	Computer Printers	0.5%	0.6%	676	776
PLA Compostable Packaging	0.0%	0.0%	1	1	Audio Equipment	0.8%	1.1%	1,026	1,445
Plastic Merchandise Bags	0.2%	0.1%	293	152	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	3.3%	2.5%	4,371	3,227	Other Consumer Electronics	0.7%	0.6%	885	795
Transportation Packaging Film Plastic	0.7%	0.4%	917	540	Textiles- Organic	1.8%	0.9%	2,319	1,128
Flexible Plastic Packaging	0.1%	0.1%	134	81	Textiles- Synthetic/Mixed/Unknown	1.4%	0.8%	1,850	1,001
R/C Plastic Packaging	0.1%	0.1%	71	115	Shoes/Purses/Belts	0.1%	0.1%	180	179
PLASTIC PRODUCTS	**5.7%**	**2.4%**	**7,504**	**3,158**	Tires & Other Rubber	0.4%	0.5%	585	653
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	8.2%	5.6%	10,718	7,350
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	3.9%	4.7%	5,127	6,113
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	**HAZARDOUS AND SPECIAL WASTES**	**0.7%**	**0.5%**	**975**	**603**
#5 PP Plastic Products	0.0%	0.0%	7	12	Pesticides	0.0%	0.0%	21	34
#6 PS Plastic Products	0.0%	0.0%	35	42	HID/UV/Germicidal Lamps	0.0%	0.0%	2	3
#7 Other/Unknown Plastic Products	1.1%	0.5%	1,429	642	Compact Florescent Lamps	0.0%	0.0%	9	9
PLA Compostable Products	0.0%	0.0%	0	0	Florescent Tubes	0.0%	0.0%	16	18
Plastic Garbage Bags	0.4%	0.1%	505	164	Water-based Paint	0.0%	0.0%	17	27
Plastic Non-bag Film Products	0.5%	0.5%	717	643	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	2.9%	1.7%	3,738	2,201	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	0.8%	0.5%	1,072	597	Oil-based Paint	0.0%	0.0%	0	0
GLASS	**3.0%**	**1.5%**	**3,971**	**1,921**	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	1.4%	0.9%	1,771	1,191	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.3%	0.2%	332	326	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.3%	0.2%	436	305	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.8%	0.9%	999	1,110	Solvents	0.0%	0.0%	11	18
Non-glass Ceramics	0.0%	0.0%	63	55	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.3%	0.3%	369	351	Dry-cell Batteries- Single Use	0.0%	0.0%	42	37
METAL	**7.6%**	**3.4%**	**9,949**	**4,387**	Dry-cell Batteries- Rechargeable	0.1%	0.2%	157	244
Aluminum Beverage Cans	0.3%	0.2%	441	202	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.0%	128	50	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.1%	0.2%	165	201	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.0%	0.0%	7	12	Antifreeze	0.0%	0.1%	65	105
Food Cans - Tinned	0.4%	0.1%	462	194	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	3	4	Oil Filters	0.1%	0.1%	70	114
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	3.6%	2.4%	4,726	3,161	Medical Wastes	0.0%	0.0%	56	32
R/C Metal	3.1%	2.6%	4,017	3,433	Sharps	0.0%	0.0%	0	0
ORGANICS	**7.6%**	**3.0%**	**9,895**	**3,863**	Pharmaceuticals & Vitamins	0.0%	0.1%	60	71
Edible Food Waste- Vegetative	2.9%	1.2%	3,765	1,531	Other Cleaners/Chemicals	0.0%	0.0%	9	15
Inedible Food Waste- Vegetative	0.8%	0.5%	1,091	622	Personal Care Products	0.1%	0.0%	67	55
Edible Food Waste- Meats/Fats/Oils	1.1%	0.7%	1,386	906	Other Potentially Hazardous Wastes	0.3%	0.2%	374	295
Inedible Food Waste- Meats/Fats/Oils	0.3%	0.2%	342	265	**RESIDUALS**	**1.4%**	**1.0%**	**1,830**	**1,284**
Yard/Garden Waste- Leaves and Grass	1.2%	1.1%	1,565	1,438	Disposable Diapers	0.8%	1.0%	1,109	1,251
Yard/Garden Waste- Prunings	0.6%	0.5%	777	658	Ash	0.1%	0.1%	87	122
Animal Manure	0.5%	0.4%	691	555	Dust	0.0%	0.0%	50	44
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.4%	0.2%	584	259
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.2%	0.1%	279	135					

Estimated Origin Specified Disposed Tons	**130,624**	*Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.*
Sample Count	**32**	

East Waste Generation Area Composition Tables

Table 28: East WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021

Material	Est. Percent	+/-	Est. Tons	Tons +/-
PAPER	**19.0%**	**2.2%**	**160,811**	**18,752**
PAPER PACKAGING	**11.8%**	**1.7%**	**99,323**	**14,263**
Newspaper Packaging	0.0%	0.0%	168	161
Cardboard & Kraft Packaging	6.0%	1.1%	51,026	9,073
Mixed/Low-grade Paper Packaging	1.8%	0.3%	14,996	2,709
Aseptic Containers	0.1%	0.0%	954	340
Gable Top Containers	0.2%	0.1%	1,981	745
Other Polycoated Packaging	0.1%	0.0%	1,015	366
Compostable Paper Packaging	1.7%	0.4%	14,396	3,155
R/C Paper Packaging	1.8%	1.3%	14,787	10,982
PAPER PRODUCTS	**7.3%**	**1.0%**	**61,489**	**8,812**
Newspaper Products	0.4%	0.1%	3,052	1,168
Cardboard & Kraft Paper Products	0.0%	0.0%	186	302
Magazines	0.2%	0.1%	1,630	1,118
High-Grade Paper Products	0.2%	0.1%	1,883	761
Other Groundwood Paper Products	0.0%	0.1%	401	508
Mixed/Low-grade Paper Products	1.7%	0.4%	14,736	3,668
Compostable Paper Products	3.4%	0.6%	29,103	5,337
R/C Paper Products	1.2%	0.7%	10,498	5,925
PLASTIC	**15.3%**	**2.2%**	**129,137**	**18,304**
PLASTIC PACKAGING	**8.3%**	**1.1%**	**69,948**	**9,546**
#1 PETE Plastic Bottles	1.0%	0.2%	8,209	1,527
#1 PETE Plastic Non-bottles	0.4%	0.1%	3,348	868
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	2,031	523
#2 HDPE Plastic Jars and Tubs	0.4%	0.1%	2,966	1,114
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	2,250	688
#3 PVC Plastic Packaging	0.0%	0.0%	29	39
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.0%	0.3%	8,040	2,619
#6 PS Plastic Packaging	0.1%	0.0%	1,186	235
#7 Other/Unknown Plastic Packaging	0.9%	0.9%	7,659	7,236
Expanded Polystyrene Packaging	0.6%	0.2%	5,483	1,751
PLA Compostable Packaging	0.0%	0.0%	252	162
Plastic Merchandise Bags	0.4%	0.1%	3,640	544
Packaging Film Plastic	2.3%	0.4%	19,695	3,258
Transportation Packaging Film Plastic	0.5%	0.2%	4,553	1,493
Flexible Plastic Packaging	0.1%	0.0%	520	168
R/C Plastic Packaging	0.0%	0.0%	86	124
PLASTIC PRODUCTS	**7.0%**	**1.7%**	**59,189**	**14,037**
#1 PETE Plastic Products	0.0%	0.0%	46	64
#2 HDPE Plastic Products:	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0
#5 PP Plastic Products	0.0%	0.0%	22	32
#6 PS Plastic Products	0.0%	0.0%	233	139
#7 Other/Unknown Plastic Products	1.0%	0.3%	8,476	2,338
PLA Compostable Products	0.0%	0.0%	71	75
Plastic Garbage Bags	1.5%	0.3%	13,000	2,379
Plastic Non-bag Film Products	0.7%	0.7%	6,199	5,705
Bulky Rigid Plastic Products	2.8%	1.3%	23,700	10,795
R/C Plastic Products	0.9%	0.4%	7,442	3,465
GLASS	**2.0%**	**0.7%**	**17,277**	**5,621**
Clear Glass Containers	1.2%	0.3%	9,752	2,800
Green Glass Containers	0.4%	0.2%	3,620	1,884
Brown/Other Colored Glass Containers	0.3%	0.2%	2,224	1,299
Plate Glass	0.0%	0.1%	341	442
Non-glass Ceramics	0.1%	0.1%	864	599
R/C Glass	0.1%	0.0%	476	394
METAL	**7.2%**	**1.6%**	**60,516**	**13,252**
Aluminum Beverage Cans	0.5%	0.1%	4,049	1,027
Aluminum Foil/Containers	0.2%	0.0%	1,598	322
Other Aluminum	0.0%	0.0%	87	127
Other Non-ferrous Metal	0.1%	0.0%	542	230
Food Cans - Tinned	0.5%	0.1%	4,311	1,241
Food Cans - Coated	0.0%	0.0%	224	116
White Goods	0.8%	0.9%	6,403	7,491
Other Ferrous Metal	2.9%	0.8%	24,436	6,858
R/C Metal	2.2%	0.9%	18,866	7,197
ORGANICS	**20.9%**	**2.7%**	**176,398**	**23,011**
Edible Food Waste- Vegetative	7.7%	1.4%	65,417	12,070
Inedible Food Waste- Vegetative	3.3%	0.7%	27,713	6,247
Edible Food Waste- Meats/Fats/Oils	2.7%	0.9%	22,757	7,375
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.2%	4,163	1,892
Yard/Garden Waste- Leaves and Grass	2.3%	1.0%	19,699	8,613
Yard/Garden Waste- Prunings	0.5%	0.3%	3,948	2,323
Animal Manure	3.4%	1.5%	28,343	12,951
Animal Carcasses & Offal	0.2%	0.3%	1,430	2,250
Food Processing Wastes	0.0%	0.0%	0	0
R/C Organics	0.3%	0.1%	2,927	1,173

Material	Est. Percent	+/-	Est. Tons	Tons +/-
WOOD DEBRIS	**9.8%**	**2.6%**	**83,099**	**22,043**
Natural Wood	0.2%	0.3%	1,829	2,353
Treated Wood	0.4%	0.3%	3,320	2,741
Painted Wood	3.8%	1.8%	32,017	15,233
Dimensional Lumber	0.8%	0.3%	6,587	2,926
Engineered Wood	0.9%	0.4%	7,552	3,027
Pallets & Crates	2.6%	1.4%	22,061	11,928
Other Untreated Wood	0.0%	0.0%	185	152
Wood By-products	0.2%	0.2%	1,783	1,780
R/C Wood Debris	0.9%	0.5%	7,765	4,413
CONSTRUCTION MATERIALS	**8.7%**	**2.8%**	**73,219**	**23,685**
Plastic Lumber	0.2%	0.3%	2,043	2,686
Insulation	0.8%	0.5%	6,426	4,478
Asphalt Paving	0.1%	0.2%	877	1,410
Concrete	2.5%	1.9%	21,110	16,352
Drywall	1.1%	1.0%	9,283	8,556
Carpet	1.0%	0.8%	8,546	6,555
Carpet Padding	0.7%	0.8%	6,328	6,655
Soil, Rocks, & Sand	0.7%	0.6%	6,310	4,700
Asphalt Roofing	0.8%	0.9%	6,776	7,447
Plastic Floor Covering	0.0%	0.0%	141	228
Ceramics & Brick	0.0%	0.0%	344	319
R/C Construction Materials	0.6%	0.8%	5,036	7,152
CONSUMER PRODUCTS	**9.4%**	**1.8%**	**79,497**	**15,197**
Televisions - LCD	0.3%	0.5%	2,614	4,171
Televisions - CRT	0.5%	0.7%	4,333	5,900
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.0%	0.0%	0	0
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.2%	0.2%	1,628	1,887
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.7%	0.5%	5,703	4,290
Textiles- Organic	2.5%	0.5%	20,732	4,115
Textiles- Synthetic/Mixed/Unknown	0.8%	0.4%	7,155	3,004
Shoes/Purses/Belts	0.3%	0.2%	2,124	1,332
Tires & Other Rubber	0.4%	0.2%	3,776	1,789
Furniture	2.5%	1.1%	21,035	9,053
Mattresses	0.6%	0.5%	5,177	3,996
R/C Consumer Products	0.6%	0.7%	5,221	5,618
HAZARDOUS AND SPECIAL WASTES	**4.0%**	**2.4%**	**33,448**	**20,373**
Pesticides	0.0%	0.0%	76	124
HID/UV/Germicidal Lamps	0.0%	0.0%	213	347
Compact Florescent Lamps	0.0%	0.0%	0	0
Florescent Tubes	0.0%	0.0%	9	14
Water-based Paint	0.1%	0.1%	857	1,022
Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Water-based Adhesives/Glues	0.0%	0.0%	115	110
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.0%	108	174
Water Repellents & Waterproofers	0.0%	0.0%	35	57
Solvents	0.2%	0.3%	1,793	2,921
Caustic Cleaners	0.0%	0.0%	50	82
Dry-cell Batteries- Single Use	0.0%	0.0%	185	79
Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	0	0
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.1%	0.1%	469	562
Explosives	0.0%	0.0%	0	0
Medical Wastes	3.1%	2.4%	26,490	19,912
Sharps	0.0%	0.0%	7	7
Pharmaceuticals & Vitamins	0.0%	0.0%	131	97
Other Cleaners/Chemicals	0.0%	0.0%	89	103
Personal Care Products	0.3%	0.2%	2,677	1,323
Other Potentially Hazardous Wastes	0.0%	0.0%	142	158
RESIDUALS	**3.7%**	**1.0%**	**31,495**	**8,854**
Disposable Diapers	1.7%	0.9%	14,512	7,569
Ash	0.2%	0.2%	1,279	2,057
Dust	0.0%	0.0%	0	0
Fines/Sorting Residues	1.9%	0.5%	15,704	4,216
Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0

Estimated Origin Specified Disposed Tons	**844,896**	*Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.*
Sample Count	**104**	

Table 29: East WGA Commercial Disposed Waste, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**23.1%**	**4.4%**	**85,822**	**16,357**
PAPER PACKAGING	**15.2%**	**3.4%**	**56,359**	**12,567**
Newspaper Packaging	0.0%	0.0%	14	23
Cardboard & Kraft Packaging	8.4%	2.1%	30,982	7,739
Mixed/Low-grade Paper Packaging	1.4%	0.5%	5,224	1,891
Aseptic Containers	0.1%	0.1%	465	265
Gable Top Containers	0.3%	0.2%	972	693
Other Polycoated Packaging	0.1%	0.1%	282	199
Compostable Paper Packaging	1.9%	0.8%	7,137	2,798
R/C Paper Packaging	3.0%	2.9%	11,283	10,904
PAPER PRODUCTS	**7.9%**	**2.0%**	**29,463**	**7,564**
Newspaper Products	0.3%	0.2%	1,108	775
Cardboard & Kraft Paper Products	0.1%	0.1%	186	302
Magazines	0.1%	0.1%	447	347
High-Grade Paper Products	0.3%	0.2%	1,150	676
Other Groundwood Paper Products	0.1%	0.1%	384	507
Mixed/Low-grade Paper Products	1.8%	0.9%	6,500	3,192
Compostable Paper Products	2.8%	0.9%	10,360	3,394
R/C Paper Products	2.5%	1.6%	9,328	5,872
PLASTIC	**16.3%**	**3.7%**	**60,423**	**13,578**
PLASTIC PACKAGING	**8.3%**	**2.2%**	**30,959**	**8,327**
#1 PETE Plastic Bottles	0.6%	0.2%	2,094	812
#1 PETE Plastic Non-bottles	0.2%	0.1%	822	352
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	618	204
#2 HDPE Plastic Jars and Tubs	0.5%	0.3%	1,714	930
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	830	371
#3 PVC Plastic Packaging	0.0%	0.0%	23	38
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.0%	0.7%	3,713	2,452
#6 PS Plastic Packaging	0.1%	0.0%	502	180
#7 Other/Unknown Plastic Packaging	1.6%	1.9%	5,828	7,228
Expanded Polystyrene Packaging	0.8%	0.4%	3,073	1,630
PLA Compostable Packaging	0.0%	0.0%	91	72
Plastic Merchandise Bags	0.2%	0.1%	743	269
Packaging Film Plastic	2.0%	0.7%	7,585	2,621
Transportation Packaging Film Plastic	0.9%	0.3%	3,219	1,269
Flexible Plastic Packaging	0.0%	0.0%	91	42
R/C Plastic Packaging	0.0%	0.0%	11	18
PLASTIC PRODUCTS	**7.9%**	**2.4%**	**29,464**	**8,866**
#1 PETE Plastic Products	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0
#5 PP Plastic Products	0.0%	0.0%	22	32
#6 PS Plastic Products	0.0%	0.0%	61	60
#7 Other/Unknown Plastic Products	1.1%	0.5%	4,039	1,802
PLA Compostable Products	0.0%	0.0%	56	74
Plastic Garbage Bags	1.9%	0.6%	6,862	2,185
Plastic Non-bag Film Products	0.8%	1.3%	3,068	4,731
Bulky Rigid Plastic Products	3.2%	1.7%	11,964	6,366
R/C Plastic Products	0.9%	0.5%	3,392	1,842
GLASS	**1.4%**	**1.3%**	**5,025**	**4,974**
Clear Glass Containers	0.7%	0.6%	2,487	2,194
Green Glass Containers	0.4%	0.5%	1,424	1,697
Brown/Other Colored Glass Containers	0.3%	0.3%	972	1,143
Plate Glass	0.0%	0.0%	0	0
Non-glass Ceramics	0.0%	0.0%	135	156
R/C Glass	0.0%	0.0%	7	12
METAL	**7.6%**	**2.5%**	**28,137**	**9,174**
Aluminum Beverage Cans	0.3%	0.1%	1,257	489
Aluminum Foil/Containers	0.1%	0.1%	365	248
Other Aluminum	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.0%	0.0%	171	140
Food Cans - Tinned	0.4%	0.3%	1,413	1,107
Food Cans - Coated	0.0%	0.0%	32	53
White Goods	0.0%	0.0%	0	0
Other Ferrous Metal	3.8%	1.5%	14,183	5,386
R/C Metal	2.9%	1.7%	10,715	6,289
ORGANICS	**12.6%**	**3.6%**	**46,670**	**13,536**
Edible Food Waste- Vegetative	6.2%	2.4%	22,871	8,764
Inedible Food Waste- Vegetative	1.9%	0.8%	7,038	2,862
Edible Food Waste- Meats/Fats/Oils	1.7%	1.0%	6,148	3,686
Inedible Food Waste- Meats/Fats/Oils	0.4%	0.3%	1,453	1,259
Yard/Garden Waste- Leaves and Grass	2.0%	1.6%	7,459	5,938
Yard/Garden Waste- Prunings	0.1%	0.2%	523	628
Animal Manure	0.2%	0.2%	892	821
Animal Carcasses & Offal	0.0%	0.0%	0	0
Food Processing Wastes	0.0%	0.0%	0	0
R/C Organics	0.1%	0.1%	287	212
WOOD DEBRIS	**13.1%**	**5.4%**	**48,573**	**19,931**
Natural Wood	0.0%	0.0%	32	53
Treated Wood	0.2%	0.3%	743	1,210
Painted Wood	4.1%	3.7%	15,221	13,662
Dimensional Lumber	0.8%	0.5%	2,823	1,925
Engineered Wood	0.8%	0.5%	2,903	1,982
Pallets & Crates	5.8%	3.2%	21,337	11,870
Other Untreated Wood	0.0%	0.0%	94	104
Wood By-products	0.3%	0.4%	1,227	1,622
R/C Wood Debris	1.1%	1.1%	4,192	4,069
CONSTRUCTION MATERIALS	**11.3%**	**5.7%**	**41,946**	**21,149**
Plastic Lumber	0.4%	0.7%	1,583	2,580
Insulation	0.1%	0.1%	442	508
Asphalt Paving	0.0%	0.0%	0	0
Concrete	5.3%	4.4%	19,495	16,224
Drywall	1.6%	2.2%	5,892	8,098
Carpet	1.3%	1.6%	4,839	5,967
Carpet Padding	0.9%	1.4%	3,266	5,302
Soil, Rocks, & Sand	0.4%	0.6%	1,391	2,119
Asphalt Roofing	0.0%	0.0%	0	0
Plastic Floor Covering	0.0%	0.1%	141	228
Ceramics & Brick	0.1%	0.1%	236	283
R/C Construction Materials	1.3%	1.9%	4,661	7,136
CONSUMER PRODUCTS	**4.2%**	**1.7%**	**15,695**	**6,376**
Televisions - LCD	0.0%	0.0%	0	0
Televisions - CRT	0.0%	0.0%	0	0
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.0%	0.0%	0	0
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.0%	0.0%	0	0
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.0%	0.0%	34	45
Textiles- Organic	1.5%	0.7%	5,559	2,608
Textiles- Synthetic/Mixed/Unknown	0.8%	0.6%	2,828	2,401
Shoes/Purses/Belts	0.1%	0.1%	195	211
Tires & Other Rubber	0.7%	0.4%	2,507	1,634
Furniture	1.2%	1.1%	4,573	4,256
Mattresses	0.0%	0.0%	0	0
R/C Consumer Products	0.0%	0.0%	0	0
HAZARDOUS AND SPECIAL WASTES	**7.9%**	**5.5%**	**29,384**	**20,314**
Pesticides	0.0%	0.0%	0	0
HID/UV/Germicidal Lamps	0.1%	0.1%	213	347
Compact Florescent Lamps	0.0%	0.0%	0	0
Florescent Tubes	0.0%	0.0%	0	0
Water-based Paint	0.2%	0.3%	627	962
Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Water-based Adhesives/Glues	0.0%	0.0%	0	0
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.0%	0	0
Water Repellents & Waterproofers	0.0%	0.0%	0	0
Solvents	0.5%	0.8%	1,793	2,921
Caustic Cleaners	0.0%	0.0%	50	82
Dry-cell Batteries- Single Use	0.0%	0.0%	14	18
Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	0	0
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.1%	0.1%	380	543
Explosives	0.0%	0.0%	0	0
Medical Wastes	6.6%	5.4%	24,446	19,860
Sharps	0.0%	0.0%	2	3
Pharmaceuticals & Vitamins	0.0%	0.0%	56	57
Other Cleaners/Chemicals	0.0%	0.0%	43	71
Personal Care Products	0.5%	0.3%	1,730	1,251
Other Potentially Hazardous Wastes	0.0%	0.0%	28	44
RESIDUALS	**2.5%**	**2.0%**	**9,185**	**7,240**
Disposable Diapers	1.8%	1.9%	6,629	7,216
Ash	0.0%	0.0%	0	0
Dust	0.0%	0.0%	0	0
Fines/Sorting Residues	0.7%	0.3%	2,555	1,224
Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0

