CITY OF

Spokane Valley

Solid and Moderate Risk Waste Management Plan

2025 THROUGH 2029

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2025 Through 2029

August 2025

GreatWest ENGINEERING

The City of Spokane Valley would like to express its gratitude for those who contributed to the creation of this plan. This endeavor would not have been possible without the hard work and knowledge of all involved including past and present City Council Members and City Staff.

Additionally, a special thank you to the individuals and organizations that were a part of the Technical Advisory Committee, which assisted the City throughout this multi-year endeavor.

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1.0 INTRODUCTION

This document presents the combined Solid Waste and Moderate Risk Waste Management Plan (the Plan) for the City of Spokane Valley (the "City" or "Spokane Valley"). This Plan provides guidance for the City's solid waste system which includes garbage, recycling, and organics collection services, transfer station facilities for public and commercial drop-off, along with transfer, transport, and disposal or processing of materials. The Plan also addresses programs for waste reduction, special wastes, and the administration of these programs. This Plan provides guidance on program development and implementation for these activities for the next six (6) years, while also attempting to anticipate the needs of the solid waste system twenty (20) years from now.

The governing legislation for the Plan includes:

- Chapter 70A.205 Revised Code of Washington (RCW): Solid Waste Management – Reduction and Recycling
- Chapter 70A.300 RCW: Hazardous Waste Management

Spokane Valley is a city of approximately 110,000 people in Spokane County, eastern Washington, only 10 miles from the Idaho border. As the eighth-largest city in Washington State, it is an integral part of the greater Spokane region (see **Figure 1-1**) and the City's economy is intrinsically tied to the larger regional economy. The City of Spokane Valley was incorporated in 2003 and has become a major retail destination and a recognized employment center that offers opportunities to visitors and residents alike. The City's vision is a community of opportunity where individuals and families can grow and play and where businesses will flourish and prosper.

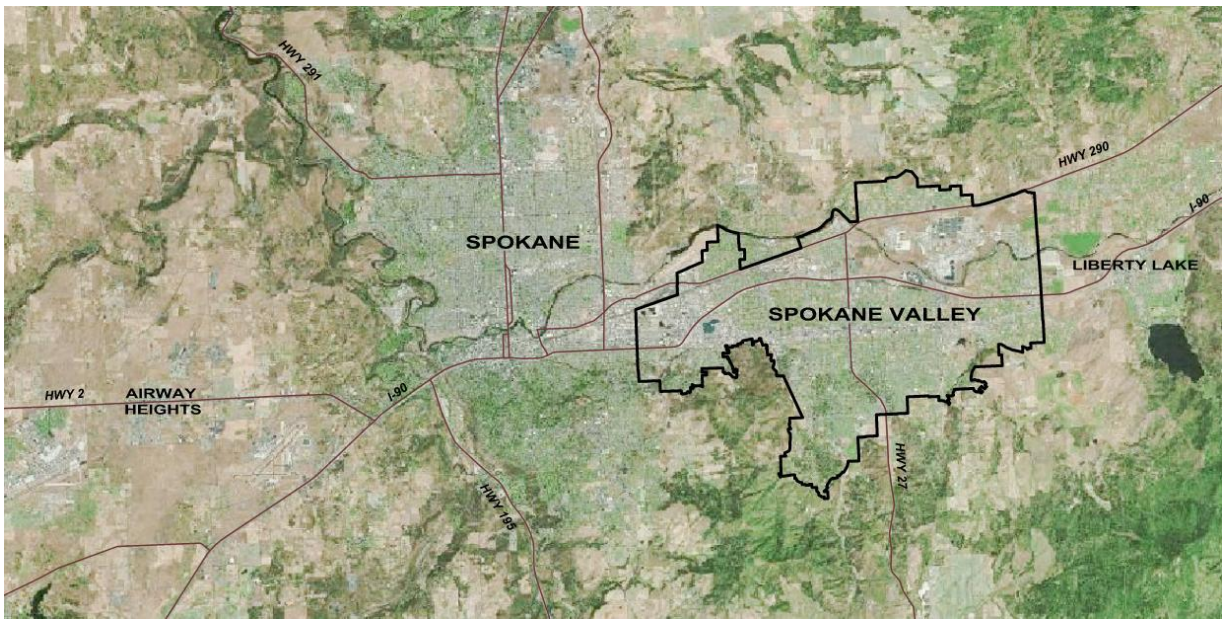


Figure 1-1 - Spokane Valley Vicinity Map

1.1 Solid Waste Management in Spokane Valley

1.1.1 History

The City of Spokane Valley was incorporated on March 31, 2003, and initially participated in the Spokane Regional Solid Waste Management System through an interlocal agreement. Upon the agreement's expiration in 2014, the City assumed full responsibility for managing its solid waste, progressively establishing its own infrastructure and service contracts. Key milestones include adopting its own Solid Waste and Moderate Risk Waste Management Plan, contracting for transfer station operations and

collection services, and implementing a Contamination Reduction and Outreach Plan (CROP). Today, the City maintains a comprehensive, state-compliant plan that guides efficient waste collection, recycling, and disposal while promoting waste reduction and environmental stewardship. For a deeper dive into the development of Spokane Valley's solid waste management program, see **Appendix B**.

1.1.2 Current Practices

The modern solid waste program in Spokane Valley thrives on robust public–private partnerships. Contracts with companies including WM (previously known as Waste Management) and Sunshine Disposal & Recycling have been integral to the program's success. These partnerships have transformed traditional waste handling by incorporating changes like self-haul transfer services, enhanced recycling initiatives, and community outreach programs designed to reduce contamination. This collaborative approach reflects the City's commitment to environmental stewardship and continuous adaptation, ensuring that the solid waste program remains effective, sustainable, and responsive to the community's evolving needs while ensuring that services are cost-effective and fiscally responsible.

The solid waste program is administered and managed by the City's Public Works Department. Services to the community generally include:

- Contracted curbside collection of residential garbage, recycling, and organics.
- Contracted collection of multi-family garbage and recyclables.
- Contracted collection of commercial garbage in 1-8 cubic yard containers, as well as roll-off boxes for industrial waste.
- A contractor owned and operated collection site [University Transfer Station (UTS)] for City-flow controlled service providers to unload garbage; self-haulers and drop off garbage, recyclables, organics, appliances, and household hazardous waste (HHW); and provision for the proper transfer, transport, management, and disposal or recycling of these solid wastes.
- Contractor owned and operated Material Recovery Facility (MRF) [WM SMaRT (Spokane Materials and Recycling Technology) Center]
- Education and outreach in coordination with the contracted service providers.
- Solid waste services during disasters

1.2 Solid Waste Management Planning in Spokane Valley

Washington state law requires all local governments to establish comprehensive programs for solid waste management to prevent pollution and conserve state resources. As part of this solid waste program, and in accordance with Chapter 70A.205 of the Revised Code of Washington (RCW), the City's separate Solid Waste Management Plan and Moderate Risk Waste Management Plan were established in 2014.

1.2.1 Inaugural (2014) Plan

When the interlocal agreement between Spokane Regional Solid Waste Management System and Spokane Valley expired, the city officially began its own solid waste management program. At that time, the City contracted to have its initial Solid Waste Management Plan written along with a separate Moderate Risk Waste Management Plan.

2014 Plan Goals

1. Ensure convenient and reliable services for managing solid waste.
2. Promote the use of innovative and economical waste handling methods.
3. Encourage public-private partnerships where possible.
4. Emphasize waste reduction as a fundamental management strategy.
5. Encourage the recovery of marketable resources from solid waste.
6. Assist the State in maintaining its goal of a 50 percent recycling rate.
7. Ensure compliance with state and local solid and moderate-risk waste regulations.

8. Assist those who sell and use products containing hazardous ingredients to minimize risks to public health and the environment.
9. Provide customers with information and education to promote recommended waste management practices.
10. Support the State's Beyond Waste goals, especially for the five key initiatives: increased diversion of organic materials; increased use of green building methods; improved management of small-volume hazardous wastes; improved management of industrial wastes; and measuring progress.
11. Address and reduce the contamination found in recyclables.

To support the plan goals, several recommendations for improving the City's overall management of waste were included in the plan. These recommended activities are listed below in **Table 1-1**. along with their implementation status as of 2025.

Table 1-1 - Implementation Status of 2014 SWMP Recommended Activities

Recommended Activity	Implementation Status	Comments
Waste Reduction		
1) Support product stewardship programs as appropriate.	Implemented	City participation in stewardship meetings and activities/programs via contracted haulers
2) The business community in Spokane Valley may be encouraged to reduce waste through a recognition program that publicizes success stories.	Not implemented	Beyond the scope of the city in reach and resources.
3) Adopt policies and practices to encourage City departments to reduce waste.	Implemented	Recycle containers added in all departments at City Hall supplemented by WM provided education materials
4) City will conduct annual round-up events.	Implemented	Annual bulky waste collection event through WM
5) Public education materials distributed by the City of Spokane Valley will include information on alternative handling methods for yard waste, the value of "smart shopping" methods, how to avoid wasting food, and the availability of volume-based garbage collection fees.	Implemented	WM education through annual mailers, continuing volume-based garbage collection fees in solid waste contracts, and adoption of compost procurement ordinance requiring City departments to identify whether compost products can be utilized in a city project
6) A ban on the disposal of yard waste within solid waste disposal containers may be considered in the future if public education and outreach efforts are not effective in diverting most of this material from the waste stream.	Partially Implemented	A disposal ban was discussed but not considered for implementation. However, pickup of yard waste and organics is now an option through WM.
Recycling and Organics		
1) Continue to include curbside recycling with garbage service.	Implemented	Hauling contracts in place for curbside collection
2) Encourage use of Sunshine Transfer Station for Clean Green.	Implemented	Outreach and education implemented by Sunshine.
3) Evaluate weekly curbside recycling.	Partially Implemented	Evaluated but not implemented due to increased cost of services
Solid Waste Collection		
1) Contract for collection service.	Implemented	Hauling contracts in place for curbside collection
2) Increase curbside collection subscriptions.	Implemented	Subscriptions increased through WM education and promotion of services
3) Refer businesses to Moderate Risk Waste (MRW) collection services as requested.	Implemented	
Transfer and Disposal		
1) Designate Sunshine Transfer Station as the disposal site for all MRW from Spokane Valley.	Implemented	
Special Waste		
1) Promote proper disposal of residential sharps.	Implemented	Included in WM provided annual service guide

Recommended Activity	Implementation Status	Comments
2) Promote green building.	Implemented	City implemented required Washington State Energy Code provisions and amendments such as required electric vehicle (EV) parking infrastructure for new buildings, storage/collection space for recyclables, etc. Additionally, city regulations and processes are designed to promote active reuse/adaptation of existing buildings for new purposes
3) Encourage use of Sunshine Transfer Station for MRW.	Implemented	Information included on Sunshine's website and in the WM provided annual service guide
4) Sunshine should consider serving Conditionally Exempt Small Quantity Generators (CESQGs).	Partially Implemented	Considered but not implemented. Beyond the scope of the City in reach and resources.
5) City will adopt ordinances if necessary to support MRW programs for identified issues	Not implemented	No MRW issues were identified.
6) City will adopt ordinance for used oil signage and container sales	Not implemented	Used oil management was not an identified issue during the plan period.
7) City to work with private entities to provide annual collection events for CESQGs	Not implemented	Beyond the scope of the city in reach and resources.
Administration		
1) Use existing staff.	Implemented	
2) Disposal surcharge as funding source.	Implemented	

1.2.2 Updated (2025) Plan

For this update, the Solid Waste Management Plan and the Moderate Risk Waste Management Plan are being combined into a single plan (the "Plan"). This Plan will be used as a guiding document for decision-making regarding future needs of the solid waste system as well as an educational tool for citizens to better understand how solid waste is being managed locally. Along with adhering to laws and regulations, this plan aligns with the City's comprehensive plan for future planning.

Required contents for this plan are outlined in RCW 70A.205.045 and include:

1. A detailed inventory and description of all existing solid waste handling facilities including an inventory of any deficiencies in meeting current solid waste handling needs.
2. The estimated long-range needs for solid waste handling facilities projected twenty years into the future.
3. A program for the development of solid waste handling facilities that meets the minimum functional standards for solid waste handling, takes into account the comprehensive land use plan, contains a six-year construction and capital acquisition program, and contains a plan for financing both capital costs and operational expenditure of the proposed solid waste management system.
4. A program for surveillance and control (to avoid or mitigate the negative impacts of improper waste handling).
5. A current inventory and description of solid waste collection needs and operations including the identification of collection franchise holders, municipal operations, the population density and the projected solid waste collection needs for the next six years.
6. A comprehensive waste reduction and recycling element that provides programs to reduce the amount of wastes generated, provides mechanisms and incentives for source separation, and establishes recycling opportunities. This may include strategies to reduce wasted food and food

waste; programs to collect source-separated recyclable materials, to collect yard waste and food waste and to educate and promote the concepts of waste reduction and recycling; and recycling strategies.

7. An assessment of the plan's impact on the costs of solid waste collection.
8. A review of potential areas that meet the criteria as outlined in RCW 70A.205.110 if siting a solid waste disposal facility.
9. A contamination reduction and outreach plan.

This plan also includes implementation strategies and community outreach programs – all designed to adapt to evolving regulatory requirements (see **Appendix A**) and sustainability goals, all of which are detailed within these plan sections. To assist with reading this plan, references used in this plan can be found in **Appendix J**, a glossary of terms and acronyms can be found in **Appendix K**, and a Plan index can be found in **Appendix L**.

2.0 BACKGROUND INFORMATION

2.1 Planning Area and Demographics

2.1.1 City Landscape

The City of Spokane Valley is approximately 38 square miles and is an urban/suburban metropolitan area. Modern Spokane Valley began as a diffused collection of agricultural communities. Residential areas were characterized by large lots, and commercial areas cropped up along highways and major arterials that connected residents to other towns throughout the Spokane River valley and, later, up and down the Interstate-90 corridor.

Today, the City offers a mix of residential and commercial uses, including single-family, multi-family, office, retail, and industrial properties. Commercial uses are located primarily along major arterials, particularly Sprague Avenue, Argonne Road, Mullan Road, Sullivan Road, and Pines Road. The residential neighborhoods between these corridors consist largely of single-family dwellings. At the same time, the City is poised to become more urban, with a growing stock of multifamily housing. Single family residential is still the City's dominant land use, encompassing 49.7% of its area. Almost 15% of the City's land is characterized as vacant[1].

[1] Spokane Valley Comprehensive Plan, 2016.

2.1.2 Population

Spokane Valley has experienced steady population growth since its incorporation in 2003, growing at a rate of about 1.6% per year. The City's estimated 2024 population was 108,800 according to the Washington State Office of Financial Management (OFM), making Spokane Valley one of the state's largest and fastest growing cities[2]. Assuming this growth rate to be consistent, the population for the City was forecasted out 20 years as shown in **Figure 2-1**.