Estimated Origin Specified Disposed Tons	**370,859**	*Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.*
Sample Count	**48**	

Table 30: East WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**18.5%**	**2.3%**	**62,032**	**7,812**
PAPER PACKAGING	**10.5%**	**1.6%**	**35,025**	**5,514**
Newspaper Packaging	0.0%	0.0%	145	158
Cardboard & Kraft Packaging	4.1%	1.0%	13,855	3,189
Mixed/Low-grade Paper Packaging	2.7%	0.6%	9,051	1,893
Aseptic Containers	0.1%	0.1%	451	209
Gable Top Containers	0.3%	0.1%	930	265
Other Polycoated Packaging	0.2%	0.1%	692	305
Compostable Paper Packaging	2.0%	0.4%	6,790	1,420
R/C Paper Packaging	0.9%	0.4%	3,111	1,232
PAPER PRODUCTS	**8.1%**	**1.2%**	**27,007**	**3,922**
Newspaper Products	0.4%	0.2%	1,374	591
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0
Magazines	0.3%	0.3%	1,038	1,039
High-Grade Paper Products	0.2%	0.1%	643	333
Other Groundwood Paper Products	0.0%	0.0%	0	0
Mixed/Low-grade Paper Products	2.1%	0.5%	6,866	1,639
Compostable Paper Products	4.9%	1.2%	16,559	3,852
R/C Paper Products	0.2%	0.1%	527	388
PLASTIC	**16.4%**	**3.3%**	**55,039**	**10,937**
PLASTIC PACKAGING	**10.4%**	**1.3%**	**34,861**	**4,371**
#1 PETE Plastic Bottles	1.7%	0.4%	5,656	1,213
#1 PETE Plastic Non-bottles	0.7%	0.2%	2,371	788
#2 HDPE Plastic Natural Bottles	0.4%	0.1%	1,361	480
#2 HDPE Plastic Jars and Tubs	0.3%	0.2%	1,127	606
#2 HDPE Plastic Colored Bottles	0.4%	0.2%	1,252	568
#3 PVC Plastic Packaging	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.2%	0.3%	4,103	913
#6 PS Plastic Packaging	0.2%	0.0%	649	150
#7 Other/Unknown Plastic Packaging	0.5%	0.1%	1,641	324
Expanded Polystyrene Packaging	0.5%	0.1%	1,833	471
PLA Compostable Packaging	0.0%	0.0%	161	145
Plastic Merchandise Bags	0.8%	0.1%	2,713	461
Packaging Film Plastic	3.3%	0.6%	11,171	1,858
Transportation Packaging Film Plastic	0.2%	0.1%	511	289
Flexible Plastic Packaging	0.1%	0.0%	311	130
R/C Plastic Packaging	0.0%	0.0%	0	0
PLASTIC PRODUCTS	**6.0%**	**2.9%**	**20,177**	**9,650**
#1 PETE Plastic Products	0.0%	0.0%	46	64
#2 HDPE Plastic Products:	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0
#5 PP Plastic Products	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	163	125
#7 Other/Unknown Plastic Products	1.0%	0.4%	3,312	1,393
PLA Compostable Products	0.0%	0.0%	14	9
Plastic Garbage Bags	1.6%	0.3%	5,241	865
Plastic Non-bag Film Products	0.3%	0.3%	999	1,001
Bulky Rigid Plastic Products	2.2%	2.5%	7,413	8,224
R/C Plastic Products	0.9%	0.8%	2,990	2,771
GLASS	**3.3%**	**0.8%**	**11,177**	**2,550**
Clear Glass Containers	2.1%	0.5%	6,955	1,729
Green Glass Containers	0.6%	0.2%	2,123	814
Brown/Other Colored Glass Containers	0.3%	0.2%	1,048	587
Plate Glass	0.1%	0.1%	267	429
Non-glass Ceramics	0.2%	0.2%	643	565
R/C Glass	0.0%	0.0%	142	125
METAL	**7.4%**	**2.8%**	**24,603**	**9,235**
Aluminum Beverage Cans	0.8%	0.3%	2,647	891
Aluminum Foil/Containers	0.3%	0.1%	1,142	195
Other Aluminum	0.0%	0.0%	79	126
Other Non-ferrous Metal	0.1%	0.0%	277	156
Food Cans - Tinned	0.8%	0.1%	2,571	496
Food Cans - Coated	0.0%	0.0%	158	93
White Goods	1.3%	2.1%	4,450	7,171
Other Ferrous Metal	2.2%	1.2%	7,301	3,941
R/C Metal	1.8%	1.0%	5,979	3,385
ORGANICS	**32.4%**	**4.7%**	**108,275**	**15,702**
Edible Food Waste- Vegetative	11.5%	2.4%	38,554	7,992
Inedible Food Waste- Vegetative	5.3%	1.5%	17,867	5,092
Edible Food Waste- Meats/Fats/Oils	4.2%	1.8%	14,167	5,911
Inedible Food Waste- Meats/Fats/Oils	0.7%	0.4%	2,338	1,300
Yard/Garden Waste- Leaves and Grass	2.8%	1.6%	9,321	5,336
Yard/Garden Waste- Prunings	1.0%	0.7%	3,260	2,229
Animal Manure	5.7%	2.8%	18,912	9,263
Animal Carcasses & Offal	0.4%	0.7%	1,394	2,249
Food Processing Wastes	0.0%	0.0%	0	0
R/C Organics	0.7%	0.3%	2,463	1,143

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
WOOD DEBRIS	**2.6%**	**1.5%**	**8,811**	**5,127**
Natural Wood	0.1%	0.1%	359	405
Treated Wood	0.4%	0.7%	1,365	2,201
Painted Wood	1.3%	1.4%	4,512	4,593
Dimensional Lumber	0.2%	0.1%	573	501
Engineered Wood	0.3%	0.3%	1,078	967
Pallets & Crates	0.0%	0.0%	0	0
Other Untreated Wood	0.0%	0.0%	70	106
Wood By-products	0.0%	0.0%	109	115
R/C Wood Debris	0.2%	0.2%	745	758
CONSTRUCTION MATERIALS	**2.2%**	**1.3%**	**7,329**	**4,219**
Plastic Lumber	0.0%	0.0%	0	0
Insulation	0.1%	0.1%	287	463
Asphalt Paving	0.3%	0.4%	877	1,410
Concrete	0.1%	0.2%	415	637
Drywall	0.2%	0.3%	738	901
Carpet	0.1%	0.1%	224	358
Carpet Padding	0.0%	0.0%	20	32
Soil, Rocks, & Sand	1.4%	1.2%	4,624	4,177
Asphalt Roofing	0.0%	0.1%	109	175
Plastic Floor Covering	0.0%	0.0%	0	0
Ceramics & Brick	0.0%	0.0%	0	0
R/C Construction Materials	0.0%	0.0%	35	41
CONSUMER PRODUCTS	**9.9%**	**3.4%**	**33,142**	**11,256**
Televisions - LCD	0.8%	1.2%	2,614	4,171
Televisions - CRT	1.1%	1.7%	3,593	5,777
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.0%	0.0%	0	0
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.5%	0.6%	1,628	1,887
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	1.4%	1.3%	4,726	4,189
Textiles- Organic	3.5%	0.8%	11,826	2,615
Textiles- Synthetic/Mixed/Unknown	0.8%	0.5%	2,769	1,517
Shoes/Purses/Belts	0.3%	0.2%	870	611
Tires & Other Rubber	0.3%	0.2%	893	650
Furniture	0.2%	0.3%	610	984
Mattresses	0.0%	0.0%	0	0
R/C Consumer Products	1.1%	1.5%	3,612	5,078
HAZARDOUS AND SPECIAL WASTES	**0.9%**	**0.4%**	**3,117**	**1,442**
Pesticides	0.0%	0.0%	0	0
HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
Compact Florescent Lamps	0.0%	0.0%	0	0
Florescent Tubes	0.0%	0.0%	0	0
Water-based Paint	0.0%	0.0%	0	0
Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Water-based Adhesives/Glues	0.0%	0.0%	92	106
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.0%	0	0
Water Repellents & Waterproofers	0.0%	0.0%	0	0
Solvents	0.0%	0.0%	0	0
Caustic Cleaners	0.0%	0.0%	0	0
Dry-cell Batteries- Single Use	0.0%	0.0%	130	67
Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	0	0
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.0%	0.0%	89	144
Explosives	0.0%	0.0%	0	0
Medical Wastes	0.6%	0.4%	1,956	1,434
Sharps	0.0%	0.0%	3	5
Pharmaceuticals & Vitamins	0.0%	0.0%	40	53
Other Cleaners/Chemicals	0.0%	0.0%	46	74
Personal Care Products	0.2%	0.1%	669	320
Other Potentially Hazardous Wastes	0.0%	0.0%	92	147
RESIDUALS	**6.3%**	**1.5%**	**21,078**	**5,056**
Disposable Diapers	2.2%	0.7%	7,496	2,260
Ash	0.4%	0.6%	1,279	2,057
Dust	0.0%	0.0%	0	0
Fines/Sorting Residues	3.7%	1.2%	12,304	4,003
Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0

Estimated Origin Specified Disposed Tons	**334,603**	*Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.*
Sample Count	**24**	

Table 31: East WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**9.3%**	**3.4%**	**12,958**	**4,803**
PAPER PACKAGING	**5.7%**	**2.8%**	**7,939**	**3,887**
Newspaper Packaging	0.0%	0.0%	9	14
Cardboard & Kraft Packaging	4.4%	2.5%	6,190	3,503
Mixed/Low-grade Paper Packaging	0.5%	0.3%	720	425
Aseptic Containers	0.0%	0.0%	39	38
Gable Top Containers	0.1%	0.0%	79	62
Other Polycoated Packaging	0.0%	0.0%	40	36
Compostable Paper Packaging	0.3%	0.2%	469	332
R/C Paper Packaging	0.3%	0.3%	393	428
PAPER PRODUCTS	**3.6%**	**1.6%**	**5,019**	**2,248**
Newspaper Products	0.4%	0.5%	570	643
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0
Magazines	0.1%	0.2%	144	222
High-Grade Paper Products	0.1%	0.1%	90	107
Other Groundwood Paper Products	0.0%	0.0%	17	28
Mixed/Low-grade Paper Products	1.0%	0.5%	1,371	762
Compostable Paper Products	1.6%	1.0%	2,184	1,458
R/C Paper Products	0.5%	0.5%	643	684
PLASTIC	**9.8%**	**4.0%**	**13,676**	**5,573**
PLASTIC PACKAGING	**3.0%**	**1.2%**	**4,128**	**1,636**
#1 PETE Plastic Bottles	0.3%	0.3%	459	448
#1 PETE Plastic Non-bottles	0.1%	0.1%	155	93
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	51	35
#2 HDPE Plastic Jars and Tubs	0.1%	0.1%	124	92
#2 HDPE Plastic Colored Bottles	0.1%	0.1%	168	113
#3 PVC Plastic Packaging	0.0%	0.0%	6	8
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.2%	0.1%	223	118
#6 PS Plastic Packaging	0.0%	0.0%	35	21
#7 Other/Unknown Plastic Packaging	0.1%	0.1%	190	109
Expanded Polystyrene Packaging	0.4%	0.3%	578	435
PLA Compostable Packaging	0.0%	0.0%	1	2
Plastic Merchandise Bags	0.1%	0.1%	184	104
Packaging Film Plastic	0.7%	0.4%	938	544
Transportation Packaging Film Plastic	0.6%	0.5%	823	732
Flexible Plastic Packaging	0.1%	0.1%	117	98
R/C Plastic Packaging	0.1%	0.1%	75	123
PLASTIC PRODUCTS	**6.8%**	**3.6%**	**9,548**	**5,030**
#1 PETE Plastic Products	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0
#5 PP Plastic Products	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	10	16
#7 Other/Unknown Plastic Products	0.8%	0.4%	1,124	528
PLA Compostable Products	0.0%	0.0%	1	2
Plastic Garbage Bags	0.6%	0.3%	897	370
Plastic Non-bag Film Products	1.5%	2.2%	2,133	3,026
Bulky Rigid Plastic Products	3.1%	2.1%	4,322	2,894
R/C Plastic Products	0.8%	0.7%	1,061	965
GLASS	**0.8%**	**0.4%**	**1,075**	**593**
Clear Glass Containers	0.2%	0.1%	311	202
Green Glass Containers	0.1%	0.1%	74	96
Brown/Other Colored Glass Containers	0.1%	0.1%	204	190
Plate Glass	0.1%	0.1%	74	106
Non-glass Ceramics	0.1%	0.1%	86	124
R/C Glass	0.2%	0.3%	327	373
METAL	**5.6%**	**1.8%**	**7,776**	**2,486**
Aluminum Beverage Cans	0.1%	0.1%	145	152
Aluminum Foil/Containers	0.1%	0.0%	91	64
Other Aluminum	0.0%	0.0%	8	12
Other Non-ferrous Metal	0.1%	0.1%	94	96
Food Cans - Tinned	0.2%	0.2%	327	262
Food Cans - Coated	0.0%	0.0%	34	47
White Goods	1.4%	1.6%	1,953	2,166
Other Ferrous Metal	2.1%	1.1%	2,952	1,575
R/C Metal	1.6%	0.6%	2,172	889
ORGANICS	**15.4%**	**7.2%**	**21,453**	**9,988**
Edible Food Waste- Vegetative	2.9%	1.6%	3,993	2,239
Inedible Food Waste- Vegetative	2.0%	1.6%	2,808	2,215
Edible Food Waste- Meats/Fats/Oils	1.8%	1.7%	2,443	2,420
Inedible Food Waste- Meats/Fats/Oils	0.3%	0.4%	373	553
Yard/Garden Waste- Leaves and Grass	2.1%	2.3%	2,920	3,233
Yard/Garden Waste- Prunings	0.1%	0.1%	165	187
Animal Manure	6.1%	6.5%	8,539	9,014
Animal Carcasses & Offal	0.0%	0.0%	35	57
Food Processing Wastes	0.0%	0.0%	0	0
R/C Organics	0.1%	0.1%	178	157

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
WOOD DEBRIS	**18.4%**	**5.7%**	**25,715**	**7,896**
Natural Wood	1.0%	1.7%	1,437	2,317
Treated Wood	0.9%	0.8%	1,213	1,097
Painted Wood	8.8%	3.5%	12,283	4,928
Dimensional Lumber	2.3%	1.5%	3,191	2,146
Engineered Wood	2.6%	1.5%	3,571	2,073
Pallets & Crates	0.5%	0.8%	724	1,169
Other Untreated Wood	0.0%	0.0%	21	29
Wood By-products	0.3%	0.5%	446	725
R/C Wood Debris	2.0%	1.1%	2,828	1,533
CONSTRUCTION MATERIALS	**17.2%**	**7.0%**	**23,944**	**9,792**
Plastic Lumber	0.3%	0.5%	461	749
Insulation	4.1%	3.2%	5,698	4,425
Asphalt Paving	0.0%	0.0%	0	0
Concrete	0.9%	1.4%	1,199	1,942
Drywall	1.9%	1.9%	2,653	2,611
Carpet	2.5%	1.9%	3,482	2,690
Carpet Padding	2.2%	2.9%	3,042	4,022
Soil, Rocks, & Sand	0.2%	0.3%	294	392
Asphalt Roofing	4.8%	5.3%	6,668	7,445
Plastic Floor Covering	0.0%	0.0%	0	0
Ceramics & Brick	0.1%	0.1%	108	146
R/C Construction Materials	0.2%	0.3%	339	472
CONSUMER PRODUCTS	**22.0%**	**5.7%**	**30,660**	**7,974**
Televisions - LCD	0.0%	0.0%	0	0
Televisions - CRT	0.5%	0.9%	741	1,200
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.0%	0.0%	0	0
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.0%	0.0%	0	0
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.7%	0.7%	942	928
Textiles- Organic	2.4%	1.3%	3,348	1,814
Textiles- Synthetic/Mixed/Unknown	1.1%	0.7%	1,558	978
Shoes/Purses/Belts	0.8%	0.8%	1,059	1,164
Tires & Other Rubber	0.3%	0.2%	376	330
Furniture	11.4%	5.7%	15,852	7,929
Mattresses	3.7%	2.9%	5,177	3,996
R/C Consumer Products	1.2%	1.7%	1,608	2,402
HAZARDOUS AND SPECIAL WASTES	**0.7%**	**0.4%**	**946**	**565**
Pesticides	0.1%	0.1%	76	124
HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
Compact Florescent Lamps	0.0%	0.0%	0	0
Florescent Tubes	0.0%	0.0%	9	14
Water-based Paint	0.2%	0.2%	229	344
Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Water-based Adhesives/Glues	0.0%	0.0%	23	31
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.1%	0.1%	108	174
Water Repellents & Waterproofers	0.0%	0.0%	35	57
Solvents	0.0%	0.0%	0	0
Caustic Cleaners	0.0%	0.0%	0	0
Dry-cell Batteries- Single Use	0.0%	0.0%	41	36
Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	0	0
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.0%	0.0%	0	0
Explosives	0.0%	0.0%	0	0
Medical Wastes	0.1%	0.1%	88	104
Sharps	0.0%	0.0%	2	3
Pharmaceuticals & Vitamins	0.0%	0.0%	35	57
Other Cleaners/Chemicals	0.0%	0.0%	0	0
Personal Care Products	0.2%	0.2%	278	289
Other Potentially Hazardous Wastes	0.0%	0.0%	21	34
RESIDUALS	**0.9%**	**0.5%**	**1,232**	**645**
Disposable Diapers	0.3%	0.2%	387	347
Ash	0.0%	0.0%	0	0
Dust	0.0%	0.0%	0	0
Fines/Sorting Residues	0.6%	0.4%	845	505
Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0

Estimated Origin Specified Disposed Tons	**139,435**	*Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.*
Sample Count	**32**	

Appendix C

City of Walla Walla Contamination Reduction and Outreach Plan

A WONDERFUL PLACE TO
LIVE WORK PLAY

City of Walla Walla

Recycling Contamination Reduction and Outreach Plan

for the City of Walla Walla

January 2021

Background

China's National Sword entered the world into a new era of recycling, exposing a system riddled and struggling with contamination. All nations faced the new reality that contamination greater than 0.5% would no longer be accepted by the largest recycling commodities market - China. Curbside and landfill recycling programs would need to be reformed to meet new standards and be marketable in this changing environment. This plan outlines the City's strategy to reduce contamination in the recycling stream.