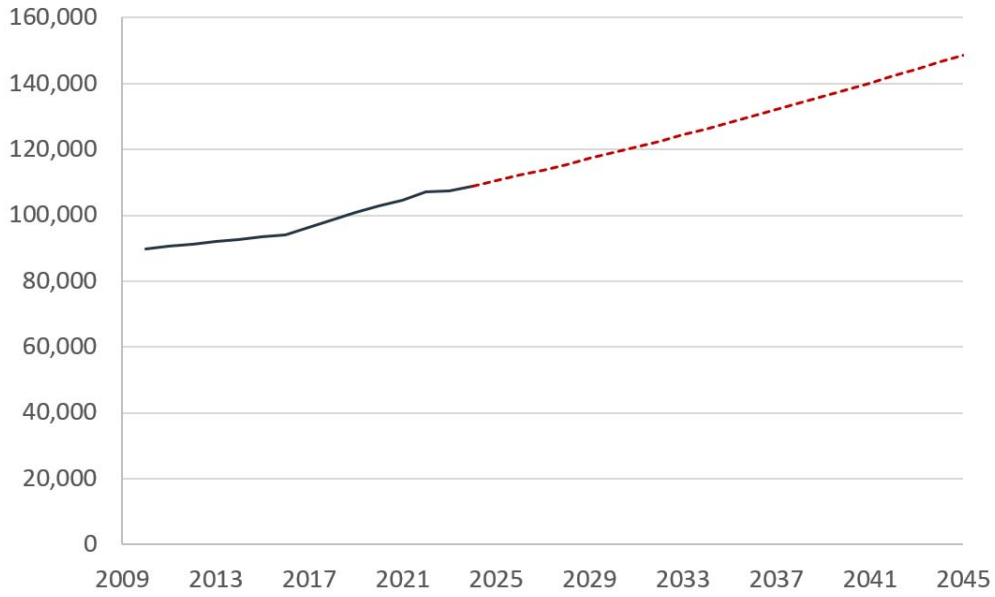
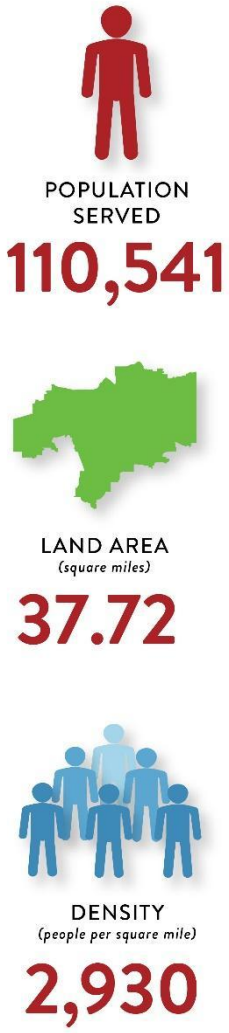
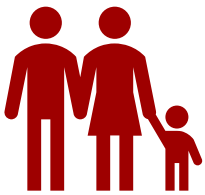


Figure 2-1 - Spokane Valley Population, Historic & Projected



2.1.3 Demographics

The majority of housing units in Spokane Valley are single unit dwellings (58%) followed by multi-unit dwellings (38%) and mobile home/other (4%). Spokane Valley's housing growth has been modest, but steady since it incorporated in 2003, growing at a rate of about 1% per year. About 12,000 new residences were added to Spokane Valley's total housing stock between 2003 and 2024[3].



Spokane Valley's population is aging. Between 2014 and 2022, the proportion of the population over the age of 65 increased by 2.5%, from around 15% to 17.5%. The City's aging trend parallels that of the County. Compared to Spokane County as a whole, the number of households with children is decreasing more rapidly in Spokane Valley. The percentage of the City's households with children decreased by 5.6%, from 30% to 24.4%, between 2014 and 2023, while the proportion of households with children in the County dropped by 4.3% during the same time period.

[2] April 1, 2025 Population of Cities, Towns, and Counties, Washington State Office of Financial Management

[3] Postcensal Estimates of April 1 Housing Units, Washington State Office of Financial Management

The median household income in Spokane Valley is $74,787, which is slightly lower than the median income of Spokane County at $73,583 in 2023. Median income in the City of Spokane Valley has been steadily increasing since 2015 when it was $43,296 per household[4].

2.1.4 Economy

Employment gains and losses are excellent regional economic indicators and provide a sense of the region's economic trajectory. Unemployment in the U.S. Census-defined Spokane-Spokane Valley metropolitan statistical area (MSA) mirrored many regions of the state over the last few decades, with a dramatic loss of jobs starting in 2008 and again in 2020. At the peak of the 2008 recession, the unemployment rate was 10.3%, and 15.9% during the Covid-19 pandemic. The most recent data reports that the unemployment rate in 2024 was around 4.5%[5].

2.1.5 Environment

Spokane Valley is a vibrant blend of urban development and natural landscapes, set against a backdrop shaped by rolling hills, agricultural lands, and the influential waterways of the region. The City's environment is marked by a semi-arid climate; warm, dry summers give way to cool, often snowy winters, a pattern influenced by its location in the shadow of the Cascade Range and on the western fringes of the Rocky Mountains. Spokane Valley is also hope to an Environmental Protection Agency (EPA) designated sole source aquifer. This climatic mix not only encourages a variety of plant life but also supports agricultural activities in the valley's fertile soils.

Applicability of Facility Siting

The City of Spokane Valley is located over the Spokane Valley-Rathdrum Aquifer, which has been designated by the EPA as a sole source aquifer. Hence, no new or expanded MSW or limited purpose landfills may be sited in Spokane Valley.

At the heart of the region's ecological identity is the Spokane River and its tributaries, which provide essential water resources and habitats for a diverse array of species. The river and its watershed play a critical role in shaping the local ecosystem—not only supporting native fish and wildlife but also underpinning the community's water quality management efforts. Local agencies work diligently to monitor water quality and reduce pollution, ensuring that the natural waterways continue to serve both ecological and recreational purposes.

Additionally, Spokane Valley's environment reflects a delicate balance between growing urban development and the preservation of natural settings. Efforts by local government and community organizations strive to integrate sustainable practices, from stormwater management to habitat restoration, reinforcing the region's commitment to environmental health.

[4] Spokane Valley Economic Development, Demographics.
[5] Federal Reserve Bank of St. Louis, Unemployment Rate in Spokane-Spokane Valley, WA (MSA)

2.2 Planning Congruency

This Plan is designed to be congruent with, and complementary to, several other city and state plans. The most significant of these plans are described below.

2.2.1 Spokane Valley Comprehensive Plan (2017)

The Spokane Valley Comprehensive Plan (SVCP) provides a 20-year vision for the future of Spokane Valley. The SVCP addresses land use, transportation, capital facilities, housing, natural environment, and parks and open space needs over the next 20 years (through 2037). The SVCP is currently in the process of being updated and the update will be adopted in 2026.

2.2.2 Countywide Planning Policies for Spokane County (2022)

The Countywide Planning Policies for Spokane County serve to create a countywide framework that all city and county comprehensive plans will adopt. The document is amended every few years to keep up to date with current regulations and needs and will be amended in 2026.

2.2.3 Washington State Solid and Moderate Risk Waste Management Plan (2021)

In 2004, the Washington State Department of Ecology ("Ecology") prepared a statewide Solid Waste Management Plan, commonly referred to as the "Beyond Waste Plan." The Beyond Waste Plan adopted a vision that states that society can transition to a point where waste is viewed as inefficient, and most waste has been eliminated. This plan was updated in 2021 with an updated vision for the future of waste. See **Figure 2-2**.

Figure 2-2 - Beyond Waste Plan Vision and Priorities

2.3 Impactful Industry Events

Several key events have occurred over the past decade affecting the solid waste industry as a whole and subsequently solid waste management in Spokane Valley. In addition to these global and national occurrences, state-level planning and legislation have also had an effect of how waste is managed in the City.

2.3.1 National Sword Policy

Historically, the U.S. shipped most of its plastic scrap overseas, particularly to China. In 2013, China introduced the "Green Fence", which included more inspections of incoming loads of scrap material. In 2016, China announced that recyclables imports would be restricted. In 2017 China followed this announcement with the launch of the National Sword program. Finally, in March 2018, China imposed a 0.5% contamination limit along with a ban on some commodities, including plastics and mixed paper.

Since this change, the cost and risk of exporting plastic materials increased significantly due to a higher likelihood of shipments being rejected and returned to the United States. While some in the industry resorted to stockpiling or landfilling materials, WM continued to process recyclables as intended. As the largest recycler in the county, WM leveraged its strong network of domestic markets to remain resilient during this transition. The industry as a whole is now reevaluating collection methods, processing standards, and how recyclability is defined – especially for items that lack long-term, stable markets.

2.3.2 Pandemic

The Covid-19 pandemic impacted nearly every aspect of life for people around the world. Several factors contributed to a shift in the amount and type of solid waste being generated in the United States. Many businesses closed leaving thousands of Americans unemployed and at home. This spike in unemployment hit the City of Spokane Valley in a way that reflects what was seen across the rest of the country. With more people at home to slow the spread of the virus, waste streams around the country were seeing increased tonnages for several waste categories including plastic and cardboard (home deliveries) packaging, food waste and, medical waste to name a few. This increase in waste production strained solid waste management systems all around the world. Charts that show the unemployment rate and waste tonnages for the City of Spokane Valley reflect this trend. Other impacted categories of waste that were affected by the Covid-19 Pandemic are recyclable packaging due to increased online shopping and construction and demolition (C&D) waste production from changes in the construction industry. The City also saw an increased tonnage of organics during this time that may have been a side effect of people doing yard work while at home. Additionally, equipment delivery time was significantly impacted during this time. In general, waste production across all categories either stabilized or returned to pre-pandemic levels once businesses began to re-open. Because of the health concerns surrounding the pandemic, loss of staff was also a huge concern for solid waste management. In fact, staffing and solid waste collection vehicle production continue to be an issue when it comes to Plan management.

2.3.3 Local Fires

Fires have been an issue in the Spokane Region for many years. In 2016, the Spokane Complex Fire burned nearly 6,500 acres south of the cities of Spokane and Spokane Valley[6]. In the summer of 2023, 2 major fires burned across Spokane County. The Gray Fire started in the City of Medical Lake, west of Spokane, and the Oregon Road Fire burned in the northern part of Spokane County. Combined, both fires burned over 20,000 acres and destroyed more than 700 structures[7]. These fires caused an influx of fire-related debris which often needs testing for hazardous materials. Many structures in the Spokane Valley area contain asbestos and fire-damaged asbestos waste is extremely harmful and must be disposed of at a moderate-risk waste facility.

[6] Northwest Annual Fire Report 2016.
[7] Facilitated Learning Analysis – Gray and Oregon Wildfires

2.3.4 Regional Storms

A variety of storms have affected the Spokane metro area in recent years. In 2015, a windstorm ravaged Spokane with winds upwards of 75 miles per hour[8]. Windstorms like this can damage buildings and harm people, as well as blow waste around transfer stations and/or landfills.

In addition, snowstorms have had an adverse effect on the solid waste management system in Spokane Valley. In December 2008, Spokane Valley experienced a historic snowstorm, deemed "Snowpocalypse", during which approximately two feet of snow fell within a 24-hour period. This intense snowfall marked the beginning of one of the snowiest winters on record for the region. In fact, in January of 2009, the region received 7.5 inches of snow in a single day, contributing to a total seasonal snowfall of over 46 inches that year. In the years 2017 through 2020, and again in 2022, Spokane Valley received over 7 inches of snow in one 24-hour period[9]. This caused slick roads, property damage, excess amounts of water on the ground once the snow had melted and made collection of waste difficult and even dangerous. Due to roof collapses, broken fences, and other damages to houses and buildings, storms like these often cause an influx of debris from structures. Organic waste often sees an increase as vegetation is destroyed in the path of the storm.

2.4 Industry Legislation

Over the past decade, several new pieces of legislation have been passed that affect the solid waste industry in Washington and how waste is managed. Many of these bills resulted in waste materials being removed from municipal collection services.

2.4.1 2017 – 2018

House Bill 1047

HB 1047 created a statewide Safe Medication Return program to ensure the secure disposal of unused medications. Managed by the MED-Project, it provides free drop-off kiosks and mail-black envelopes for residents to safely dispose of prescription and over-the-counter drugs, helping prevent misuse, accidental poisonings, and environmental harm. Certain items like vitamins and illicit drugs are excluded from the program.

2.4.2 2019 – 2020

House Bill 1114

HB 1114 established ambitious goals to reduce food waste by 50% by 2030, including halving edible food waste. The law directed Ecology to develop the Use Food Well Washington Plan, a comprehensive strategy created in collaboration with over 100 experts and multiple state agencies. The plan outlines 30 actionable recommendations across sectors such as agriculture, retail, and hunger relief, focusing on policy reform, public education, infrastructure investment, and funding. By prioritizing food recovery and efficient distribution, the law aims to fight hunger, cut greenhouse gas emissions, and save over $1 billion annually in disposal and climate-related costs.

House Bill 1543

HB 1543 aimed to modernize the state's recycling system by addressing contamination and improving market resilience. A key provision of the bill required Ecology to develop and implement a statewide Recycling Contamination Reduction and Outreach Plan (CROP). This plan, based on BMPs, provides a

[8] Massive windstorm…, *History Link (historylink.org)*.
[9] Spokane, WA December Weather History, National Weather Service.

framework for reducing contamination in recycling streams and improving public education. Additionally, the bill mandates that city and county Solid Waste Management Plans (SWMPs) include a local CROP or adopt the state's version, ensuring consistent anti-contamination efforts across jurisdictions. The law also established the Recycling Development Center to support domestic markets for recycled materials and restructured funding allocations to better support waste reduction and recycling initiatives.

House Bill 1652

HB 1652 established a statewide paint stewardship program to manage leftover architectural paint through an industry-funded and operated system. The law requires paint manufacturers to implement a stewardship plan – approved by Ecology – that ensures convenient, no-cost collection sites for residents and qualifying businesses, The program, operated by PaintCare, accepts interior and exterior paints, primers, stains, and sealers in containers of five gallons or less. Collected paint is reused, recycled, used as fuel, or properly disposed of. The law aims to reduce environmental harm, improve recycling access, and shift disposal costs from taxpayers to producers.

House Bill 2565

HB 2565 established clear labeling requirements for disposable wipes to prevent environmental harm caused by improper flushing. Effective July 1, 2022, the law mandates that non-flushable wipes – including baby wipes, cleaning wipes, and similar products – must display a prominent "Do Not Flush" label on both the front and back of the packaging. The label must follow specific design standards for visibility and durability. This legislation aims to reduce sewer blockages, protect wastewater infrastructure, and improve public awareness about proper disposal practices.

House Bill 2645

HB 2645 established the Photovoltaic Module Stewardship and Takeback Program, requiring manufacturers of solar panels (photovoltaic modules) sold in the state to finance and operate a recycling and disposal program for their products. Beginning July 1, 2025, no photovoltaic module may be sold in Washington unless its manufacturer has an approved stewardship plan on file with Ecology. These plans must ensure convenient, no-cost collection for consumers and outline how modules will be safely reused, recycled, or disposed of at the end of their life. The law aims to reduce environmental harm from solar panel waste and promote responsible product lifecycle management.

House Bill 2713

HB 2713 promotes the use of compost in public projects to support soil health and reduce organic waste. The law requires state agencies and local governments to consider using compost products in landscaping, construction, and soil maintenance for government-funded projects, where feasible. It also encourages local governments that offer residential compost collection to establish purchasing agreements with compost processors, creating a closed-loop system for organic waste reuse. Although a proposed pilot program to reimburse farmers for compost purchases was vetoed due to budget concerns, the core provisions of the bill remain in effect, reinforcing Washington's commitment to sustainable waste management.

Senate Bill 5323

SB 5323 established a statewide ban on single-use plastic carryout bags to reduce plastic pollution and contamination in recycling systems. Effective October 1, 2021, the law prohibits retailers and food service businesses from providing thin plastic bags and instead requires them to offer recyclable paper bags or reusable plastic bags for a minimum charge of $0.08 per bag. All allowed bags must meet specific standards, such as containing at least 40% post-consumer recycled content and being properly labeled. The law aims to promote reusable alternatives, support the recycled paper industry, and create consistent bag policies around the state.

Senate Bill 5397

SB 5397 directed Ecology to conduct a comprehensive study on the management of plastic packaging in the state. The law aimed to evaluate the amount, types, and lifecycle impacts of plastic packaging sold or distributed in Washington, including its environmental and economic costs. The study assessed infrastructure needs, contamination issues, and the effectiveness of existing recycling and stewardship programs. It also reviewed innovations in plastic reduction, reuse, and recycling – such as chemical recycling technologies – and identified businesses using recycled plastics. The findings were used to develop policy recommendations for reducing plastic waste through product stewardship, industry initiatives, and improved recycling systems, with the goal of implementing actionable solutions by 2022.