The City of Walla Walla began wrestling with the costs and impacts of contamination/the China National Sword policy in the fall of 2017. Multiple discussions on the issue occurred with Council and various City/County Committees over the past three years (see Appendix II for additional information). City staff prepared a draft Contamination Reduction and Outreach Plan in 2019 and a recycling commodities charge was established to cover monthly commodities costs in June 2018. City Council established a Recycling Ad-Hoc Committee in 2020 to provide specific recommendations to contain or reduce recycling costs while preserving and encouraging responsible recycling. In October 2020 Council adopted the Committee's recommendations (see Appendix III).

Goals

1. Reduce the amount of contamination.
2. Reduce/control customer costs.
3. Preserve and improve the program.

Objectives

1. Identify routes with highest levels of contamination.
2. Educate public on acceptable and unacceptable items.
3. Enforce requirements through targeted enforcement.

Key Contaminants

Investigation into the key contaminants in the recycling stream indicate either "wishful recycling" (someone will recycle this item) or the customer utilizes the recycling container as an extra garbage can. In addition, the City's Recycling Ad-Hoc Committee's assessment determined that plastics are a point of confusion adding to contamination (see Recycling Ad-Hoc Committee's recommendations in Appendix III).

In surveys, like the one conducted by The Recycling Partnership in 2019, MRFs and cities in Washington identified the following recycling contaminants as the most problematic and costly to manage:

- Plastic bags and film
- Tanglers including rope, cords, chains, and hoses
- Food and liquids
- Shredded paper

- Bagged garbage
- Non-program plastics

Costs

Pioneer Recycling Services, the City's MRF, estimates contamination of 15-20% by weight. Based on the average monthly weight of 123 tons (September 2019-August 2020) X 20% = 24.6 tons of contamination at an average cost of $109/ton = monthly contamination cost of $2,682.

Additionally, contamination:

- Slows the sorting and processing of materials.
- Reduces the quality and value of the commodities.
- Can damage collection, processing, and remanufacturing equipment.
- Can cause serious injuries to collection and processing facility staff.

The Plan...

The following tasks/projects are proposed to achieve the desired Goals and Objectives:

1

Gather Data and Measurements

Data will be gathered for each route to determine those with the highest levels of contamination and what are the items of contamination.

- View items dumped from each route.
- Identify routes most contaminated.
- Attempt to identify the most common contaminate.
- Identify recyclable/acceptable materials (per Pioneer Recycling).
- Analyze data to refine education and enforcement components.
- Collect data before/during/after education and enforcement.
- Evaluate/report on effectiveness.

2

Education

Results from data gathering will influence educational component.

- Create educational materials on what goes in the bin (recycle right).
- Inform citizens on how the system works and the citizen's and city's role in the system.
- Refine education content to target the most detrimental contamination items.
- Answer/address common questions.
- Education will be predecessor to enforcement.
- Enforcement tagging will be developed to coincide with top contaminants while still encouraging responsible recycling.

3

Website/Social Media

Update the city's website and use social media to reach customers where they are.

- Educational material will be developed for various media outlets (Facebook, Twitter, YouTube, City Newsletter, Friday Feed, etc.) in conjunction with education through Recycle Coach.
- Blogs or updates will be posted on the city's website to inform and encourage citizens to recycle right.
- Social media and apps are effective tools to reach customers. The City operates a Facebook page with 8,218 followers, Twitter feed with 571 followers, Instagram presence with 1,350 followers, Nextdoor Agency account reaching 3,909 residents, Recycle Coach with 960 users and 48,162 resident interactions over the past year, OWWL app with 2,169 users, all in addition to visits to the City's website.

4

Recycle Coach

Recycle Coach is a low-cost customer service app/tool that can also help promote responsible recycling.

- Consider enhancements to support contamination reduction/educational efforts.

5

City Newsletter and Friday Feed

City prepared/issued media.

- Already an established and free communication tool.
- Reaches city employees easily and effectively.

6

Enforcement

Enforcement will follow education/outreach.

- Encourage recycling right.
- Work with Recycling Team members (Basin Disposal of Walla Walla, Finance/Customer Service Staff, Walla Walla Recycling) on recycling education/outreach/enforcement.
- Program focus - behavioral change.

7

Improve Outcomes

Continuous improvement - research, educate, enforce, revise, repeat.

- Track baseline data to measure and report on improvements/effectiveness.
- Determine which education messages are resonating with customers and how best to get that messaging to them.
- Change messaging and delivery methods according to the findings/data.

ActionPlan

Project	Tasks	Due By	Budget	Person Responsible	Status
1 Gather Data and Measurements	1. Gather data from recycling partners including Basin Disposal of Walla Walla (city's contracted recycling collector), Pioneer Recycling Services (Material Recovery Facility, MRF), Walla Walla Recycling (contracted by Basin Disposal to bale commodities for transport to MRF).	10/31/20	N/A (staff time only)	Mori Struve	Complete
	2. Pioneer Recycling Services to help define acceptable materials.	10/31/20	N/A (staff time only)	Mori Struve	Complete
	3. Identify primary contaminants along with problem collection routes. Investigate loads of recyclables as they are delivered to Walla Walla Recycling to determine the percent of contamination. Take pre-project photos of recyclable loads.	6/30/21	N/A (staff time only)	PW Comm Coordinator	On-going
	4. Track weight of recyclables (per route if possible), pre- and post-program as delivered by Basin Disposal of Walla Walla.	6/30/21	N/A	Mori/PW Comm Coordinator	
	5. Measure contamination at Walla Walla Recycling per routes after educational and enforcement procedures are implemented.	12/31/21	$3,500	PW Comm Coordinator	
	6. Data gathered will be used to refine and improve contamination reduction / education / outreach / enforcement efforts.	6/30/21	N/A	PW Comm Coordinator	On-going

Project	Tasks	Due By	Budget	Person Responsible	Status
2 Education	1. Recycling mailer to be developed and sent via bills or through mail to all recycling customers. Mailings to identify accepted items, how to "recycle right", inform customers of impending enforcement efforts, and what customers should expect.	2/26/21	$15,000	Mori/PW Comm Coordinator	
	2. Create educational videos/media releases such as: Why not pizza boxes? Lids or no lids? Why not shredded paper? Why not paper towels? If tin and aluminum cans are acceptable, why not all metal? When in doubt, throw it out! Recycling at Christmas/Holiday time. Why clean and dry? How to prepare items for recycling. Why contamination is bad. Explain the recycling process (curbside to mill) and the citizen's and city's role in the recycling system/process. Why Walla Walla does not recycle glass.	6/30/21	$20,000	PW Comm Coordinator	
	3. Dovetail and utilize information from the Department of Ecology (DOE) and The Recycling Partnership to reinforce goals.	6/30/21	$4,000	PW Comm Coordinator	

Project	Tasks	Due By	Budget	Person Responsible	Status
3 Website and Social Media	1. On website describe anti-contamination campaign and how it will benefit the citizens of Walla Walla.	12/31/20	N/A	Darci Bell	In-process
	2. Briefly describe current state of recycling.	12/31/20	N/A	Darci Bell	In-process
	3. Describe actions to decrease contamination in recycling and how bins will be checked, marked, and refused (see enforcement).	6/30/21	N/A	PW Comm Coordinator	
	4. Boost social media posts, articles, project brochures, and signage to increase views.	6/30/21	$200	Brenden Koch	
	5. Include an intro paragraph on the City's Solid Waste page that briefly describes the City's recycling goals.	12/31/20	N/A	Darci Bell	In-process
	6. Create an area on the Solid Waste page that can be easily updated to announce the latest updates on recycling news.	6/30/21	N/A	Darci Bell/PW Comm Coordinator	
	7. Describe the need to reduce contamination. Show before/after photos at Walla Walla Recycling and include a list of benefits to the community/public (such as decreased cost and benefits of recycling).	6/30/21	N/A	PW Comm Coordinator	

Project	Tasks	Due By	Budget	Person Responsible	Status
4 Recycle Coach	1. Update graphics to currently accepted items list.	2/26/21	$3,500	Mori Struve	
	2. Consider single item campaign to focus on a specific contaminate; campaign lasts 8 weeks ($1,295/each campaign).	12/31/21	$1,500	PW Comm Coordinator	
	3. Track number of new app downloads and app usage.	12/31/21	N/A	PW Comm Coordinator	
	4. Consider Standard package ($3,600/year) which would include report a problem option, 3 things you need to know, 4-page recycling guide, blog content, what goes where search, coloring book pages, videos, articles and personalized calendars with reminders. Separate option would be a customized package.	12/31/21	$3,600	PW Comm Coordinator	
5 City Newsletter & Friday Feed	1. Prepare short messages for City newsletter/email blast and Friday Feed (e.g. why paper towels are not recyclable, why pizza boxes are not recyclable, etc. – see Education section above).	4/30/21	N/A	PW Comm Coordinator	

Project	Tasks	Due By	Budget	Person Responsible	Status
6 Enforcement	1. Work with the recycling team (BDI, Sanitation, Finance /Customer Service Staff, Walla Walla Recycling) to design the enforcement process and procedures.	6/30/21	N/A	Mori Struve	
	2. Create a tag for first offence of recycling bin rules.	6/30/21	$1,500	PW Comm Coordinator	
	3. Create tag for repeat offence and extreme offences of recycling bin rules.	6/30/21	$1,500	PW Comm Coordinator	
	4. Implement spot-checks/enforcement and tagging. Repeat offenders or blatant violations will have cans refused for pick-up until the contaminate is removed. Repeat offenders may have can picked up as trash and charged accordingly.	9/30/2021	$15,000 (intern/temp)	PW Comm Coordinator	

Project	Tasks	Due By	Budget	Person Responsible	Status
7 Improve Outcomes	1. Compare before and after contamination.	12/31/21	N/A	PW Comm Coordinator	
	2. Create feedback loop to customers.	12/31/21	$9,500	PW Comm Coordinator	
	3. Consider customer survey to get feedback (Survey Monkey).	6/30/21	$500	PW Comm Coordinator	
	4. Continue working to decrease contamination of recyclables and provide best product to market.	Continuous	N/A	PW Comm Coordinator	
	5. Decrease weight of contaminated recyclables by updating tools utilized above.	N/A	N/A	PW Comm Coordinator	
	6. Determine if the curbside collection system should be modified (e.g. source separation) for the next collection contract – Notice of expiration of the existing contract must be sent to BDI by January 31, 2022.	12/31/2021	N/A	PW Comm Coordinator	
8 Preparation for Enforcement Roll-Out	1. Prepare press release to newspaper, radio stations, chamber of commerce to announce beginning date of Enforcement Project. Include list of benefits to the community and project details.	6/30/21	N/A	PW Comm Coordinator	
	2. Train enforcement team on protocols, the enforcement process and why it is necessary.	6/30/21	N/A	PW Comm Coordinator	
	3. Order tags, mailers and any necessary equipment.	6/30/21	$4,000	PW Comm Coordinator	

This Contamination Reduction and Outreach Plan for the Recycling Program is meant to be a living document and updated as needed and/or as internal and external factors change. For questions or further input, contact the City of Walla Walla's Public Works Operations Manager, Mori Struve, 509.527.4463, **mstruve@wallawallawa.gov**

References:

Dave Claugus
Pioneer Recycling Services
16810 SE 120th Avenue
Clackamas, OR 97105
P: 916.205.3136

Booker Nagely
Operations Manager
Basin Disposal Inc.
P.O. Box 3850
Pasco, WA 99302-3850
P: 509.547.2476 ext. 713

Marty Gehrke
Owner
Walla Walla Recycling
827 North 12th Avenue
Walla Walla 99362
P: 509.525.1482

List of Appendices

Appendix I –
Reference Information/Resources

The Recycling Partnership: https://recyclingpartnership.org/

Utilize the Recycling Partnerships' graphics and sample mailers to help design focused mailers to customers regarding Walla Walla's top contamination problems. Incorporate some of the Recycling Partnerships guidance documents for anti-contamination program including MRF Surveys, MRF Tracking Forms and curbside training and tracking form suggestions.

Recycle Coach: https://solutions.recyclecoach.com

Use the Recycle Coach app to inform customers about the recycling program. Update accepted items and rules on/with Recycle Coach. Consider upgrading to perform online specialize focal training of residence and perform single-item campaign once top contaminants identified.

Washington Department of Ecology:
https://ecology.wa.gov/recycleright

Use Recycle Right, It Matters! Free information, commercial spots and toolkit to encourage others to recycle correctly.

Appendix II – History/Background Information

History/How did we get here?

History/How did we get here?

2020 Recycling Commodities Surcharge Adoption (Tipping Point Plan)

- November 6, 2019

Recycling Commodities Surcharge Discussion

- December 2, 2019

Recycling Commodities Surcharge Discussion

- December 16, 2019

Revised 2020 Recycling Commodities Surcharge Adopted

- December 18, 2019

Recycling Ad-Hoc Committee Established

- February 12, 2020

ar-2965 **30 Min**

City Council - Work Session

Meeting Date: 03/12/2018

Item Title: City Recycling Program - China National Sword

Submitted For: Mori Struve, Public Works Department, Public Works Administration

Add'l Contributors:

Project No: **Funding/BARS No.:**

Financial Comments:

The City's residential Recycling Program generates approximately 130 tons of recycling material each month. Historically, recycling had a positive value, meaning those tons were sold for a profit which put money back into the Sanitation Fund reducing garbage costs for customers. But now, costs are reaching $90 per ton and may go even higher. If rates stay this high, the City will pay over $140,000 this year to dispose of recyclable commodities. Due to volatility in the commodities market in past years, the 2018 Sanitation budget included an expense of $35,000 for potential recycling commodities costs.

Information

HISTORY:

SUMMARY: A presentation will be given by Public Works Operations Manager, Mori Struve and Public Works Director, Ki Bealey regarding the current market conditions of recycling. Council will have the opportunity to discuss the topic and provide feedback on Staff's proposals to improve quality (value), reduce contamination and manage costs.

Recyclable commodities costs have hit record highs in the past few months. China initiated the "National Sword" Program that drastically changed the cleanliness and type of recyclables it will accept. Until recently, China represented approximately 60% of the world market for the purchase of recyclable commodities. The United States and many other countries have become "addicted" to China for the disposal of recyclable commodities. As of March 1, 2018, China is simply saying “no” to contamination, setting a standard of 0.5% for all recyclable commodities; a standard the recycling industry cannot presently meet.

Recycling values for the City have only been positive five times in the last fourteen months. These costs have not been felt directly by customers because the City’s Sanitation Fund has been absorbing the costs through garbage rates; however, with costs growing, that approach is not sustainable, and cities, including Walla Walla, must find a new way to cover the costs of recycling.

POLICY ISSUES:

In an effort to control program costs, Staff proposes to:
1) Focus collection on commodities of value;
2) Evaluate low cost options to reduce contamination; and
3) Develop a financial strategy to address the variable recycling commodities expense.

RCW 70.95.010 lists the State's goals and priorities for solid waste management.

RCW 70.95.090 stipulates recyclables must be collected from single and multi-family residences, unless Ecology approves an alternate program...
County and city comprehensive solid waste management plans—Contents.
(7) The waste reduction and recycling element shall include the following:
(a) Waste reduction strategies;
(b) Source separation strategies, including: *(emphasis added)*
Programs for the *collection of source separated materials from residences in urban and rural areas. In urban areas, these programs shall include collection of source separated recyclable materials from single and multiple-family residences, unless the department approves an alternative program,* according to the criteria in the planning guidelines. Such criteria shall include: Anticipated recovery rates and levels of public participation, availability of environmentally sound disposal capacity, access to markets for recyclable materials, unreasonable cost impacts on the ratepayer over the six-year planning period, utilization of environmentally sound waste reduction and recycling technologies, and other factors as appropriate. In rural areas, these programs shall include but not be limited to drop-off boxes, buy-back centers, or a combination of both, at each solid waste transfer, processing, or disposal site, or at locations convenient to the residents of the county. The drop-off boxes and buy-back centers may be owned or operated by public, nonprofit, or private persons;

PLAN COMPLIANCE:

STRATEGIC PLAN:
Strategy 4: We will foster economic development and sustain financial stability.

COMPREHENSIVE PLAN: Objective 2 - To maintain a sound financial condition to allow flexibility that ensures the City is in a position to react and respond to changes in the economy and new service challenges without measurable financial stress.

ALTERNATIVES:

In November 2017, Staff inquired with the Department of Ecology (Ecology) about the possibility of landfilling recyclables should the cost of recycling exceed a predetermined financial tipping point. This inquiry was prompted by the industry stating it was possible that recyclables may have to be landfilled if there was no market for them.

Ecology responded that the City/County would be required to do "an entire overhaul" of its Comprehensive Solid Waste Plan.

Staff replied that the Solid Waste Management Plan does not state that recycling shall be done at any cost, but rather in a “cost effective manner” and that Walla Walla is trying to identify at what cost it is economically better to dispose of recyclables, rather than paying transportation costs to a Material Recovery Facility (MRF) then disposed of in another Landfill.