2.4.3 2021 - 2022

House Bill 1663

Washington State's House Bill 1663 became effective June 9, 2022. The main purpose of HB 1663 is to reduce methane emissions from landfills. In order to do this, the bill established methane emission requirements to be met by both municipal solid waste (MSW) landfills as well as limited purpose landfills. In addition, owners of covered landfills of different sizes now need to calculate the quantity of gas generated by the fill and could possibly have to install a gas collection system. Landfills in Washington State cannot exceed a methane emission value of 500 parts per million by volume or an average methane concentration of 25 parts per million by volume at any location on the landfill property. These requirements could impact solid waste disposal costs.

House Bill 1799

House Bill 1799 became effective the same day as HB 1663 and addresses organic materials management concerns. Here, Washington sets state goals related to the management of organic materials and requires local governments to establish a volumetric capacity for organic materials management. In addition, certain businesses and local governments are required to arrange or provide organic waste collection services. The Washington Center for Sustainable Food Management was created under the Department of Ecology with the passing of this bill as well. Several other requirements regarding the funding and execution of waste management were created too, such as the updating of plastic and compostable products labeling standards and the requirement to annually submit a report covering the previous year's compost procurement activities to the Department of Ecology.

Senate Bill 5022

SB 5022 is a comprehensive law targeting plastic waste reduction through multiple strategies. It bans the sale and distribution of expanded polystyrene (EPS) products such as packing peanuts (effective June 2023) and foam food containers, plates, and coolers (effective June 2024). The law also requires that single-use food serviceware items – like plastic utensils, straws, and condiment packets – be provided only upon customer request, helping to curb unnecessary plastic waste. Additionally, SB 5022 mandates minimum post-consumer recycled content in plastic beverage bottles, household cleaning containers, and trash bags, with phased increases over time to support recycling markets and reduce reliance on virgin plastics.

2.4.4 2023 - 2024

House Bill 1033

House Bill 1033 became effective July 23, 2023, and evaluates compostable product usage in Washington. HB 1033 requires that Ecology creates a legislatively outlined advisory and hire a facilitator to review issues on compostable products, mainly food related compostable products. Cascadia Consulting Group was hired to be the lead facilitator, and the Advisory Committee has been meeting

since October 2023. A final report with recommendations from the Advisory Committee was finalized in September 2024.

House Bill 1085

House Bill 1085 became effective on the same day as HB 1033 and has a focus on reducing plastic pollution. This bill requires that Ecology oversees restrictions on beauty and single-use health products provided in lodging establishments and restricts the construction and installation of overwater plastic foam structures like boat docks. The Washington Department of Fish and Wildlife will be required to conduct a study on sustainable alternative for the foam structures. Certain public buildings will also be required to install water bottle filling stations in an effort to reduce single-use plastic bottles.

House Bill 1213

HB 1213 strengthens enforcement of labeling requirements for non-flushable wipes, ensuring compliance wit the state's earlier "Do Not Flush" labeling law (see HB 2565 above). The bill clarifies that manufacturers of wipes sold in Washington must clearly and consistently label products that are not intended to be flushed, using standardized language and placement of packaging. It empowers Ecology to monitor compliance and take enforcement actions, including issuing penalties for violations. The law supports efforts to reduce sewer blockages, protect wastewater infrastructure, and improve consumer awareness about proper disposal of wipes.

House Bill 1185

House Bill 1185 became effective June 6, 2024, and focuses on reducing environmental impacts associated with lighting products. This bill bans certain mercury-containing lights from being sold starting January 1, 2029, but allows in-state distributors, retailers, and wholesalers to sell existing stock through July 1, 2029. The mercury-containing lights collection and recycling program is extended until 2035 rather than ending in 2025. A consumer fee is also added to purchases of mercury-containing lights at the end of 2028.

House Bill 1569

HB 1569 strengthens regulations on how products – especially packaging and food service ware – can be marketed in terms of degradability. The law prohibits the use of misleading terms like "biodegradable", "degradable", and "oxo-degradable" unless the product meets strict scientific standards for compostability. To be labeled "compostable", products must be certified by a recognized third party (e.g., ASTM D6400) and clearly marked with specific color signals and labeling. This legislation aims to combat greenwashing, reduce contamination in composting systems, and ensure consumers are not misled by false environmental claims.

House Bill 2301

House Bill 2301 became effective on the same day as HB 1185 and focuses on improving the outcomes associated with waste material management systems, including products impacting organic material management systems. Several organics materials management laws are updated with this bill, including the following summary from Ecology:

- Establishing five grant programs within Ecology's Center for Sustainable Food Management to support food waste reduction, food rescue, and other organic material management system improvements
- Establishing the Washington Commodities Donation Grant Program within the Department of Agriculture
- Increasing award thresholds for the Waste Not Washington School Awards
- Mandating organic materials collection in jurisdictions that implement local solid waste plans

- Requiring Ecology to adopt rules to establish permitting requirements for organic management facilities that accept food waste and that also are required to have a solid waste handling permit, to address contamination
- Amending product degradability restrictions
- Changing compost reimbursement eligibility requirements
- Increasing reporting frequency for jurisdictions with a Compost Procurement Ordinance
- Adding a requirement for products labeled as "home compostable"
- Establishing a work group to study how to improve the rescue of edible food from businesses and submit a legislative report by Sept. 1, 2025
- Studying produce sticker technology including compostability, performance, printability, and cost and submit a report to the legislature by Sept. 1, 2025

Senate Bill 5040

SB 5040, known as the "Welcome to Washington Act", aims to strengthen litter control efforts along state highways. The bill mandates greater coordination among key state agencies – including Ecology, the Department of Transportation (WSDOT), and the Washington State Patrol – to improve the efficiency and visibility of litter cleanup operations. It prioritizes highway litter removal as a public-facing environmental issue and seeks to enhance public perception of the state's cleanliness. The legislation also supports expanded use of litter crews, public education campaigns, and enforcement of anti-littering laws to reduce roadside waste and promote civic pride.

Senate Bill 5144

SB 5144 establishes a comprehensive battery stewardship program to ensure responsible environmental management of batteries. The law requires battery producers to implement a statewide collection and recycling system for portable batteries by January 1, 2027, and for medium-format batteries (like those in e-bikes and mobility devices) by January 1, 2029. Producers must submit a stewardship plan to Ecology by July 1, 2026, detailing logistics, funding, safety protocols, and public outreach strategies. The bill also mandates a study on electric vehicle (EV) battery management, with final recommendations delivered in May 2024, addressing end-of-life handling, regulatory gaps, and stakeholder responsibilities. Rulemaking to implement the law began in 2024, with public engagement underway.

Senate Bill 5376

SB 5376 authorizes the sale of cannabis waste that is not classified as dangerous or hazardous waste under state law. Previously, cannabis producers and processors were required to render such waste unusable and dispose of it at permitted facilities. Under the new law, they may now sell non-hazardous cannabis waste – such as stems, leaves, and trim – provided they first notify the Washington State Liquor and Cannabis Board (LCB) and the Department of Agriculture with details including the quantity, price, and buyer's name. All sales records must be made publicly available. If the waste is not sold under this provision, the original disposal requirements still apply. The law takes effect June 6, 2024, and aims to reduce waste while supporting sustainable reuse within the cannabis industry.

Organics Management Law (2022 & 2024)

The Organics Management Laws in the State of Washington are made of House Bills 1799, 2301, and 2713 (described above). These laws aim to reduce methane by diverting organic materials away from municipal landfills by saving food for people or livestock or composting it. Relative to 2015 levels, the goal is for 20% of previously disposed edible foods to be recovered for consumption by 2025 and for 75% of these foods to be diverted from landfills by 2030. Five different grant programs that will support these various organics management requirements will begin to be developed in January 2025. Awards for supporting waste reduction in public schools will also be increased in 2026.

2.4.5 2025

Recycling Reform Act (2025)

Signed into law in May 2025, Washington's Recycling Reform Act (SB 5284) establishes an Extended Producer Responsibility (EPR) program for consumer packaging materials, shifting financial and operational responsibility for recycling from local governments and ratepayers to the producers of packaging materials. Washington becomes the seventh U.S. state to enact such a program. Under the law, packaging producers must join a Producer Responsibility Organization (PRO) by early 2026. The PRO will be responsible for financing and managing the State's recycling system, including curbside recycling, public education, infrastructure support, and a statewide recycling list of acceptable materials.

The Washington State Department of Ecology will oversee implementation, supported by a 17-member advisory council representing stakeholders from local government, industry, haulers, Materials Recovery Facilities (MRFs), and environmental interests. The law mandates statewide curbside recycling access for all households with existing trash service, including up to 500,000 underserved homes, particularly in rural and multi-family housing. Existing UTC-regulated and municipal solid waste contracts remain in place, with the EPR system operating alongside them.

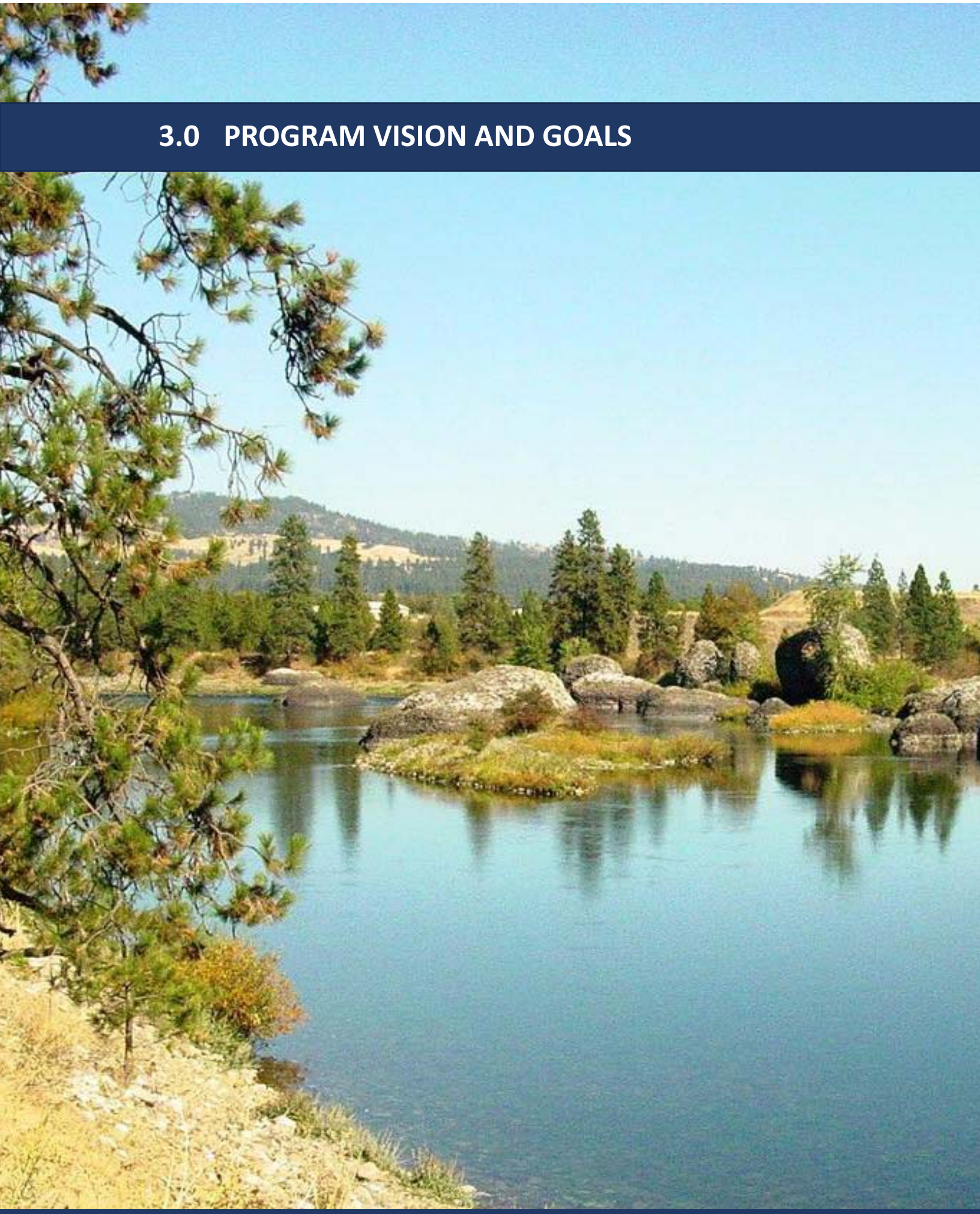
A statewide needs assessment will be completed by 2027 to identify infrastructure and service gaps and define the true costs of running the system. Implementation is phased, with reimbursement to local service providers beginning at 50% in 2030, increasing to 75% in 2031, and 90% by 2032. Exemptions apply for specific categories of food, medical, and hazardous packaging. Producers can also be exempt if they independently achieve a 70% reuse or recycling rate by 2030. In addition, starting in 2028, MRFs processing more than 25,000 tons per year must meet minimum labor compensation standards to ensure fair wages and safe working conditions for recycling workers.

Organics Management Law (2025)

Washington State House Bill 1497 (HB 1497), signed into law on May 17, 2025, and effective July 27, 2025, strengthens the state's efforts to reduce landfill-bound organic waste and improve waste system performance. The law builds upon earlier organics legislation (HB 1799 in 2022 and HB 2301 in 2024) and introduces several key updates. One major provision requires that all solid waste carts under 101 gallons purchased after August 1, 2025, must follow a standardized color scheme by January 1, 2028. This aims to reduce contamination and confusion through consistent visual cues. Jurisdictions may request exemptions, and existing, functional carts are not required to be replaced.

HB 1497 also addresses a critical service gap by mandating that updated local solid waste management plans include phased implementation of source-separated organics collection for multifamily residences, particularly new or substantially remodeled buildings. Local governments must ensure adequate bin placement space, proper signage, and provide annual sorting education to residents. The State Building Code Council will amend construction codes to support these changes. Additionally, the law requires jurisdictions to report performance metrics, such as the percentage of food waste properly separated and contamination rates, to qualify for state funding. The Washington Department of Ecology is tasked with developing an outreach and education toolkit and formalizing data reporting requirements through rulemaking.

3.0 PROGRAM VISION AND GOALS



Solid waste management is a vital service that, at its core, is provided to protect the health and safety of a community, its citizens and the environment in which they live, work, and play. However, the world of solid waste management is associated with a wide breadth of services and endless variations of how to provide those services. In 2014, the solid waste program vision was established (see **Figure 3-1**). For this plan update, that original vision statement was re-evaluated and found to be simple and remnant of the establishing the new solid waste system in 2014.

To determine how best to uniquely serve the citizens of Spokane Valley, the city worked through an iterative and collaborative review process to create a program vision statement. When crafting the vision statement, consideration was given to:

- Citizen priorities, as identified through previous surveys,
- Input from local industry experts serving on the Technical Advisory Committee (TAC),
- Regulatory requirements,
- Current industry best management practices (BMPs), and
- The Community Vision and Values of Spokane Valley.

Figure 3-1 – 2014 Solid Waste Program Vision Statment

The process of creating a new vision statement for the solid waste program began by meeting with the TAC. During this meeting, the key elements of the vision statement were identified and included:

- Cost of service,
- Continuity of service,
- Environmental protection,
- Protection of human health, and
- Efficiency.

From this meeting, a vision statement incorporating these key elements was drafted. The vision statement went through multiple reviews and edits with input from the Solid Waste Program Manager, Public Works Director, consultant and City Administrator. The final version was given to the TAC for review and incorporation in the updated plan.

This new vision statement will guide solid waste management in Spokane Valley now and into the future.

The Vision of Spokane Valley for Solid Waste is:

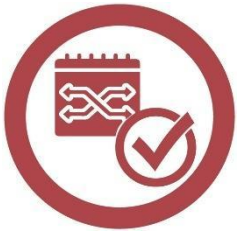
To promote a healthy community by providing affordable, adaptable and reliable solid waste services that are environmentally protective and aligned with the best practices of the state, region, and industry.