Ecology (re)stated that the plan would need to be revised because the County priorities would be moving in an entirely different direction. It would need more than just an amendment because it would be altering goals, short/long term planning, impact on haulers, residents, etc.

A plan revision has not been pursued, but could be if so desired by Council.

Attachments

Presentation

China's National Sword

March 12, 2018
City Council Work Session

Presented by:
Mori Struve, Public Works Operations Manager
Ki Bealey, Public Works Director

Presentation Purpose

- Inform Council about China National Sword
- Explain its impacts
- Receive Council input on recommended actions

Regulatory Requirement

RCW 70.95.090

(7) The waste reduction and recycling element shall include the following:

(b) Source separation strategies, including:

Programs for the collection of source separated materials from residences in urban and rural areas. In urban areas, these programs shall include collection of source separated recyclable materials from single and multiple-family residences, unless the department approves an alternative program…

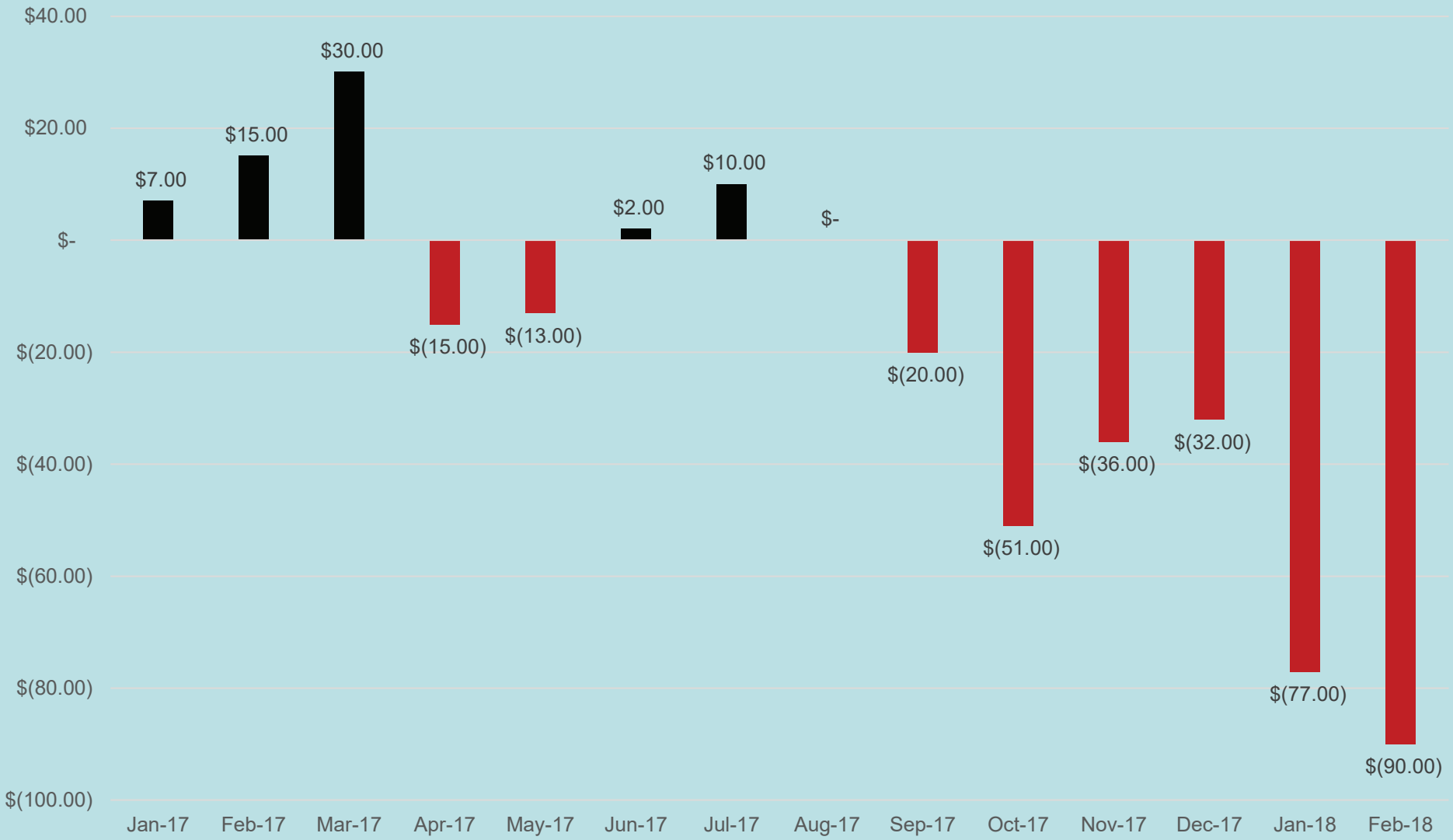
China's National Sword – What is it?

- Bans the import of at least 24 varieties of solid waste and recyclables
- Imposes 0.5% contamination maximum limit
- Dramatic reduction in Importer licenses
  - 2017 First Quarter – 2,937
  - 2018 First Quarter – 108
- China's goals:
  - Clean up environment and corruption
  - Create and build up their own domestic recycling programs and markets

Global Impacts

- Closing of largest market for mixed paper and plastics (#3-7)
- One bale in one container found with higher than 0.5% contamination – the entire allotment is rejected
- No more negotiating price based on quality

Local Impact – Recycling Costs per Ton



How did we get here?

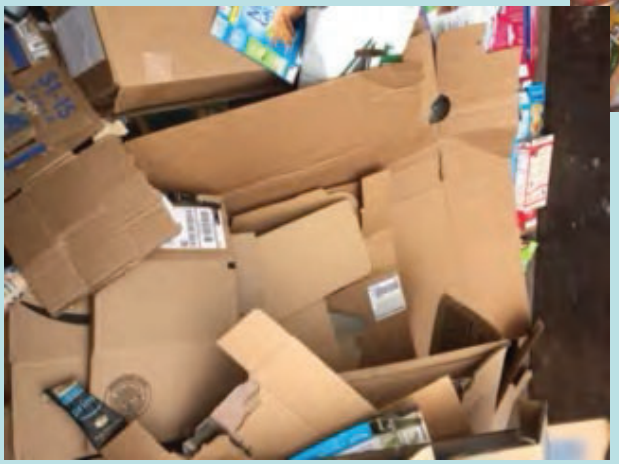
- Decades of encouraging folks to recycle (behavior training)
- Created mis-conceptions:
  - Recycling is “free” (or of very little cost) because all commodities have value
  - When in doubt, throw it in (maybe it can be recycled?)
  - More is better

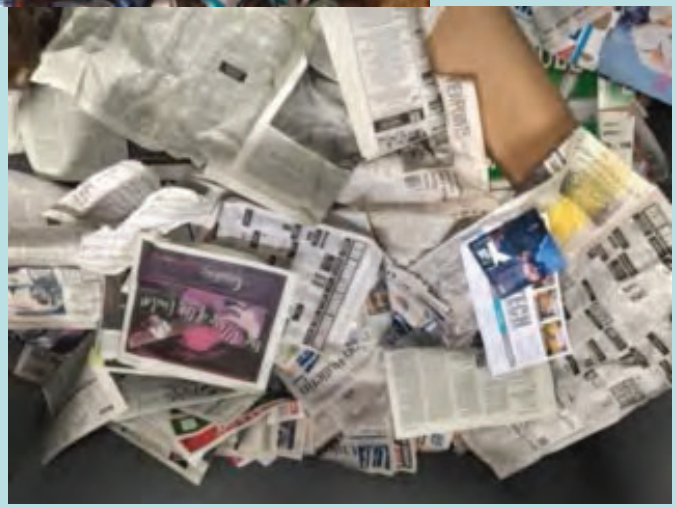
Reality

- Supply overwhelming demand = low commodity value
- Too much contamination/non-recyclable material in the mix
- Recycling processing costs increasing
- Industry's Recommendation – Recycling fewer items will preserve and enhance commodity values

Industry Response

- Communicate impacts and recommended actions
- Emphasis on quality and value
- Reduce contamination
- Looking for new global and domestic markets
- Revised List of Materials for Commingled Programs

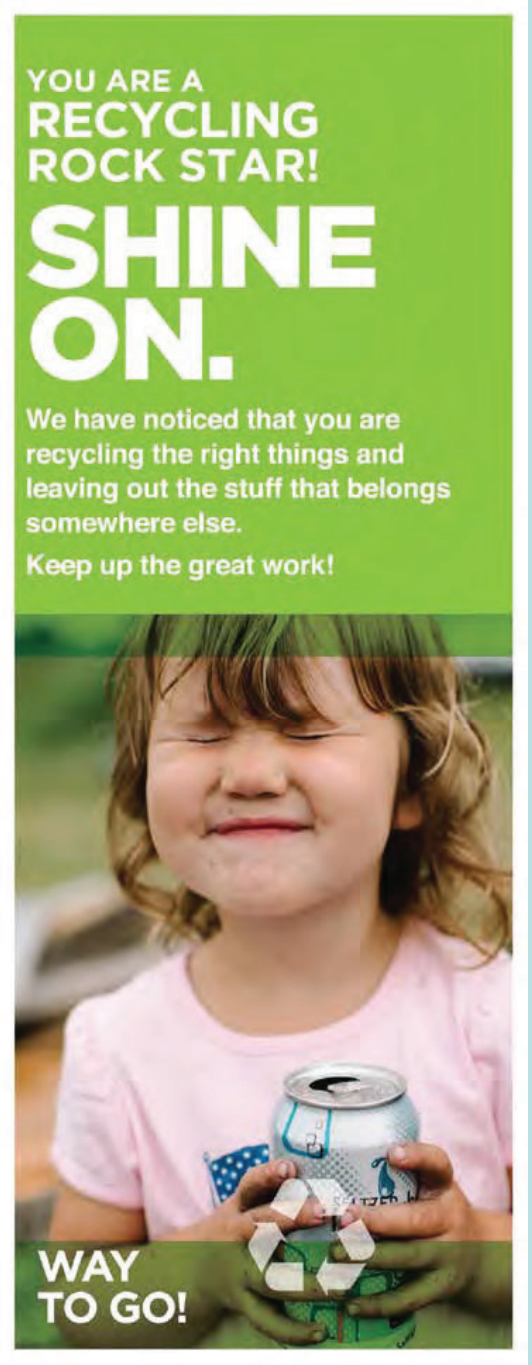




Recommendations for the City's Recycling Program

- Maintain our commitment to recycling
- Focus on quality not quantity – When in doubt, throw it out!
- Target commodities of value: Mixed Paper, Cardboard, #1 & 2 Plastic, tin, aluminum
- Implement an adjustable recycling surcharge fee to offset negative cost of commodity disposal

- ✓ Recommendations presented to and endorsed by the City's Sustainability Committee on March 8, 2018
- ✓ Committee also recommends including funding for outreach and education



ar-3029 **45 Min.**

City Council - Work Session

Meeting Date: 05/14/2018

Item Title: Recycling Surcharge Discussion

Submitted For: Ki Bealey, Public Works Department

Add'l Contributors: Finance Director, Jean Teasdale; Accounting Supervisor, Rachel Warren; PW Operations Manager, Mori Struve

Project No: NA **Funding/BARS No.:** NA

Financial Comments:

The City's residential Recycling Program generates approximately 130 tons of recycling material each month. Historically, recycling had a positive value, meaning those tons were sold for a profit which put money back into the Sanitation Fund reducing garbage costs for customers. But now, costs are $100 per ton and may go even higher. If rates stay this high, the City will pay over $140,000 this year to dispose of recyclable commodities.

Due to volatility in the commodities market in past years, the 2018 Sanitation budget included an expense of $35,000 for potential recycling commodities costs.

The 2018 per ton tip fee at Sudbury is $89.80.

Proposed 2018 recycling commodities surcharge is $2.42 per month for 2018 with an effective date of August 1. The maximum for 2018 would be $3.17 per month. Please see the calculations in the staff report for additional information.

Information

HISTORY:

Recycling commodities costs have hit record highs in the past few months. China initiated the National Sword; Program that drastically changed the cleanliness and type of recyclables it will accept. Until recently, China represented approximately 60% of the world market for the purchase of recyclable commodities. The United States and many other countries have become addicted to China for the disposal of recyclable commodities. As of March 1, 2018, China is simply saying "no" to contamination, setting a standard of 0.5% for all recyclable commodities; a standard the recycling industry cannot presently meet.

Recycling values for the City have only been positive five times in the last sixteen months. These costs have not been felt directly by customers because the City's Sanitation Fund has been absorbing the costs through garbage rates; however, with costs growing, that approach is not sustainable, and cities, including Walla Walla, must find a new way to cover the costs of recycling, consider abandoning recycling, or pursue some combination thereof.

In October 2017, staff first informed the Solid Waste Council Focus Group of the China Sword issue, the rising cost of recycling commodities disposal, and the impacts on the City's Recycling Program. It was discussed again with the Council Focus Group in November 2017.

In October 2017, in response to rising costs, staff prepared an amendment to the Solid Waste Management Plan to focus collection on items of highest value (paper, metals, plastic). The amendment was reviewed and approved by the Solid Waste Advisory Committee (SWAC) and subsequently the Department of Ecology (DOE).

On March 8, 2018, staff presented to the Sustainability Committee seeking the Committee's input on the issue. The Sustainability Committee recommended pursuing an adjustable recycling surcharge to offset the cost of recycling commodities charges. Staff presented this to Council at the Work Session on March 12. Council directed staff to come back to Council with a financial proposal for a recycling surcharge.

If approved by Council at the May 23 meeting, the commodities surcharge would become effective on August 1. The proposed rate would recover the costs, beyond the budgeted $35,000 expense from January 1 through July 31, as well as anticipated future costs from August 1 to December 31. Recovery of the January-July expenses will require the need for a higher surcharge on a temporary basis.

The monthly surcharge for 2018 was calculated by estimating the cost for recycling each month ($12,000), divided by the number of recycling accounts within City limits. The calculation for 2018 is as follows:

1. $12,000 / 9,000 = $1.33 per month for August 1 – December. 31, 2018, **plus**
2. ($12,000 x 7 months - $35,000 budgeted amount) / 9,000) / 5 (the remaining months in 2018) = $1.09, this additional surcharge covers the estimated expenses incurred January 1 – July 31, less the budgeted $35,000 expense, spread over the months of August 1 – December 31.
3. Total estimated surcharge is therefore $1.33 + $1.09 = $2.42 per month for August 1 - December 31, 2018.

To estimate the maximum surcharge, Finance used historical data to calculate the cost for the highest monthly recycling tonnage.

1. 144 tons (maximum tonnage) x $130 (guess-estimated maximum cost) per ton / 9000 = $2.08
2. Additional surcharge for January 1 to July 31, 2018 = $1.09
3. Total estimated surcharge is $2.08 + $1.09 or $3.17 per month for the 2018 recycling surcharge.

Each quarter, Finance will review the revenue generated by the surcharge and if necessary, adjust the surcharge for the next quarter. <u>At no time will the surcharge exceed the maximum amount without prior approval by Council</u>.

Staff anticipates the 2019 surcharge will be less than 2018 because costs will be spread over 12 months rather than 5 months. To calculate the 2019 surcharge, Finance will use the data from 2018 to project the annual cost, divide that amount by 12 months and divide that amount by the number of recycling accounts within City limits (projected annual cost / 12 months / # of recycling accounts). E.g. 130 tons / month x $130 per ton / 9,000 = $1.88 per month (current estimated maximum).

The following is Staff's proposed outreach plan to notify the public of this action:
1) Guest editorial to the Union-Bulletin (Friday, May 4)
2) Citizens notification of the surcharge/justification in the May, June, July, and August email newsletters and the June, July, and August utility bill newsletters
3) Utility Bill explanatory message

POLICY ISSUES:

RCW 70.95.010 lists the State's goals and priorities for solid waste management.

RCW 70.95.090 stipulates recyclables must be collected from single and multi-family residences, unless Ecology approves an alternate program...
County and city comprehensive solid waste management plans—Contents.
(7) The waste reduction and recycling element shall include the following:
(a) Waste reduction strategies;
(b) Source separation strategies, including: (emphasis added)

Programs for the collection of source separated materials from residences in urban and rural areas. In urban areas, these programs shall include collection of source separated recyclable materials from single and multiple-family residences, unless the department approves an alternative program, according to the criteria in the planning guidelines.

Such criteria shall include:
Anticipated recovery rates and levels of public participation, availability of environmentally sound disposal capacity, access to markets for recyclable materials, unreasonable cost impacts on the ratepayer over the six-year planning period, utilization of environmentally sound waste reduction and recycling technologies, and other factors as appropriate. In rural areas, these programs shall include but not be limited to drop-off boxes, buy-back centers, or a combination of both, at each solid waste transfer, processing, or disposal site, or at locations convenient to the residents of the county. The drop-off boxes and buy-back centers may be owned or operated by public, nonprofit, or private persons.

PLAN COMPLIANCE:

STRATEGIC PLAN:
Strategy 4: We will foster economic development and sustain financial stability.
COMPREHENSIVE PLAN:
Objective 2 - To maintain a sound financial condition to allow flexibility that ensures the City is in a position to react and respond to changes in the economy and new service challenges without measurable financial stress.
2014 WALLA WALLA COUNTY SOLID WASTE AND MODERATE RISK WASTE MANAGEMENT PLAN
Recycling Goals and Objectives
Section 3.1 Education and Outreach- Goals and Objectives
• Increase recycling and recovery efforts and accomplishments
• Expand availability of opportunities of recycling and yard waste collection within the municipalities, unincorporated County area, and Urban Growth Area.
Section 3.3 Recycling- Recycling is the second tier in the hierarchy of solid waste management in the State of Washington.
Section 3.3.1.1 Goals and Objectives
• Work toward reaching a recycling rate of 50% by 2023.
• Continue to encourage and educate residents and businesses to compost and recycle
• Expand the availability of opportunities for recycling and yard waste collection within the municipalities, unincorporated County area, and Urban Growth Area.
CITY GREENHOUSE GAS POLICY:
Continue to promote and expand recycling programs…improved management of waste handling, reductions in waste generation, and expansion of waste diversion programs.

ALTERNATIVES:

There are a number of alternatives Council could consider including, but not limited to:
1) Recover the $35,000 Sanitation expense to date (2018) in addition to the commodity costs incurred beyond the $35,000 in 2018.
2) Implement the surcharge and pursue elimination of the Recycling Program through a Solid Waste Management Plan Update.
3) Implement the surcharge and pursue a per ton cost cap for recycling wherein recycling charges exceeding some per ton number would be landfilled locally (DOE has said that this too will require a Solid Waste Management Plan Update (the 2014 update cost approximately $120,000 not including staff time).
4) Continue having the Sanitation Fund bear the expense and pursue elimination of the recycling program.
5) Raise Sanitation rates to cover the recycling commodities cost.

Other considerations:
• The City's current contract with BDI for recycling collection extends through January 31, 2024.
• If the City's curbside recycling program is suspended, what happens to the local system (e.g. Walla Walla Recycling)?

CITY MANAGER COMMENTS:

Approved for City Council workshop discussion.