3.1 Goals

Four goals were created with input from the TAC to assist in achieving the City's vision. Recommended action items (presented later in **Section 9**) were then developed to help reach those goals. All action items were reviewed and ranked according to criteria of importance, achievability, applicability to vision, and resource needs. The highest ranked action items were then used to create the implementation plan (**Section 9**).

GOAL 1

Maintain affordability of solid waste services without compromising the level of service.



GOAL 2

Ensure the solid waste system remains reliable through disruptive changes and events.

GOAL 3

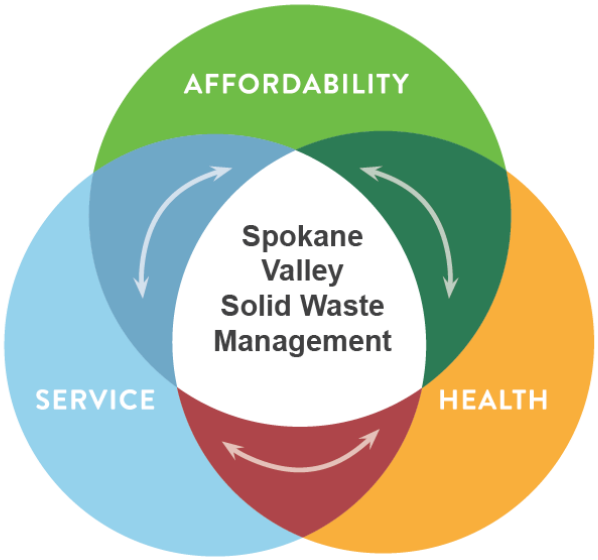
Protect the environment through proper management of solid waste streams including garbage, recyclables, organics, and household hazardous waste.

GOAL 4

Provide education and outreach to inform the communities of solid waste services and best practices and encourage optimal use of solid waste services.

4.0 WASTE STREAMS

Managing solid waste in Spokane Valley is a balance of affordability, service, health, and safety both for humans and the environment. Solid waste consists of anything people discard including food, paper, plastics, textiles, yard trimmings, scrap metal, glass, wood, appliances, etc. At one time, managing this waste simply meant collecting it and burying it in a landfill. Today's modern waste management is so much more. It includes not just the collection and transport of waste, but also capturing the value of certain wastes.



The City's solid waste is managed according to its waste category. Some wastes require special handling, some are regulated to be diverted from landfills, and others may contain economic or environmental value. For more information regarding disposal of the following wastes, refer to **Section 5**.

4.1 Municipal Solid Waste

Municipal Solid Waste (MSW) refers to waste that is generated from residences, businesses, hospitals, schools, and other institutions. It includes materials that can or will be re-used, recycled, repurposed and/or composted. Waste that cannot be beneficially reused in this manner is deemed to be garbage, or trash, and is often taken to a transfer station and then disposed of at landfills and incinerators. MSW is comprised of a mix of materials, and the composition of each community's waste stream can vary greatly. Factors that affect composition include:

Community Ethos

Geography | **Population Density**

Topography | **Urban / Rural Designation**

Proximity to Recycling Markets | **Regulations**

Climate | **Availability of Services & Programs**

Economy

4.1.1 Municipal Solid Waste in Washington

Washington State's vision for solid waste management is to move beyond waste; transitioning to a society where waste is viewed as inefficient and where most wastes and toxic substances have been eliminated. Part of working towards this vision is establishing baseline data. In 2009 and again in 2016, a statewide waste characterization study was performed to determine the composition of the state's waste streams and compare how they differed across the state. This data was updated in a new study completed in

2021. These studies included analyzing the waste streams in the West, Northwest, Puget Sound, Southwest, Central, and East regions of Washington.

Approximately 52 percent of MSW generated in Washington is disposed of in landfills and incinerators, while about 48 percent of waste is diverted. Overall, the state is generating more and more waste every year as the population increases[10]. The per capita waste **generation** (produced) rate has climbed just slightly over the past decade (2012 to 2022) from 12.0 to 12.7 lbs/person/day[11]. The per capita waste **disposal** (landfilled) rates, however, climbed from 5.7 to 7.3 lbs/person/day over the past decade.

[10] The State Solid and Hazardous Waste Plan, *Washington State Department of Ecology*.
[11] Waste Generation and Recovery Data (2022), *Washington State Department of Ecology*.

4.1.2 Municipal Solid Waste in the Spokane Region

The East region of the state's waste characterization study was based upon samples taken at the Whitman County Transfer Station and the Spokane Regional Waste-to-Energy Facility. **Figure 4-1** below compares the statewide waste stream composition to that in the East region of the state, where Spokane Valley is located.

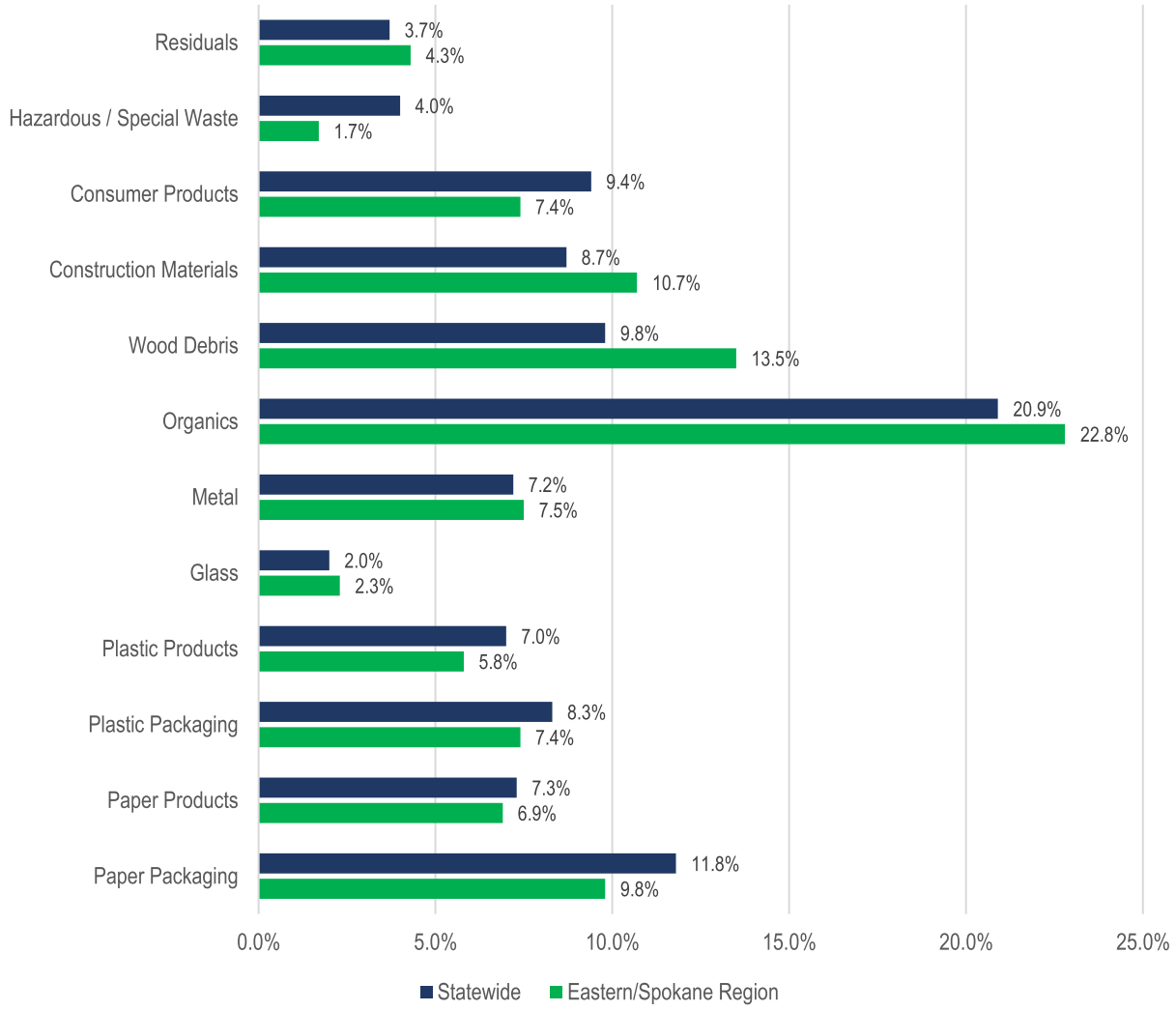
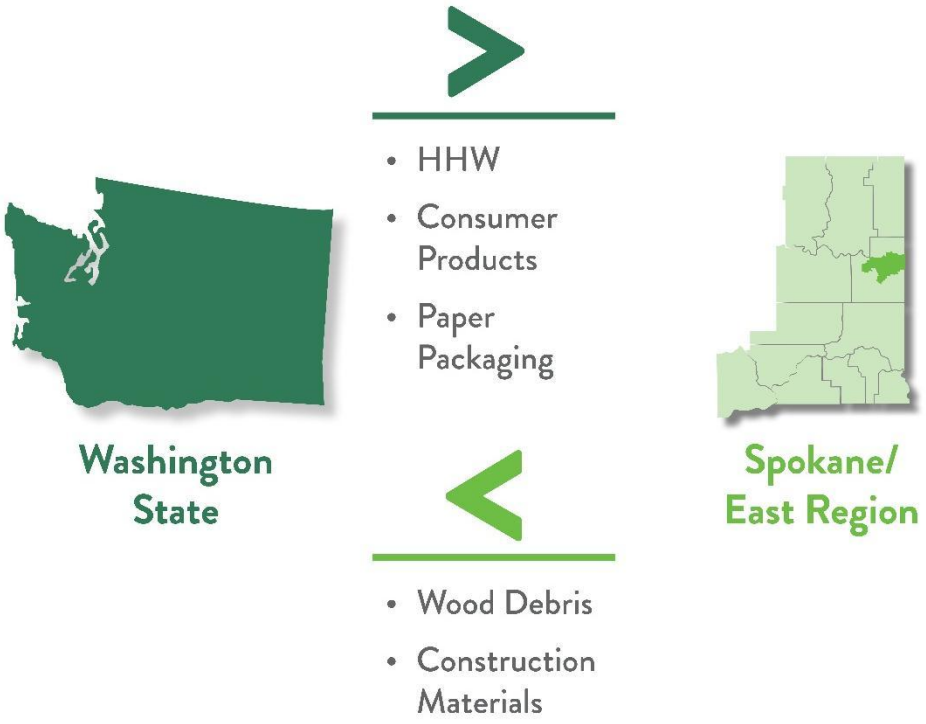