Attachments

March 12, 2018 Presentation

Resident Sentiments

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ar-3013 **Pgs. 121-125**

City Council - Regular Meeting

Meeting Date: 06/13/2018

Item Title: Ordinance establishing a recycling commodities surcharge

Submitted For: Ki Bealey, Public Works Department

Add'l Contributors: Finance Director, Jean Teasdale; Accounting Supervisor, Rachel Warren; PW Operations Manager, Mori Struve

Project No:
NA

Financial Comments:

The City's residential Recycling Program generates approximately 130 tons of recycling material each month. Historically, recycling had a positive value, meaning those tons were sold for a profit which put money back into the Sanitation Fund reducing garbage costs for customers. But now, costs are over $100 per ton and may go even higher. If rates stay this high, the City will pay over $140,000 this year to dispose of recyclable commodities. Due to volatility in the commodities market in past years, the 2018 Sanitation budget included an expense of $35,000 for potential recycling commodities costs.

All Contracts:

Federally funded contracts only:
Not Applicable

Construction contracts only:
Not Applicable

Brief Summary of Requested Action:

Adopt an Ordinance establishing a recycling commodities surcharge of $3.30 per month to pay for the costs of transport (separate from collection), processing, and sales of recycling materials.

Information

HISTORY:

As reviewed at the May 14 Council Work Session, recycling values for the City have only been positive five times in the last fourteen months. These costs have not been felt directly by customers because the City's Sanitation Fund has been absorbing the costs through garbage rates; however, with costs growing, that approach is not sustainable, and cities, including Walla Walla, must find a new way to cover the costs of recycling. A recycling commodities surcharge for recycling customers is proposed to address this volatile expense.

The surcharge will be effective on August 1. As a result, the City will need to recover costs from January 1 through July 31, as well as the costs from August 1 to December 31, over the remainder of this year (5 months). This will require the need for higher surcharge on a

temporary basis.

The proposed monthly surcharge for 2018 is calculated by estimating the cost for recycling each month, divided by the average number of recycling units. The calculation for 2018 is:

1. Costs for August 1 - December 31: 128 average tons/month * $100/ton / 9,000 accounts = $1.42 per month, plus
2. Costs for June 1 - July 31: (128 average tons/month * $100/ton * 2 months / 9,000) / 5 months = $0.57, plus
3. Costs for January 1 - May 31: ($59,082 / 9,000) / 5 months = $1.31
4. Total estimated surcharge is therefore $1.42 + $0.57 + $1.31 or $3.30 per month.

Staff anticipates the 2019 surcharge will be less than 2018 because costs will be spread over 12 months rather than 5 months. To calculate the 2019 surcharge, Staff will use the data from 2018 to project the annual cost, divide that amount by 12 months and divide that amount by the number of recycling units (projected annual cost / 12 months / # of recycling units). E.g. 144 tons / month x $150 per ton / 9,000 = $2.40 per month (current estimated maximum). The 2018 rate will remain in effect until replaced with a new rate approved by Council. Revenue received in excess of the amount needed will be used to offset future costs until such time as the surcharge can be eliminated.

This issue has been discussed previously with Council, the Solid Waste Advisory, and the Sustainability Committee; most recently at the May 14, 2018 City Council Work Session.

POLICY ISSUES:

RCW 70.95.010 lists the State's goals and priorities for solid waste management. RCW 70.95.090 stipulates recyclables must be collected from single and multi-family residences, unless Ecology approves an alternate program...
County and city comprehensive solid waste management plans—Contents.
(7) The waste reduction and recycling element shall include the following:
(a) Waste reduction strategies;
(b) Source separation strategies, including: (emphasis added)
Programs for the collection of source separated materials from residences in urban and rural areas. In urban areas, these programs shall include collection of source separated recyclable materials from single and multiple-family residences, unless the department approves an alternative program, according to the criteria in the planning guidelines. Such criteria shall include: Anticipated recovery rates and levels of public participation, availability of environmentally sound disposal capacity, access to markets for recyclable materials, unreasonable cost impacts on the ratepayer over the six-year planning period, utilization of environmentally sound waste reduction and recycling technologies, and other factors as appropriate. In rural areas, these programs shall include but not be limited to drop-off boxes, buy-back centers, or a combination of both, at each solid waste transfer, processing, or disposal site, or at locations convenient to the residents of the county. The drop-off boxes and buy-back centers may be owned or operated by public, nonprofit, or private persons.

Staff initially discussed establishing a maximum surcharge that could be adjusted down on a quarterly basis, however regulation in the State of Washington does not allow for such delegation of rate setting. Staff therefore proposes a fixed surcharge adjusted on an as needed basis.

PLAN COMPLIANCE:

STRATEGIC PLAN:
Strategy 4: We will foster economic development and sustain financial stability.
COMPREHENSIVE PLAN: Objective 2 - To maintain a sound financial condition to allow flexibility that ensures the City is in a position to react and respond to changes in the economy and new service challenges without measurable financial stress.

ALTERNATIVES:

1) Implement the surcharge and pursue elimination of the Recycling Program through and a Solid Waste Management Plan Update.
2) Implement the surcharge and pursue a per ton cost cap for recycling wherein recycling charges exceeding some per ton number would be landfilled locally (DOE has said that this too will require a Solid Waste Management Plan Update).

STAFF RECOMMENDATION:

Staff recommends adopting an Ordinance establishing a recycling commodities surcharge.

Additionally, since costs continue to escalate at an extreme rate, Staff further requests Council's approval to discuss a possible cost cap with the Department of Ecology on recycling costs.

CITY MANAGER COMMENTS:

Approved for City Council action.

Attachments

Ord 2018-14

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ar-3074 **Pgs. 73-78**

City Council - Regular Meeting

Meeting Date: 12/19/2018

Item Title: 2019 Recycling Rates

Submitted For: Ki Bealey, Public Works Department

Financial Comments:

For 2018, the City's residential Recycling Program generated approximately 125 tons of recycling material each month. Historically, recycling had a positive value, meaning those tons were sold for profit, which put money back into the Sanitation Fund reducing garbage costs for customers. But over the past year with the collapse of the recycling commodities market, costs have been as high as $100 per ton resulting in a cost of over $130,000 for the year.

This action proposes to reduce the monthly recycling commodities charge from $3.30/month to $1.21/month for 2019.

All Contracts:

Federally funded contracts only:
Not Applicable

Construction contracts only:
Not Applicable

Brief Summary of Requested Action:

Adopt an Ordinance to reduce the monthly recycling commodities surcharge to $1.21 per month to pay for the costs of transport (separate from collection), processing, and sales of recycling material

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Information

HISTORY:

Recycling values for the City haven't been positive since July 2017. Prior to implementing the recycling commodities charge earlier this year (Ord. 2018-14), commodies costs were not felt directly by customers because the City's Sanitation Fund absorbed the costs through garbage rates; however, with the collapse of the recycling commodities market in 2018, that approach was not sustainable.

The current $3.30/month surcharge went into effect on August 1 as rate payers had to recover costs from January 1 through July 31, as well as the costs from August 1 to December 31. This required the need for higher surcharge on a temporary basis. For 2019, the costs will be distributed out over a 12-month period instead of 5-months.

The proposed monthly surcharge for 2019 is calculated by estimating the cost for recycling each month, divided by the average number of recycling units. The calculation for 2019 is therefore:

The average monthly tonnage (125.08 tons/month) * the average monthly cost per ton ($86.91/ton) / the average number of accounts (9,000 accounts) = $1.21 per month.

The 2019 rate will remain in effect until it is replaced with a new rate approved by Council. This issue has been discussed previously with Council, the Solid Waste Advisory, and the Sustainability Committee; most recently at the June 13, 2018 Regular City Council meeting wherein the 2018 rate was established.

POLICY ISSUES:

RCW 70.95.010 lists the State's goals and priorities for solid waste management.
RCW 70.95.090 stipulates recyclables must be collected from single and multi-family residences, unless Ecology approves an alternate program...
County and city comprehensive solid waste management plans—Contents.
(7) The waste reduction and recycling element shall include the following:
(a) Waste reduction strategies;
(b) Source separation strategies, including: (emphasis added)
Programs for the collection of source separated materials from residences in urban and rural areas. In urban areas, these programs shall include collection of source separated recyclable materials from single and multiple-family residences, unless the department approves an alternative program, according to the criteria in the planning guidelines. Such criteria shall include: Anticipated recovery rates and levels of public participation, availability of environmentally sound disposal capacity, access to markets for recyclable materials, unreasonable cost impacts on the ratepayer over the six-year planning period, utilization of environmentally sound waste reduction and recycling technologies, and other factors as appropriate. In rural areas, these programs shall include but not be limited to drop-off boxes, buy-back centers, or a combination of both, at each solid waste transfer, processing, or disposal site, or at locations convenient to the residents of the county. The drop-off boxes and buy-back centers may be owned or operated by public, nonprofit, or private persons. Staff initially discussed establishing a maximum surcharge that could be adjusted down on a quarterly basis, however regulation in the State of Washington does not allow for such delegation of rate setting. Staff therefore proposes a fixed surcharge adjusted on an as needed basis.

ALTERNATIVES:

Set a different rate.

STAFF RECOMMENDATION:

Staff recommends adopting an Ordinance to reduce the monthly recycling commodities surcharge to $1.21 per month.

CITY MANAGER COMMENTS:

Happily approved for City Council action!

Attachments

Ord 2018-50
Monthly Costs per Ton

ar-3525 **45 Min.**

City Council - Work Session

Meeting Date: 08/26/2019

Item Title: 2019 Recycling Commodities Surcharge

Submitted For: Ki Bealey, Public Works Department

Add'l Contributors:

Project No: **Funding/BARS No.:**

Financial Comments:

For 2018 and 2019 (Jan-June), the City's residential Recycling Program averaged 125 tons of recycling material each month. Historically, recycling had a positive value, meaning those tons were sold for a profit, which put money back into the Sanitation Fund reducing garbage costs for customers. Since September 2017, recycling commodities costs have been negative with a cost as high as $118 per ton (May 2019). The commodities surcharge established for 2019 was based on average costs from 2018 ($86.91/ton), however the costs for 2019 are averaging $111/ton and have been at or above $115/ton the past four months (April-July).

The monthly recycling commodities surcharge established in 2018 was $3.30/month as it had only 5-months to cover commodities costs in 2018. The 2019 rate, which was based on 2018 costs, was established at $1.21/month but will be insufficient to cover expenses based on current cost trends.

The recycling commodities rate for 2019 will either need to be increased to cover anticipated costs for the year or some other cost control mechanism or strategy implemented. The purpose of this discussion is to identify one or two alternatives to investigate more thoroughly to bring back to Council for action/consideration.

Information

HISTORY:

Recycling values for the City haven't been positive since July 2017. Prior to implementing the recycling commodities charge in 2018 (Ord. 2018-14), commodities costs were not felt directly by customers because the City's Sanitation Fund absorbed the costs through garbage rates; however, with the collapse of the recycling commodities market in 2017, that approach was not sustainable. The 2018 surcharge ($3.30/month) went into effect on August 1, 2018 as rate payers had to recover costs from January 1 through July 31, as well as the costs from August 1 to December 31, 2018. For 2019, the costs were expected to be distributed out over a 12-month period instead of 5-months.

The monthly surcharge for 2019 (Ord. 2018-50) was calculated by estimating the cost for recycling each month, divided by the average number of recycling units. The calculation for 2019 was therefore: The average monthly tonnage (125.08 tons/month) * the average monthly cost per ton ($86.91/ton) / the average number of accounts (9,000 accounts) = $1.21 per month.

To address the projected shortfall for 2019, assuming an effective date of September 1, the rate would need to be increased approximately $1.05 per month for a total (Sept-Dec) of $2.26/mo.

Contamination continues to be an issue contributing to high monthly costs, both in unit pricing and the tonnage collected. Reducing contamination at the local level will have little effect on unit pricing because the unit cost is driven by much larger market forces than Walla Walla controls. However, reducing the amount of contamination would reduce tonnage therein reducing monthly costs. It is with that interest that staff prepared the attached contamination reduction plan (draft attached). This plan is in general alignment with that required by House Bill 1543 (see highlights below in the policy section). Additionally, on August 8 staff submitted a grant funding request to the Department of Ecology to assist in funding activities identified in the proposed plan

Staff also reached-out to Pioneer Recycling, the material recovery facility (MRF) serving the city through the city's contract with BDI, to get their view on the future of recycling. According to Dave Claugus (Pioneer Recycling), changes are in the works that will improve the market for recyclables:

- "The current pricing (for recycling) is the lowest of my entire 35+ year career. While I expect pricing to stay low for at least a little longer, Pioneer does expect pricing for the Paper grades, which are still about 75% of the ResMix yield, to improve significantly over the mid to long term. This conclusion results from the number of announced mill expansion projects in both North America and Southeast Asia. Three of the projects are local to the Pacific Northwest.All three of those local projects should be up and running by this time next year.Help for recycle paper demand is truly on the way!"
- "Mills all over the world want better quality and they want it now.Pioneer is responding to these demands by adding additional sorting equipment at both of our facilities.The first of these projects, in Tacoma, will be completed by the end of this August.We expect to have additional sorting equipment installed in our Portland plant by this time next year."
- "In my 35+ years in the business I have only dealt with one mill that actually was willing to pay more for better quality.What all the other mills did was take for granted the quality they demanded.If you couldn't achieve the quality they demanded, they just stopped buying from you."
- "With all of the new paper mill projects coming online 6 to 36 months from now, paper pricing will undoubtedly improve and the value of ResMix with it."

For additional information, please refer to the attached "Recycling Isn't Broken" presentation recently given by Mr. Claugus' to the Washington State Recycling Association.

POLICY ISSUES:

RCW 70.95.010 lists the State's goals and priorities for solid waste management.
RCW 70.95.090 stipulates recyclables must be collected from single and multi-family residences, unless Ecology approves an alternate program.
County and city comprehensive solid waste management plans—Contents.
(7) The waste reduction and recycling element shall include the following:
(b) Source separation strategies, including:
Programs for the collection of source separated materials from residences in urban and rural areas. In urban areas, these programs shall include collection of source separated recyclable materials from single and multiple-family residences, unless the department approves an alternative program, according to the criteria in the planning guidelines. Such criteria shall include: Anticipated recovery rates and levels of public participation, availability of environmentally sound disposal capacity, access to markets for recyclable materials, unreasonable cost impacts on the ratepayer over the six-year planning period, (emphasis added), utilization of environmentally sound waste reduction and recycling technologies, and other factors as appropriate. In rural areas, these programs shall include but not be limited to drop-off boxes, buy-back centers, or a combination of both, at each solid waste transfer, processing, or disposal site, or at locations convenient to the residents of the county. The drop-off boxes and buy-back centers may be owned or operated by public, nonprofit, or private persons.

Applicable highlights of House Bill 1543 signed by the Governor in April (effective date of 7/1/2019):

- The Recycling Development Center (Center) is created within the Department of Ecology (ECY) to further

the development of markets and processing for recycled commodities and products.

- The ECY must create and implement a statewide recycling contamination reduction and outreach plan based on best management practices for recycling. The plan must be developed with stakeholder input by July 1, 2020.The ECY must also provide technical assistance and guidance to help local jurisdictions understand contamination in their regional recycling, and to develop contamination reduction and outreach plans.
- County and city solid waste plans must contain a contamination reduction and outreach plan (contamination plan). Contamination plans must be added to local solid waste plans by amendment or when revising or updating a solid waste plan before July 1, 2021.

PLAN COMPLIANCE:

2014 WALLA WALLA COUNTY SOLID WASTE AND MODERATE RISK WASTE MANAGEMENT PLAN (Res. 2014-121)
Recycling Goals and Objectives
Section 3.1 Education and Outreach- Goals and Objectives

- Increase recycling and recovery efforts and accomplishments
- Expand availability of opportunities of recycling and yard waste collection within the municipalities, unincorporated County area, and Urban Growth Area.

Section 3.3 Recycling- Recycling is the second tier in the hierarchy of solid waste management in the State of Washington.
Section 3.3.1.1 Goals and Objectives

- Work toward reaching a recycling rate of 50% by 2023.
- Continue to encourage and educate residents and businesses to compost and recycle.
- Expand the availability of opportunities for recycling and yard waste collection within the municipalities, unincorporated County area, and Urban Growth Area.

GREENHOUSE GAS POLICY:
Continue to promote and expand recycling programs ... improved management of waste handling, reductions in waste generation, and expansion of waste diversion programs.

ALTERNATIVES:

It is recommended that contamination reduction efforts occur with all alternatives that maintain the recycling program.

1. Increase the 2019 commodities surcharge to cover the anticipated shortfall for the year.
2. Pay for the additional (2019) commodities cost out of the Sanitation fund balance (approximately $40,000 for the remainder of 2019).
3. Maintain the current surcharge but establish a cost cap wherein recycling charges exceeding the landfill's rate ($91.90 – 2019; $94.10 – 2020) would be land-filled locally. The Department of Ecology previously told staff in 2017 that this action would require an update to the Solid Waste Management Plan and is subject to review/approval by Ecology. Staff is currently preparing a minor update to the 2014 plan (required every 5-years) and could request that change. Review/approval by Ecology is not anticipated to be completed until 2020. Given this timeline, commodities costs for 2019 will still be an issue to address.
4. Suspend the recycling program. This action would also require a Solid Waste Management Plan update as described under item #2. Costs through 2019 would still need to be addressed as would termination of the city's collection contract with BDI, which runs through January 2024.

Staff met with and discussed the issue with the Finance Committee on August 19. The Finance Committee's recommendation was as follows:

- Pay for the cost overruns for 2019 out of Sanitation's Fund Balance (alt. 2)

- Establish cost per ton “tipping point” for 2020 and send to City’s Landfill if exceeded (alt. 3)
- Update the surcharge for 2020 based on the “tipping point”

Pursue contamination reduction (staff applied for a grant from Ecology earlier this month)

CITY MANAGER COMMENTS:

Approved for City Council workshop discussion.

Attachments

Presentation
WW Recycling Costs
Contamination Plan
Recycling Isn't Broken Pres
June 2019 Nat. Geo Graphic

Appendix D

WUTC Cost Assessment Questionnaire

WUTC Cost Assessment Questionnaire

Prepared for

City of Walla Walla
55 E. Moore Street
Walla, Walla, WA 99362

Prepared by

Parametrix
719 2nd Avenue, Suite 200
Seattle, WA 98104
T. 206.394.3700 F. 1.855.542.6353
www.parametrix.com

April 2024 | 373-4095-005

Citation

Parametrix. 2023. WUTC Cost Assessment Questionnaire.
Prepared for City of Walla Walla
by Parametrix, Seattle, Washington.
April 2024.

Contents

TABLES

General Information

Plan prepared for the County of:	Walla Walla
Plan prepared for the City of:	Walla Walla
Prepared by:	City of Walla Walla, Leah Rohan, Public Works Department
Contact telephone:	(509) 524-4712
Contact email:	lrohan@wallawallawa.gov
Date:	4/3/2024

Planning Period

Year 1 (Base Year) shall refer to:	2024
Year 2 shall refer to:	2025
Year 3 shall refer to:	2026
Year 4 shall refer to:	2027
Year 5 shall refer to:	2028
Year 6 shall refer to:	2029

Each year shall refer to (check one):

☒	Calendar year	January 1 – December 31
☐	Fiscal year	Such as July 1 – June 30

1. Demographics

The population forecast shown in Table 1-1 is based on the 2022 County Growth Management Population Projections 2020–50 (middle series) by the Office of Financial Management, Olympia, Washington, December 2022. According to the 2020 U.S. Census, 73% of the population is concentrated in incorporated areas, with the City of Walla Walla at 55% and College Place at 15% of the total population within the county.

Table 1-1. Population Forecast

Year	Projected Population
1	63,422
2	63,714
3	64,002
4	64,259
5	64,506
6	64,746

2. Waste Stream Generation

This section emphasizes the projected 1) solid waste disposal at the Sudbury Road Landfill (SRL) and 2) tonnage of materials to be recycled during the planning period.

2.1 Tonnage of Solid Waste Disposed

Table 2-1 shows the projected tonnage for disposal at SRL. The per capita disposal is based on the population estimates as discussed above and the 2022 disposal estimates provided by the City of Walla Walla Solid Waste Division. On average, solid waste disposal in Walla Walla County is approximately 5.2 pounds per capita per day. It is expected recycling will increase at an average of 5% for all planning years and organics diversion will increase by 25% starting in 2028 (year 5); therefore, it is expected, even with an increase in population, disposal tonnage will decrease with these recycling and organics diversion rates applied.

Table 2-1. Projected Waste Disposal[1]

Year	Tonnage Disposal
1	59,627
2	59,862
3	60,100
4	60,338
5	57,859
6	58,075

2.2 Tonnage of Materials Recycled

Table 2-2 shows the tonnage of materials projected to be recycled in the base year and each of the following five years. The baseline recycling quantity was derived from the 2020 tonnage of recycling processed through Walla Walla Recycling. The year 2020 was selected to reflect the reduction in the range of recyclables collected County-wide. The recycling rate shows a slight increase with the reintroduction of commodities that were previously removed from recycling collection due to market constraints, and with the potential introduction of new materials, with an increased recycling rate of 5%/year.

Table 2-2. Recycling Projections

Year	Tonnage Recycling
1	11,229
2	11,282
3	11,334
4	11,376
5	11,419
6	11,461

3. Solid Waste Collection Programs

This section discusses the UTC-estimated solid waste and recycling collection tonnage estimates for the 6-year planning horizon. No UTC-regulated companies collect organics in Walla Walla County. The UTC-regulated collection company that serves the participating jurisdictions covered under the 2024 Plan is Basin Disposal (BDI).

Tables 3-1 and 3-2 provide the projected number of disposal and recycling customers and tonnage collected by customer-type during the planning period. The estimates are based on the WUTC collection data provided by BDI in October 2021. [Source: Francisco Alcala francisco@basindisposal.com]. The projected number of customers and tonnage collected is based on the 2022 County Growth Management Population Projections 2020–50 (middle series) by the Office of Financial Management, Olympia, Washington, December 2022.

Table 3-1. BDI Solid Waste Collection Projections

UTC- Regulated Hauler	Basin Disposal Inc. (BDI), G-Certificates: G-118 and G-165					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Residential						
# of Customers	9,267	9,304	9,344	9,384	9,425	9,466
Tonnage Collected	9,646	9,684	9,726	9,768	9,811	9,853
Commercial/ Multifamily						
# of Customers	793	797	800	803	807	810
Tonnage Collected	3,126	3,138	3,152	3,166	3,179	3,193
Drop Box & Compactor Waste						
# of Customers	--	--	--	--	--	--
Tonnage Collected	5,007	5,027	5,049	5,071	5,093	5,115

Table 3.2 Recycling Collection Projections

UTC- Regulated Hauler	Basin Disposal Inc. (BDI), G-Certificates: G-118 and G-165					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Residential (City of Walla Walla)						
# of Customers	10,330	10,371	10,416	10,461	10,506	10,552
Tonnage Collected	1,532	1,538	1,544	1,551	1,558	1,565
Commercial (Drop Box Unincorporated/Incorporated Walla Walla County)						
# of Customers	166	167	168	169	169	170
Tonnage Collected	347	349	350	352	353	355

4. Implemented and Proposed Recycling and Waste Reduction Programs

Tables 4-1 and 4-2 emphasize recycling programs and Tables 4-3 and 4-4 emphasize waste reduction programs (organics) that have been implemented during previous planning years or that are proposed in the 2024 Plan. Where possible, costs and proposed funding mechanisms are included as well as the section of the 2024 SWMP that discusses these programs. The description of implemented programs was provided through personal communication with the City of Walla Walla, and the recommendations originates from coordination with the Solid Waste Advisory Committee (SWAC) and City of Walla Walla Public Works department.

Table 4-1. Recycling Programs - Implemented

Program	Cost	Funding	Plan Section
City of Walla Walla expanded recycling outreach methods that included hiring of one new staff, and improvements to City website. Other measures included: ▪ Created a recycling video in English and Spanish as well as other multi-lingual messaging. ▪ Participated in national night out, farmers markets, school outreach, and public works week recycling booth. ▪ Recycling stickers placed on recycle containers along with handouts on what is recyclable. ▪ City Central e-newsletter, which covers a variety of community-themed topics, including reduce, reuse, and recycling. ▪ Utility bill mailings, which provides information on the solid waste program.	$10,000-$20,000	Tip, CPG	3.1.1
Re-evaluated the recycling system - City of Walla Walla Council appointed Ad-Hoc Recycling Committee that provided recommendations to Council to contain or reduce the cost of recycling while preserving and encouraging responsible recycling specific to the City of Walla Walla. This resulted in the removal of plastic from the recycling collection program and transition to every other week instead of every week collection (plastics #1, #2, #5 were reintegrated in early 2024)	--	Tip, CPG	3.3.1.3
Developed Contamination and Reduction and Outreach Plan (CROP)	$60,000	CPG	3.1.1

Note: Tip = landfill tipping fees; CPG = Department of Ecology Coordinated Prevention Grants.

Table 4-2. Recycling Programs - Proposed

Program	Cost	Funding	Plan Section
Recommendation 3.5.1 Education and Outreach	$10,000-$20,000	Tip, CPG	3.5.1
Recommendation 3.5.3 Promotion of Multifamily Recycling	Between $2,000 and $5,000[1]	Tip, CPG, Private funding	3.5.3
Recommendation 3.5.4 Award and Recognition Program	$1,000	Tip, CPG	3.5.4
Recommendation 3.5.5 Drop-off Opportunities for Recyclables	Varies[2]	Tip, CPG	3.5.5
Recommendation 3.5.6 Variable Can Rate (Cities)	Varies[3]	Tip, CPG	3.5.6
Recommendation 3.5.7 On-site Audits and Technical Assistance	$2,000 and $5,000[4]	Tip, CPG	3.5.7
Recommendation 4.5.1 Expand Curbside Recycling in Urban Growth Areas	$10-$20 per month/per household[5]	Tip, CPG	4.5.1
Recommendation 4.5.3 Mixed Paper and Cardboard Collection	None established	Tip, CPG	4.5.3

Note: Tip = landfill tipping fees; CPG = Department of Ecology Coordinated Prevention Grants.

[1] Estimated at $2k/year. Changing building codes estimated at $5k per jurisdiction. Cost of implementation/retrofit would be at private property owners expense and will be site specific.

[2] Estimated costs will vary for each jurisdiction and will depend upon the type and quantity of materials collected and the number of sites. Evaluation will need to consider collection, transport, monitoring, site development, and commodities (disposal) costs. Each jurisdiction will need to make their own assessments given the variables.

[3] Costs will depend upon the required level of infrastructure investments and would have to be factored into the financial planning/rate setting process either by the jurisdiction or through the WUTC (for franchised/private waste haulers).

[4] Costs to implement this program vary depending on business needs and level of assistance. This work would only be undertaken with grant assistance. Grant writing would be $2,000/year and 25 percent of the cost share would be $5,000/year.

[5] Costs will also depend upon service frequencies and number of accounts serviced.

5. Landfill Disposal

This section discusses landfill disposal in Walla Walla County. The Sudbury Road Landfill, owned and operated by the City of Walla Walla, is the only MSW landfill operated in the County. It is located at 414 Landfill Road in the City of Walla Walla.

Table 5-1 provides the projected tonnage disposed by BDI, the only UTC-regulated hauler in the county. The estimates are based on the 2022 WUTC disposal data provided by the City of Walla Walla in 2023. The projected tonnage disposed is based on the 2022 County Growth Management Population Projections 2020–50 (middle series) by the Office of Financial Management, Olympia, Washington, December 2022.

Table 5-1. Projected Quantity of Solid Waste Disposed at Sudbury Road Landfill by BDI

Year	Tons
Year 1	16,033
Year 2	16,097
Year 3	16,161
Year 4	16,225
Year 5	16,289
Year 6	16,354

Table 5-2 provides the tonnage disposed at the SRL by other (non-regulated) haulers and other contributors, most of which is collected by the City of Walla Walla within city limits The estimates are based on the 2022 non-regulated disposal data provided by the City of Walla Walla in 2023. The projected tonnage disposed at the SRL is based on the 2022 County Growth Management Population Projections 2020–50 (middle series) by the Office of Financial Management, Olympia, Washington, December 2022.

Table 5-2. Projected Quantity of Solid Waste Disposed at Sudbury Road Landfill by Non-Regulated Haulers

Year	Tons
Year 1	44,132
Year 2	44,307
Year 3	44,483
Year 4	44,659
Year 5	44,836
Year 6	45,014

Tables 5-3 and 5-4 provide information for landfill disposal programs that have been implemented and proposed including costs and proposed funding mechanism as well as the section of the 2024 SWMP that discusses these programs. Table 5-5 provides a breakdown of specific capital improvements identified in the 2023 Sudbury Road Landfill Facility Master Plan, which extends beyond the 6-year planning period.

Table 5-3. Landfill Disposal Programs Implemented

Program	Cost	Funding	Section #
Landfill and Sanitation Cost of Service and Financial Planning Study (2018-2023)	$80,000	TIP, CPG	5.2.1, 5.2.2
Sudbury Landfill Facility Master Plan	$300,000	Tip, CPG	5.2

Note: Tip = landfill tipping fees; CPG = Department of Ecology Coordinated Prevention Grants.

Table 5-4. Landfill Disposal Programs Proposed

Program	Cost	Funding	Section #
Recommendation 5.5.1 Use Sudbury Road Landfill for Out-of-County Waste (prepare Marketshed Study)	$50,000	Tip, CPG	5.5.1
Recommendation 5.5.2 Implement Sudbury Road Landfill Facility Master Plan	Varies by program, Table 5.2.4.c below.	TIP, State (e.g., CPG) and Federal Grants, WA State public works trust loans, bond sales	5.5.2
Recommendation 5.5.3- Sudbury Road Landfill Financial Stability Update	$80,000	Tip, CPG	5.5.3
Recommendation 5.5.4 Expand Organic Materials Processed	$125,000	Tip, CPG	5.5.4
Recommendation 5.5.4 Improve the Marketability of the Sudbury Compost Facility's Finished Product	N/A[1]	Tip, CPG	5.5.5

Note: Tip = landfill tipping fees; CPG = Department of Ecology Coordinated Prevention Grants.

[1] Continue to monitor production and demand at Sudbury Compost Facility.

Table 5-5. Capital Investment Schedule (2024-2043)

Facility Improvement	Priority[1]	Approximate Implementation Duration, Months	Implementation Commencement Year	Capital Budget (2023 $)
Landfill Core and Supporting Element Investments (Non-Optional)				
Self-haul Waste Drop Off Area Replacement	1	22	2024	$4.23 million
Design/connect Existing Leachate Cleanout Locations to Existing Header	1	24	2024	$0.06 million
Compost Facility Improvements Alternative 1	1	30	2024	$3.84 million
Existing MRW Building Rehabilitation and Expansion Alternative 2 (7,500 sf)	1	36	2025	$2.5 to $3 million
Maintenance Building Replacement	2	36	2026	$5.37 million
Permit for Area 7, Cell 4	1	36	2026	$0.08 million
Compliance Monitoring System	1	24	2028	$1.44 million
Design/install new 300-800 cfm LFG flare facility	1	30	2028	$1.94 million
Design/install LFG extraction system in Area 7 and connect to existing header, horizontal/vertical.	1	28	2028/2030	$0.62 million
Design and development[2,3] of Area 8, Cell 1	1	36	2028	$5.39 million
Design and final closure of Area 7	1	30	2029	$3.62 million
Alternatives to Proposed Capital Projects				
Compost Facility Improvements Alternative 2 (First Phase, 60% of full-buildout, 15 acres)	1	30	2024	$17.42 (10.45) million
MRW Building Replacement Alternative 1 (7,400 sf)	1	40	2025	$5.88 million
Other Solid Waste Program Investments (Discretionary)				
Drop Off Recycling Area Improvements	3	20	2027	$0.29 million
Recycled Glass Processing Area	3	20	2029	$0.37 million

[1] Priorities are qualitatively defined as follows: 1 = Essential landfill operations; 2 = Beneficial to landfill operations, but timing could vary considerably without seriously impacting continued landfill operations; 3 = Important for other solid waste program needs.

[2] A 10-year life is assumed for Area 8, Cell 1, and 7 acres is assumed for development EOPCC.

[3] It is assumed permitting for Area 8, Cell 1 will take place at the same time as Area 7, Cell 4 and site characterization for all of Area 8.

6. Funding Mechanisms

The County's solid waste system is funded almost entirely through tipping fees at the SRL. The City of Walla Walla contracted for the completion of a rate study in 2018 for the landfill and sanitation utilities to identify revenues that would fund ongoing obligations and expenses through 2023. Solid waste tipping fees are used for essentially all solid-waste-related expenses, including landfill disposal, construction debt service, post-closure fund contributions, recycling, moderate risk waste, public education, and administration. Ecology grants are used for planning, recycling, and other programs, with the City's match obtained from disposal tipping fees. A new rate study will be prepared in Spring/Summer of 2024.

6.1 Existing Tip Fee and Estimated Tip Fee

Table 6-1 provides the tip fee for the Sudbury Road Landfill and Table 6.2 provides the tip fee components. Table 6.3 provides the estimate tip fee forecast for reporting years 1 (2024-2029).

Table 6-1. Facility Inventory 2022

Facility Name	Type of Facility	Tip Fee per Ton	Final Disposal Location	Total Tons Disposed /Year	Total Revenue Generated
Sudbury Road Landfill	Disposal	$105.27	Sudbury Road Landfill	59,377 (2022) 64,807 (2023)	$6,131,590 (2021)

Table 6-2. Tip Fee Components

Facility	Surcharge	City Excise Tax	State Tax	Personnel/Admin Costs[1]	Operational Cost[2]	Closure Costs
Sudbury Road Landfill	3.6%	15%	2%	50%	25%	7%

1. Personnel costs, engineering, and other professional services (contractual), administrative service charges
2. Includes: debt, equipment and fuel, operating expenses,

Table 6-3. Estimated Tip Fee Forecast

Tip Fee per Ton by Facility	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Sudbury Road Landfill	$105.27	$108.43	$111.68	$115.03	$118.48	$122.03

6.2 Surplus Funds

The City of Walla Walla targets a 15% reserve, which is approximately $746,000 in 2024.

Appendix E

SEPA Checklist

Development Services Department
permits@wallawallawa.gov
(509) 524-4710

SEPA SUBMITTAL REQUIREMENTS

Application fee of $190 is due upon submittal.
All posting, notification, and postage costs will be billed to the applicant *WWMC 20.14.065(F) & 20.14.085(G)*

Site Address: _____

Applicant Name: City of Walla Walla Public Works Department, on behalf of Walla Walla County

Phone: (509) 524-4712 E-mail address: lrohan@wallawallawa.gov

Mailing Address: 55 E. Moore Street, Walla Walla WA 99362

Property Owner: N/A

Phone: _____ E-mail address: N/A

Mailing Address: 55 E. Moore Street, Walla Walla WA 99362

Related applications (e.g. subdivision):

Required Documents:

- [x] Completed SEPA Environmental Checklist and fees
- [x] Site plan of the subject property
- [x] Vicinity map
- [ ] Critical Areas Report (e.g. wetlands, streams) meeting requirements of WWMC 21.04. if required
- [ ] Trip Generation Report and/or Traffic Impact Analysis
- [ ] Preliminary Storm Report, if required
- [ ] Geotechnical Report

I certify, by checking this box and printing my name below, that the information submitted in this application packet is true and accurate. Determination of information to be in error could result in revocation of permit.
I understand that this application is not deemed filed until fees are paid.

_____ Date: _____
Printed Name of Property Owner or Owner's Authorized Agent

SEPA[1] Environmental Checklist

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal**, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in "Part B: Environmental Elements" that do not contribute meaningfully to the analysis of the proposal.

[1] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance

A.Background

Find help answering background questions[2]

1. **Name of proposed project, if applicable:**

   2024 Walla Walla County Solid Waste and Moderate Risk Waste Management Plan

2. **Name of applicant:**

   City of Walla Walla Public Works Department, on behalf of Walla Walla County

3. **Address and phone number of applicant and contact person:**

   Leah Rohan, PE
   Environmental Engineer
   Public Works Department
   509.524.4712 (office)
   509.386.9951 (cell)

4. **Date checklist prepared:**

   December 8, 2023

5. **Agency requesting checklist:**

   City of Walla Walla

6. **Proposed timing of schedule (including phasing, if applicable):**

   Commencing 2024

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

   Yes. The *2024 Walla Walla County Solid Waste and Moderate Risk Waste Management Plan* (2024 Plan) is an update of an earlier plan, the *2014 Walla Walla County Solid Waste Management Plan*, and is intended to be regularly updated. Capital improvements recommended in the 2024 Plan will undergo a separate regulatory review and approval process.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

   No additional environmental information has been prepared.

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

   There are no known applications pending government approvals or other proposals that would directly affect the project.

10. **List any government approvals or permits that will be needed for your proposal, if known.**

[2] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background

Under Chapters 70A.205.040 through 70A.205.075 and Chapters 70A.205.110 and 70A.205.115 of the Revised Code of Washington, Walla Walla County and cities within the county are required to review their solid waste plan every 5 years. The referenced 2024 Plan reflects Walla Walla County's current goals for meeting statewide expectations for the handling of solid waste over the next 5 years.

Final approval of the 2024 Plan requires the following:

- An Interlocal Agreement for the purpose of establishing and integrated and coordinated solid waste management program between Walla Walla County and the cities of College Place, Walla Walla, Prescott, and Waitsburg.
- Resolutions of adoption from participating jurisdictions.
- Washington State Department of Ecology concurrence.
- Washington Utilities and Transportation Commission opportunity to review and comment on the preliminary draft.
- Washington Department of Agriculture opportunity to review and comment on the preliminary draft.

Capital improvements recommended in the 2024 Plan will undergo a separate regulatory review and approval process.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The 2024 Plan will provide background and guidance for a long-term approach to solid waste and moderate risk waste management in Walla Walla County and surrounding jurisdictions. It is intended to provide citizens and decision-makers in Walla Walla County with a guide for implementing, monitoring, and evaluating future activities in the planning area for a 20-year period. The recommendations for the 2024 Plan are intended to guide local decision-makers and to substantiate the need for local funds and state grants to underwrite solid waste projects.

This plan will replace the 2*014 Solid Waste and Moderate Risk Waste Management Plan*.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The 2024 Plan encompasses all of Walla Walla County, including incorporated cities (Walla Walla, College Place, Prescott, and Waitsburg), unincorporated communities (Burbank, Garrett, Touchet, Wallula, and Dixie), and other areas of the county. The 2024 Plan also

provides for receipt of waste at the Sudbury Road Landfill (SRL) from outside of Walla Walla County. A vicinity map of the planning area is attached.

The SRL is generally located at 414 Landfill Road in the City of Walla Walla, approximately 0.5 mile north of US 12. The landfill is located in the northern half of Section 22, Township 7 North, Range 35 East, Willamette Meridian, in Walla Walla County, Washington. The site is located on 830 acres (north of highway), approximately 125 of which are used for landfill operations. A site plan showing the existing layout of the SRL is attached.

B.Environmental Elements

1. Earth

Find help answering earth questions[3]

a. **General description of the site:**

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other**:**

Walla Walla County covers an area of approximately 1,272 square miles and consists of the following types of topography: rolling, treeless hills; valleys; flats; and the northern extension of the Blue Mountains of Oregon. The highest elevation in the county is 4,895 feet at the summit of Lewis Peak in the Blue Mountains. The lowest elevation, 300 feet, is found in the southwestern corner of the county along the Columbia River.

The SRL occupies generally flat to gently rolling terrain at an elevation of approximately 850 feet above mean sea level.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slopes within the county are 30% to 65%.

The steepest slopes at the SRL are approximately 33% on the side slopes of existing landfill cells, which are capped with soil, resulting in a 3:1 ratio of horizontal to vertical slopes.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The majority of Walla Walla County is composed of sandy, silt loam over basalt rubble or bedrock. There are also limited areas of loamy sand or sandy loam over gravel or basalt. Primary agricultural uses are for rangeland and crops such as wheat, barley, peas, fruit trees, and grapes. Non-cultivated areas are composed of grasses and sagebrush. Much of the county is composed of soils that are considered prime farmland, if irrigated; farmland of statewide importance; or farmland of unique importance.

[3] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Does not apply. The 2024 Plan will not include recommendations that will disturb or be affected by unstable soils within Walla Walla County.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

No new earthwork is proposed as part of the 2024 Plan. Earthwork related to capital improvements described in the *Sudbury Road Landfill Facility Management Plan* (FMP) will be designed and implemented according to regulatory requirements and will involve a separate regulatory review and approval process, including project-specific SEPA review, as needed.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

The 2024 Plan does not include construction or clearing as part of the recommendations. The clearing activities related to capital improvements described in the SRL FMP will be designed and implemented according to regulatory requirements and will involve a separate regulatory review and approval process, including project-specific SEPA review, as needed.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

None. The 2024 Plan does not include impervious surfaces as a recommendation. An accounting of impervious surfaces related to capital improvements described in the FMP will be assessed under a separate regulatory review and approval process, including project-specific SEPA review, as needed.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

None, there is no risk of erosion as a result of the recommendations of the 2024 Plan. Measures to reduce or control erosion related to the capital improvements described in the SRL FMP will be designed and implemented according to regulatory requirements and will involve a separate regulatory review and approval process, including project-specific SEPA review, as needed.

2. Air

Find help answering air questions[4]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

There will be some emissions to the air from the existing landfill, the transfer stations, and motor vehicles transporting solid waste. These sources are expected to be only a small percentage of total air emissions generated in the county. There may be a minor increase in emissions if other jurisdictions do export waste to Walla Walla as a result of additional truck traffic; however, this is a low-priority recommendation in the 2024 Plan and may not be implemented.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No, there are no off-site emissions or odor that will affect the proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

This proposal does not change current practices. Emissions from the SRL are controlled and regulated. Currently the SRL has a gas collection and control system that is monitored and balanced regularly in accordance with Washington Administrative Code (WAC) 173-351-200(4), WAC 173-351-500(2)(a)(iv), WAC 173-340, and WAC 173-460 and to comply with the State of Washington Department of Ecology (Ecology) Approval Order No. 10AQ-E355 dated May 28, 2010. As regulations are updated, the SRL and the County of Walla Walla will continue to comply.

3. Water

Find help answering water questions[5]

a. Surface:

Find help answering surface water questions[6]

1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

There is no surface water body in proximity to the landfill.

[4] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air
[5] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water
[6] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Surface-water

The major water bodies within Walla Walla County include the Columbia, Lower Snake, and Walla Walla Rivers. These rivers include shorelines of the state within the county limits.

2. **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

   All existing solid waste facilities are located 200 feet or more from described surface waters.

3. **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

   Does not apply. Any fill resulting from the SRL FMP will be discussed in a future project-specific SEPA Checklist, as required.

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

   No, there will be no surface water withdrawals or diversions as part of this proposal.

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

   A significant portion of Walla Walla County is within the 100-year floodplain, according to the *2019 Walla Walla County Comprehensive Plan* and the *2022 Walla Walla County Flood Management Plan*.

   There is no published flood map for the SRL Facility.

6. **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

   No, there is no planned discharge of waste materials to surface waters.

b. Ground:

Find help answering ground water questions[7]

1. **Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.**

   This proposal does not change current practices for use of groundwater for facility operations (e.g., for dust control, watering compost, flushing toilets, impotable sink use, or landscape watering).

[7] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals…; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

   The landfill has an on-site septic system. Sewer piping from restrooms in the administration and household hazardous waste building direct sanitary waste to a septic tank located just south of the current landfill cell (Area 7). This proposal does not change current practices for use of groundwater for facility operations.

c. Water Runoff (including stormwater):

1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

   The existing solid waste facilities at the SRL have runoff control and stormwater management programs in place. Leachate at the landfill is collected from the current cell, Area 7, and is pumped to a leachate collection and removal system at the surface. Leachate management is provided to ensure less than 12 inches of head is present on the landfill liner per WAC 173-351-300(2)(a). Leachate management was not provided for the landfill areas constructed prior to Area 7 because it was not required under the previously applicable arid landfill regulations, WAC l 73- 351-500(l)(b). Leachate from Area 7 is pumped from a sump and routed via a force main to a double-lined leachate evaporation pond located northeast of Area 7. The 2.1-acre, two-compartment pond is designed for complete leachate evaporation with no discharge. To date, the flowmeters for the leachate evaporation pond have not been functioning properly; therefore, it is difficult to estimate the total leachate generation. However, this is not considered a significant environmental concern because the pond level indicators are functional. Leachate levels in the pond are typically very low due to the site's arid conditions and the pond's conservative storage capacity.

   Surface water from the site is managed using a series of soil diversion berms, perimeter ditches, and culverts that collect and convey surface water to three detention basins. One sediment basin pond is located north of Area 6, and two basins are located southwest of Area 6. Surface water from outside the landfill areas and from portions of the landfill under final cover is prevented from coming in contact with the active face of the landfill so that it is not required to be managed as leachate. Surface water run-on is diverted using soil diversion berms at the edge of the active landfill area. Surface water conveyance systems were designed for the 25-year, 24-hour storm event per WAC-173-351-200(7). Capital improvements outlined in the SRL FMP will treat runoff and stormwater according to regulatory requirements in place at the time of their implementation.

2. Could waste materials enter ground or surface waters? If so, generally describe.

This proposal does not change current practices at the landfill. Historical landfill cells are unlined, so leachate has the potential to migrate downwards into groundwater. Current waste placement is in a lined cell, significantly reducing the likelihood of impacts to site groundwater. Operating practices and the leachate collection system described above prevent discharge to surface waters. Site groundwater monitoring data indicates that a number of volatile organic compounds (VOCs) are present in the groundwater, as found in upgradient wells on the eastern property boundary (east and upgradient of the waste disposal area), which indicates that an off-site source(s) of VOC contamination exists. Similar but slightly lower VOC concentrations have been detected regularly in downgradient monitoring wells. Additionally, distinctly different VOCs and inorganic constituents have been found in a downgradient well, which indicates a source different than the other documented contamination. Groundwater data results have been reported regularly to the Health Department and Ecology.

In 2010, Ecology issued a Notice of Potential Liability Letter to the City of Walla Walla regarding groundwater contamination identified at the landfill. The City and Ecology initiated Agreed Order No. 8456 in 2011, and a Remedial Investigation with groundwater sampling and other field activities was completed in 2012 and 2013. Groundwater monitoring results indicated that a number of the detected constituents were indicators of landfill impacts to the groundwater. A draft Remedial Investigation Report was submitted to Ecology in May 2013.

In 1999, Ecology conducted a study indicating that, based on the observed contaminant concentrations, a large, continuous VOC source is present. The study identified the Washington State Penitentiary, located directly east and upgradient of the landfill and adjacent City-owned property, to be a potential source for the VOC contamination at the landfill, based on historic use.

3. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No, the recommendations within the 2024 Plan would not alter or affect drainage patterns in the area.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Does not apply. Any measures related to capital improvements described in the SRL FMP will be designed and implemented according to regulatory requirements and will involve a separate regulatory review and approval process, including project-specific SEPA review, as needed.

Current practices include the use of landfill liners within cells and regular groundwater monitoring.

4. Plants

Find help answering plants questions

a. Check the types of vegetation found on the site:

☒ **deciduous tree: alder, maple, aspen, other**

☒ **evergreen tree: fir, cedar, pine, other**

☒ **shrubs**

☒ **grass**

☒ **pasture**

☒ **crop or grain**

☒ **orchards, vineyards, or other permanent crops.**

☒ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**

☒ **water plants: water lily, eelgrass, milfoil, other**

☐ **other types of vegetation**

Walla Walla County includes a diverse landscape with river deltas, agricultural lands, shrub steppe habitat, and the Blue Mountains. Urban areas contain ornamental evergreen and deciduous trees. Forested areas include Ponderosa pine, Douglas-fir, white fir, and Western larch. Vegetation common in and around rivers, creeks, and ponds can include reed canary grass, yellow flag iris, Canada thistle, purple loosestrife, bulrush, cattail, and milfoil.

b. What kind and amount of vegetation will be removed or altered?

No vegetation will be removed or altered as part of the 2024 Plan. Vegetation removal as a result of the SRL FMP will be discussed in a future project specific SEPA Checklist.

c. List threatened and endangered species known to be on or near the site.

There are a number of threatened and endangered plants in Walla Walla County listed in the table below:

Species	State Status	Federal Status
Astragalus kentrophyta var. *douglasii* – Douglas's thistle milkvetch	Possibly extinct or extirpated	Unlisted
Cryptantha leucophaea (Oreocarya leucophaea) – gray cryptantha	Threatened	Bureau of Land Management (BLM) Sensitive
Cryptantha rostellata – beaked cryptantha	Sensitive	BLM Sensitive, Forest Service Sensitive
Erythranthe patula (Mimulus patulus) – stalk-leaved monkeyflower	Threatened	BLM Sensitive, Forest Service Sensitive
Erythranthe pulsiferae (Mimulus pulsiferae) – candelabrum monkeyflower	Sensitive	BLM Sensitive, Forest Service Sensitive

Species	State Status	Federal Status
Githopsis specularioides – Common bluecup	Sensitive	BLM Sensitive, Forest Service Sensitive
Leymus flavescens (Elymus flavescens) – yellow wildrye	Endangered	BLM Sensitive, Forest Service Sensitive
Lomatium serpentinum – Snake Canyon biscuitroot	Sensitive	BLM Sensitive
Lupinus sabinianus – Sabin's lupine	Sensitive	Unlisted
Mimetanthe pilosa – downy false monkeyflower	Sensitive	Unlisted
Penstemon pennellianus Blue – Mountain beardtongue	Threatened	BLM Sensitive, Forest Service Sensitive
Phlox solivaga – yeti phlox	Endangered	Forest Service Sensitive
Sabulina pusilla (Minuartia pusilla) – dwarf sandwort	Sensitive	Unlisted
Trifolium plumosum var. *plumosum* – plumed clover	Possibly extinct or extirpated	Unlisted

There are no known threatened or endangered plants on the SRL site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.

No landscaping is proposed.

e. List all noxious weeds and invasive species known to be on or near the site.

The Walla Walla County Noxious Weed List identifies hundreds of invasive species in Walla Walla County. Invasive vegetation is common in disturbed areas, such as along roadways or in urban areas.

5. Animals

Find help answering animal questions[8]

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site.

Examples include:

- **Birds:** hawk, heron, eagle, songbirds**, other:**
- **Mammals:** deer, bear, elk, beaver**, other:**
- **Fish: bass,** salmon, trout, herring, shellfish**, other:**

Animals in Walla Walla County include deer, elk, moose, muskrats, mink, beavers, badgers, rabbits, raccoons, squirrels, chipmunks, skunks, weasels, coyotes, fox, bobcats, cougars, pheasants, quail, great blue heron, bald eagle, red-tailed hawk, ferruginous hawk, great-horned owl, northern harrier, grouse, doves, seagulls, ravens, sparrows, migratory waterfowl, raptors, and other assorted song and shore

[8] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals

birds. Salmon, trout, bass, sturgeon, and other species are found in the Snake, Walla Walla and/or Columbia Rivers systems. No salmonids are documented to be present in Mud Creek; however, steelhead are presumed to be present in lower part of Mud Creek because they are present in Dry Creek and no fish barriers are located between Dry Creek and the mouth of Mud Creek.

b. List any threatened and endangered species known to be on or near the site.

Using a sample radius of 25 miles from the center of the county, the table below lists threatened and endangered species identified through the Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species interactive mapping web-based program, PHS on the Web.

Species Name	Federal Status	State Status
Yellow-billed cuckoo	Threatened	Endangered
Loggerhead shrike	Threatened	Candidate
Sagebrush lizard	Threatened	Candidate
Prairie falcon	Threatened	Candidate
Western small-footed myotis	Threatened	Candidate
Margined sculpin	Threatened	Sensitive
Sagebrush sparrow	Threatened	Candidate
Ring-necked pheasant	Threatened	Candidate
Pacific lamprey	Threatened	Candidate
Burrowing owl	Threatened	Candidate
Mountain quail	Threatened	Candidate
Rio Grande wild turkey	Threatened	Candidate
California floater	Threatened	Candidate
Columbia spotted frog	Threatened	Candidate
Monarch	Threatened	Candidate
Ring-necked pheasant	Threatened	Sensitive
Ferruginous hawk	Threatened	Threatened
Rio Grande wild turkey	Threatened	Threatened
Juniper hairstreak Columbia Basin segregate	Threatened	Candidate
Western toad	Threatened	Candidate
Golden eagle	Threatened	Candidate
Rocky Mountain tailed frog	Threatened	Candidate
Prairie falcon	Threatened	Sensitive
Ring-necked pheasant	Threatened	Threatened

c. Is the site part of a migration route? If so, explain.

Yes, the site is within the Pacific Flyway.

d. Proposed measures to preserve or enhance wildlife, if any.

None proposed.

e. List any invasive animal species known to be on or near the site.

WDFW identifies 14 invasive animal species, including insects, that are species of concern in Eastern Washington.

6. Energy and natural resources

Find help answering energy and natural resource questions[9]

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

No new project energy needs are anticipated. The management of solid waste uses fossil fuels to power mobile construction equipment, electricity to power administrative facilities and site lighting, and oil for heating some on-site buildings.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No, there will be no effect on the use of solar energy to adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

There are no energy conservation features included as part of the recommendations in the 2024 Plan.

7. Environmental health

Health Find help with answering environmental health questions[10]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.

No new hazards are associated with the proposal. The SRL accepts municipal solid waste, with the exception of regulated dangerous or hazardous waste from commercial or industrial sources, liquid wastes, radiation contaminated wastes, septage, sewage sludge, or biosolids, asbestos or medical waste not properly contained The facility also provides recycling services. In addition to recycling and accepting solid waste, the SRL compost facility offers composting services for the County. The goals of the 2024 Plan include maintaining minimum functional standards of handling solid waste, ensuring compliance with state and local solid and moderate risk waste regulations, and maintaining solid waste infrastructure to meet or exceed the Minimum Functional Standards for handling solid waste.

[9] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-6-Energy-natural-resou
[10] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-7-Environmental-health

1. **Describe any known or possible contamination at the site from present or past uses.**

See 3.b.2.

2. **Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.**

No existing chemicals/conditions are anticipated to affect the proposal. The City operates a household hazardous waste (HHW) facility at the site in accordance with a current permit from the County Health Department. There are new and used oil tanks associated with the unit heaters in the HHW and equipment buildings.

3. **Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.**

This proposal does not change current practices at SRL. Hazardous materials are stored on-site in the HHW building, in accordance with current permit conditions. Such materials include motor oil, antifreeze, latex paint, oil, aerosol cans, solvents, glues and other adhesives, pool and spa chemicals, gasoline, household batteries (alkaline, NiCad), lithium-ion rechargeable batteries, automotive batteries, pesticides, herbicides, fertilizers, household cleaners, and fluorescent lights (tube and compact/spiral types).

4. **Describe special emergency services that might be required.**

Trained staff operate the waste collection program, and operating staff at the HHW building require specific training. Local fire department personnel would respond to emergencies at the landfill or collection events. Washington State Patrol Bomb Squad is the responding agency in situations where explosives may be left at the HHW facility.

5. **Proposed measures to reduce or control environmental health hazards, if any.**

All facilities incorporate required waste containment measures. Materials will be stored temporarily on-site in enclosed containers. The HHW staff will maintain required training and will operate the facility according to permit requirements.

a. Noise

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

The SRL is generally isolated from noise generators and receptors by physical separation (distance). Surrounding land use is generally agricultural with the Washington State Penitentiary located east of the landfill. US 12 is located south of the site and is a source of vehicular noise.

2. **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?**

Additional traffic will be received at the site if the waste acceptance volume is increased, but this traffic will be coming from US 12, which has existing highway traffic noise. Therefore, no notable noise increase is expected. Existing on-site noise include mobile equipment operation. Noise is generated at the site or by accessing the site only during operating hours: 8:30 a.m. to 6:00 p.m., Monday through Saturday, from March 1 to October 31, and from 8:30 a.m. to 4:00 p.m. Monday through Saturday, November 1 to February 28.

3. **Proposed measures to reduce or control noise impacts, if any:**

No impacts are anticipated.

8. Land and shoreline use

Find help answering land and shoreline use questions[11]

a. **What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

The current land uses of Walla Walla County are predominantly agriculture, single-family residential, industrial, and recreational.

b. **Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

Yes, areas of the county are working agricultural land. The 2024 Plan does not propose modifications to agricultural uses.

c. **Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?**

The proposal does not impact and is not impacted by surrounding agricultural land. There are no change from current conditions.

d. **Describe any structures on the site.**

The SRL has several structures on the site, as shown on the existing conditions site map included with this checklist.

e. **Will any structures be demolished? If so, what?**

No structures will be demolished as part of the proposal.

[11] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-8-Land-shoreline-use

f. What is the current zoning classification of the site?

Per the City of Walla Walla 's Zoning Map, the landfill site is zoned PR-Public Reserve. Participating jurisdictions of the 2024 Plan have a variety of zoning designations, with agriculture as the primary zoning designation countywide.

g. What is the current comprehensive plan designation of the site?

Per the City of Walla Walla's Comprehensive Plan Map, the landfill site is currently designated Public. Participating jurisdictions of the 2024 Plan have a variety of comprehensive planning designations, with agriculture as the primary comprehensive planning designation countywide.

h. If applicable, what is the current shoreline master program designation of the site?

Does not apply.

i. Has any part of the site been classified as a critical area by the city or county? If so, specify.

All participating jurisdictions of the 2024 plan are likely to have one or more regulated critical area, including aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands.

j. Approximately how many people would reside or work in the completed project?

Approximately 12 people work at the SRL.

k. Approximately how many people would the completed project displace?

The 2024 Plan would not displace anyone.

l. Proposed measures to avoid or reduce displacement impacts, if any.

None needed; there will be no displacement.

m. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

The proposal is being reviewed by the County of Walla Walla and the cities and communities within the county to ensure that it is compatible with existing and projected land use. In addition, the 2024 Plan is intended to be reviewed every 5 years and updated as needed, which will ensure its continued compatibility.

n. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

Does not apply.

9. Housing

Find help answering housing questions[12]

a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

   No housing will be provided by the plan.

b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

   No housing will be eliminated by the plan.

c. **Proposed measures to reduce or control housing impacts, if any:**

   There are no anticipated housing impacts.

10. Aesthetics

Find help answering aesthetics questions[13]

a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

   The SRL FMP proposes a variety of new structures as part of the facility, including the expansion or replacement of many current buildings and the addition of new buildings. These planned structures vary in priority and may or may not be built as part of the FMP improvements. All capital projects proposed as part of the SRL FMP will undergo the applicable regulatory reviews at the time of their implementation.

b. **What views in the immediate vicinity would be altered or obstructed?**

   No views will be altered or obstructed as a result of the 2024 Plan.

c. **Proposed measures to reduce or control aesthetic impacts, if any:**

   None needed.

11. Light and glare

Find help answering light and glare questions[14]

a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

   The 2024 Plan will not produce any light or glare.

b. **Could light or glare from the finished project be a safety hazard or interfere with views?**

   No, there will be no new or additional light or glare as a result of the 2024 Plan.

[12] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing
[13] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics
[14] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-11-Light-glare

c. What existing off-site sources of light or glare may affect your proposal?

No existing light or glare will affect the proposal.

d. Proposed measures to reduce or control light and glare impacts, if any:

None needed.

12. Recreation

Find help answering recreation questions

a. What designated and informal recreational opportunities are in the immediate vicinity?

No designated or informal recreational opportunities are in the immediate vicinity of the SRL. Recreational opportunities are present in both incorporated and unincorporated areas countywide.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Does not apply.

13. Historic and cultural preservation

Find help answering historic and cultural preservation questions[15]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

A number of buildings, structures, and sites that are eligible for listing in the national, state, or local register are found in Walla Walla County, mostly in developed areas.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

The Washington State Department of Archaeology and Historic Preservation predictive model indicates that areas of Walla Walla County are between low and high risk for archaeological resources. High-risk areas are primarily concentrated near major rivers.

[15] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Any projects that evolve from the recommendations in the 2024 Plan will undergo measures to assess for cultural and historic resources, as appropriate.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Any projects that evolve from the recommendations in the 2024 Plan, will undergo measures to avoid, minimize, or compensate for cultural and historic resources, as appropriate.

14. Transportation

Find help with answering transportation questions[16]

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Management of the solid waste system outlined in the 2024 SWMP involves many streets and highways throughout the county. The SRL is accessed by turning north off of US 12 onto Sudbury Road and then east onto Landfill Road. See the attached existing SRL conditions site plan.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Walla Walla County has limited public transit, with most transit offered by Valley Transit in the cities of Walla Walla and College Place.

c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No, there will be no improvements to or new roads, streets, pedestrian, bicycle, or state transportation facilities.

d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No, the proposal will not use water, rail, or air transportation.

[16] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-14-Transportation

e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The proposed capital improvements outlined in the SRL FMP may generate additional vehicular trips during construction and operation. The number of vehicle trips would be explored at the time of project development and implementation, as necessary.

f. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The proposed capital improvements outlined in the SRL FMP may generate additional vehicular trips during construction and operation. It is not expected that these improvements would affect the movement of agricultural or forest products, but this would be explored at the time of project development and implementation, as necessary.

g. Proposed measures to reduce or control transportation impacts, if any:

No measure to reduce or control transportation impacts are proposed.

15. Public services

Find help answering public service questions[17]

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No, the project will not increase the need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

No measures to reduce or control direct impacts on public services are proposed.

16. Utilities

Find help answering utilities questions[18]

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

The underlined utilities above are those utilities at the SRL.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No new utilities or utility modifications are proposed.

[17] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services
[18] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-16-utilities

C.Signature

Find help about who should sign[19]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

X _____

Type name of signee:

Position and agency/organization:

Date submitted:

[19] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-C-Signature

D.Supplemental sheet for nonproject actions

Find help for the nonproject actions worksheet[20]

Do not use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. **How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

   The 2024 Plan is intended to identify future needs at existing facilities or the establishment of new services to accommodate the county residents to address potential environmental health concerns. The capital projects outlined in the SRL FMP may undergo a separate environmental review consistent with SEPA.

   - **Proposed measures to avoid or reduce such increases are:**

   No measures to avoid or reduce an increase in discharge to water, emissions to air, or the production, storage, or release of toxic or hazardous substances are proposed.

2. **How would the proposal be likely to affect plants, animals, fish, or marine life?**

   The *Solid Waste and Moderate Risk Waste Management Plan* would not affect plant, animal, fish or marine life directly. By proactively planning to accommodate future solid waste needs, facilities, and capacity for the residents of Walla Walla County, the natural environment will benefit by a reduction in potential hazards.

   - **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

   No measures are proposed to protect or conserve plants, animal, fish, or marine life.

3. **How would the proposal be likely to deplete energy or natural resources?**

   The 2024 Plan would not deplete energy or natural resources.

   - **Proposed measures to protect or conserve energy and natural resources are:**

   No measures are proposed to protect or conserve energy and natural resources.

[20] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-d-non-project-actions

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

   The 2024 Plan itself would not use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands.

   - **Proposed measures to protect such resources or to avoid or reduce impacts are:**

   No measures to protect such resources or to avoid or reduce impacts are proposed.

5. **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

   The 2024 Plan is intended to complement other County land use and shoreline management plans.

   - **Proposed measures to avoid or reduce shoreline and land use impacts are:**

   No measures to avoid or reduce shoreline and land use impacts are proposed.

6. **How would the proposal be likely to increase demands on transportation or public services and utilities?**

   This 2024 Plan itself does not generate an increase demand on transportation, public services, or utilities.

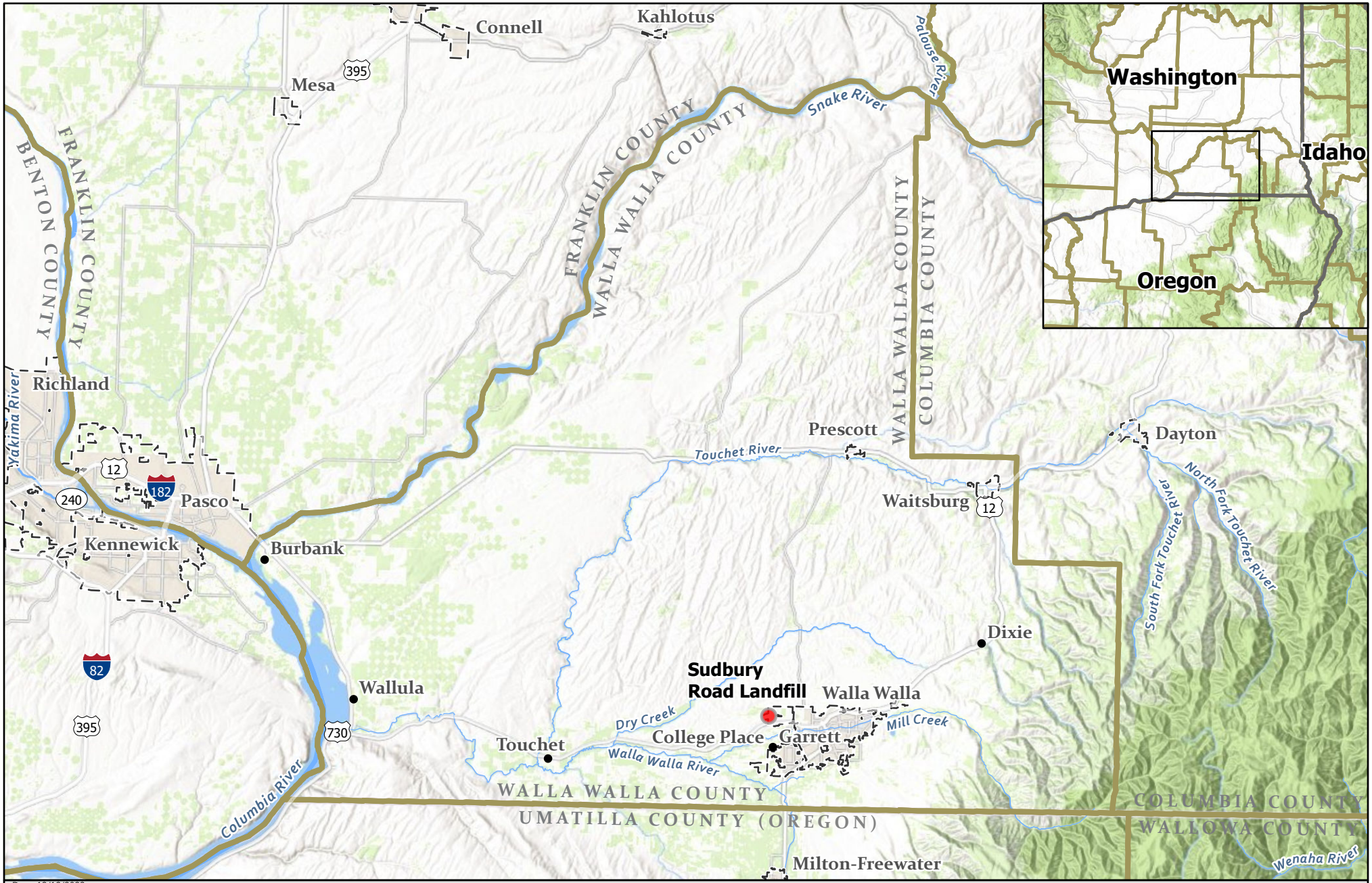
   - **Proposed measures to reduce or respond to such demand(s) are:**

   No measures to reduce or respond to demands on transportation, public services, or utilities are proposed.

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

   The Walla Walla County Solid Waste and Moderate Risk Waste Management Plan has been prepared in compliance with local and state laws and regulations governing solid waste management. The 2024 Plan does not conflict with local, state, or federal laws or requirements for the protection of the environment.

Attachments



Date: 12/12/2023
Sources:
PCS: NAD 1983 StatePlane Washington North FIPS 4601 Feet
Disclaimer: This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes.

0 2.5 5 10 Miles

- Sudbury Road Landfill
- City Limits
- Unincorporated Community
- County Boundary
- State Boundary

Vicinity Map
Walla Walla County Solid Waste Management Plan

Walla Walla County, WA

Sudbury Road Landfill: Existing Site Layout

City of Walla Walla, Washington

Appendix F

Preliminary Draft Plan Comments and Responses

Comments and responses will be included with the final draft

Appendix G

Resolutions of Adoption

Resolutions of Adoption will be included with the final draft

Appendix H

Hazardous Waste Information

Hazardous Waste Generators in Walla Walla County

RCRA	Name	Last Report	Last Gen Status	City
WA0000470856	Pacificcorp Walla Walla SVC CTR	2023	SQG	Walla Walla
WA2960010153	US ARMY COE Mill Creek Project	2023	XQG	Walla Walla
WA9360007315	US VA Walla Walla Medical Center	2023	MQG	Walla Walla
WAD000643478	Nutrien Ag Solutions	2023	XQG	Prescott
WAD009052432	Packaging Corporation of America	2023	SQG	Wallula
WAD020235420	Nutrien Ag Solutions	2023	XQG	Walla Walla
WAD059949362	Nelson Irrigation Corp	2023	SQG	Walla Walla
WAD067548552	WA DOC Washington State Penitentiary	2023	SQG	Walla Walla
WAD071846877	Walla Walla Community College	2023	SQG	Walla Walla
WAD096247507	Wilbur Ellis Co LLC Walla Walla	2023	MQG	Walla Walla
WAD099143984	Tyson Fresh Meats	2023	MQG	Wallula
WAD988479176	Northwest Pipeline Corp Walla Walla	2023	XQG	Walla Walla
WAD988499422	UPS Walla Walla	2023	SQG	Walla Walla
WAH000003665	Walla Walla University Plant Service	2023	SQG	College Place
WAH000013540	Walmart Supercenter 2476	2023	MQG	College Place
WAH000018200	Walla Walla University	2023	SQG	College Place
WAH000022816	Westway Feed Products LLC	2023	LQG	Burbank
WAH000023606	US DHS TSA Walla Walla Regional	2023	SQG	Walla Walla
WAH000024293	Home Depot Store 4735	2023	MQG	College Place
WAH000029289	Pacific Power & Light Walla Walla Svc	2023	SQG	Walla Walla
WAH000030022	Walgreens 10107	2023	SQG	Walla Walla
WAH000032624	Albertsons 3414	2023	SQG	Walla Walla
WAH000034679	WA AGR WALLA WALLA 2	2023	XQG	Walla Walla
WAH000035095	FPL Energy Vansycle LLC	2023	SQG	Touchet
WAH000040556	Rite Aid #5320	2023	SQG	Walla Walla
WAH000045420	Safeway Store 307	2023	SQG	Walla Walla
WAH000045972	Safeway Store	2023	SQG	Walla Walla
WAH000050929	Aspen Dental College Place	2023	XQG	College Place
WAH000055046	Sherwin Williams 8012	2023	XQG	Walla Walla
WAH000056415	Petco 1239	2023	SQG	Walla Walla
WAH000059115	Byrnes Oil	2023	XQG	Walla Walla
WAH000059840	Schnitzer Steel Burbank	2023	SQG	Walla Walla

Hazardous Waste Generators in Walla Walla County (continued)

RCRA	Name	Last Report	Last Gen Status	City
WAH000059875	217 S 2nd Ave	2023	SQG	Walla Walla
WAH000060090	Firstfruits Farms LLC	2023	LQG	Prescott
WAH000060895	Johnson Custom Farming and Excavating JCFE	2023	XQG	Walla Walla
WAR000000414	US ARMY Corps of Engineers	2023	XQG	Walla Walla
WAR000006056	Walla Walla Foundry	2023	SQG	Walla Walla

Hazardous Waste Transporters that Serve Walla Walla County

Company	Facility I.D.
Environmental Compliance Consultants	AKR000202408
NRC Environmental Services	CAR000030114
Advanced Chemical Transport LLC	CAR000070540
Ingenium Group LLC	CAR000179747
Mashburn Transportation Services Inc	CAR000295238
Patriot Environmental Services	CAR000351205
Steve Forler Trucking LLC	IDR000205625
Heritage Crystal Clean LLC	ILR000130062
Heritage Transport LLC	IND058484114
Savannah Transp Inc	KS0000336891
Clean Harbors Environmental Services, Inc.	MAD039322250
Us Ecology Transportation Solutions, Inc	MIK593743838
Clean Earth Specialty Waste Solutions, Inc.	MNS000110924
Union Pacific Railroad Company	NED001792910
Veolia Es Technical Solutions	NJD080631369
Enviroserve Inc.	OH0000333336
Basin Transportation	OKR000031492
Chemical Waste Management Of The NW	ORD089452353
Wastexpress	ORQ000023150
Environmental Compliance Consultants Inc	ORQ000032743
Palouse River & Coulee City Railroad - Condon	ORQ000041180
Safety-Kleen Systems, Inc.	TXR000081205
Emerald Services, Inc.	WAD009492877
Graymar Environmental Services Inc.	WAH000055713
Steve Forler Trucking Inc.	WAR000001263
Johnson Custom Farming and Excavating JCFE	WAH000060895

Remedial Action Sites in Walla Walla County

#	Facility/ Site ID	Site Name	City	Rank	Status
1	774	Walla Walla Airport	Walla Walla	Not ranked	Awaiting Cleanup
2	775	Whitman College	Walla Walla	5 - Lowest Assessed Risk	Awaiting Cleanup
3	777	US West Communications Walla Walla County 070397 Uswcom Walla Walla Co US West Communications W00397	Walla Walla	5 - Lowest Assessed Risk	Cleanup Started
4	779	Washington DOC Washington State Penitentiary	Walla Walla	3 - Moderate Risk	Cleanup Started
5	780	Future Coe HQ Building Site	Walla Walla	Not ranked	Awaiting Cleanup
6	784	Unocal Bulk Plant 0836	Walla Walla	Not ranked	Awaiting Cleanup
7	823	Wainwright VA Medical Center	Walla Walla	Not ranked	Cleanup Started
8	4853	Pacificorp Dell Ave	Walla Walla	5 - Lowest Assessed Risk	Awaiting Cleanup
9	14694	Basin Disposal Site	Walla Walla	Not ranked	Cleanup Started
10	16980	Fuds Humorist Outlying Field	Pasco	Not ranked	Awaiting Cleanup
11	18927	Usacoe Mill Creek Project Maintenance Yard	Walla Walla	Not ranked	Cleanup Started
12	20520	Tausick Way Landfill	Walla Walla	Not ranked	Awaiting Cleanup
13	71926	50 Gallon Diesel Spill On WSDOT Right Of Way	update	Not ranked	Awaiting Cleanup
14	901826	Port Of Walla Walla Burbank Facility	Burbank	Not ranked	Cleanup Started
15	1367331	Stubblefield Salvage Yard	Walla Walla	1 - Highest Assessed Risk	Cleanup Started
16	1747458	Walla Walla City Burdine Property	Walla Walla	Not ranked	Awaiting Cleanup
17	2534124	Walla Walla Farmers CoOp Inc Prescott	Prescott	Not ranked	Awaiting Cleanup
18	5934224	Martin D Johnson DBA Martys Mobil	Walla Walla	Not ranked	Cleanup Started
19	7848414	Muirhead Salvage Yard	Walla Walla	4 - Low-Moderate Risk	Awaiting Cleanup
20	11264449	Jackpot Food Mart 047	Walla Walla	Not ranked	Cleanup Started
21	11293827	Schwerin Concaves Walla Walla	Walla Walla	2 - Moderate-High Risk	Cleanup Started
22	11366714	Unocal SS 0191	Walla Walla	4 - Low-Moderate Risk	Cleanup Started
23	17714266	Leid Ford Chevron Bulk Storage Facility	Walla Walla	Not ranked	Awaiting Cleanup
23	21518812	Simplot Feeders	Burbank	Not ranked	Cleanup Started
25	37666554	Dairy Express	College Place	Not ranked	Cleanup Started
26	42862563	Touchet Chevron	Touchet	Not ranked	Cleanup Started
27	43322744	Mountain Oil Co LLC	Walla Walla	Not ranked	Awaiting Cleanup
28	49796611	Seneca Foods Corp Walla Walla	Walla Walla	Not ranked	Cleanup Started
29	48016	Rose Street Bridge Replacement at Mill Creek	Walla Walla	Not ranked	Cleanup Started
30	10011	Walla Walla Community College	Walla Walla	Not ranked	Cleanup Started
31	10160	Walla Walla Tire & Auto Center	Walla Walla	Not ranked	Cleanup Started
32	16913	Bill Singers Chevron	Walla Walla	Not ranked	Awaiting Cleanup
33	14568	Sun Mart 14	Burbank	Not ranked	Awaiting Cleanup

#	Facility/ Site ID	Site Name	City	Rank	Status
	10764	Walla Walla City Golf	Walla Walla	Not ranked	Cleanup Started
	11005	Waitsburg City Shop	Waitsburg	Not ranked	Cleanup Started