Figure 4-1 - State and East Region Waste Stream Composition by Weight

Overall, Spokane and the East region of the state have similar trends with organics making up the largest portion of the waste stream and glass making up the smallest portion. Where Spokane / East region noticeably differs is in larger amounts of woody debris and construction materials than the state average. Given the residential and commercial construction boom in this area and the large population increases over the past several years, this trend is not surprising. Compared to the rest of the state, the Spokane / East region contributes less HHW, consumer products and paper packaging.



4.1.3 Municipal Solid Waste in Spokane Valley

There is a commonality in composition between the city and the surrounding county and neighboring cities. However, Spokane Valley is a unique and separate community, with its own **economy**, **programs and services,** and **community ethos**. While there is some overlap and similarity within the region, Spokane Valley manages its solid waste separately and in a distinct manner compared to its neighbors, tailoring the services offered to their residents' specific needs (refer to the following sections for service descriptions). The City offers optional curbside collection services for garbage, recycling, and yard waste/organics through a service contract.

4.2 Garbage

As outlined previously, garbage, for the purpose of this plan, is identified as the waste that cannot or is not beneficially reused or recycled, that ends up in a landfill or incinerator. Garbage does not include hazardous waste, such as chemicals or oil-based paints, nor does it contain other prohibited wastes such radioactive material or asbestos. Items that may be classified as garbage include diapers, plastic bags, ceramics, packaging, etc. The definition of garbage can vary depending on the source and the context. . For example, the City's hauling contracts utilize a slightly different verbiage ion describing garbage as do state and federal regulatory definitions.

4.3 Recyclables

Recycling is the process of collecting and processing materials (recyclables) that would otherwise be thrown away as trash and turning them into new products. Factors contributing to whether waste items are considered recyclable include local markets, resources, facilities, and legislation. Some readily recyclable materials include plastic bottles, office paper, metals such as aluminum and steel, and cardboard. Many other materials are *technically*, but not readily, recyclable. Recyclables are generated most everywhere MSW is generated, including households, retail/commercial spaces, and even public areas like parks and roads. More details on recycling, recyclable materials, and recycling in Spokane Valley are included in **Section 6** of this Plan.

4.4 Organics

Organic waste, also referred to as compostables, refers to biodegradable materials that come from living organisms. It includes a variety of items that can decompose naturally through microbial action. Organic waste can create methane after being landfilled, contributing to greenhouse gas build up. It can also release odors and attract pests during decomposition.

There are three main types of organic waste: green waste, wood waste, and food waste.

4.4.1 Green Waste (Yard Waste)

Green waste is a type of organic waste that primarily consists of yard waste and other gardening waste including:

- Grass clippings
- Bush and tree clippings
- Weeds
- Leaves

The amount of green waste varies by season and typically spikes during spring and fall when gardening efforts are most common. Composting green waste, whether residential or commercial, has significant benefits to soil health and can decrease methane emissions if handled properly.

4.4.2 Wood Waste

Wood waste is any sort of waste from trees or shrubs with woody-material that is not coated or treated in any way. This includes tree trunks, tree limbs, logs, and other untreated wood. Typically, wood waste is chipped after being disposed of and can be used as “hog fuel”. Untreated wood can be recycled into several materials, including mulch, compost additives, and even new wood products. It can also be used as a biomass fuel in wood-burning stoves or even for energy production. Treated wood can pose challenges due to the presence of chemicals that can be harmful if released into the environment or incorporated into compost.

4.4.3 Food Waste

Food waste is any food that is not eaten, whether it is leftover food, scraps (such as peels or cores), or spoiled food. This is generated in residential, industrial, and/or commercial instances, such as schools, hospitals, or office buildings. Food waste occurs during agricultural production

(overproduction, pests, weather conditions, etc.), processing and manufacturing (peels and other parts that are not used), in retail and food service (unsold products, food preparation), and in households (discarded leftovers, expired foods). Like the other types of organic waste, food waste also undergoes anaerobic digestion during the decomposition process and produces methane. Washington has recently passed legislation to divert food waste from disposal to reduce the production of methane at landfills.

4.5 Construction and Demolition (C&D) Waste

C&D wastes are defined simply as the wastes that are generated from construction and demolition activities. These wastes consist primarily of new and used building materials (wood, sheetrock, pipe and other metals, shingles, etc.), concrete and asphalt. Land clearing wastes, including soil and large stumps, are also sometimes included in this category.

There is a large amount of C&D waste that is landfilled every year, but a significant portion of this has the potential to be reused or recycled. Items from demolition like doors, windows, or other various fixtures can be reused in new construction projects. Some materials including wood, metals, or concrete from demolition can be recycled and used as “new” products in new construction.

4.6 Inert Waste

A category of waste related to C&D wastes is inert (will not burn, creates no harmful leachate or gases, etc.) wastes. Inert wastes are defined to include some types of construction wastes, such as concrete, asphalt, brick, and ceramic tile, but specifically excludes sheetrock. Inert wastes also include glass, stainless steel, aluminum, and other wastes that can meet the criteria for inert wastes. Inert waste decomposes very slowly, if at all, and therefore doesn’t undergo any significant physical, chemical, or biological changes when exposed to the environment. Inert waste also has the potential to be reused or recycled. For example, crushed concrete can be used in new construction as aggregate.

4.7 Biomedical Waste

Biomedical wastes can be encountered in waste generated from hospitals or other medical facilities, including nursing homes, funeral homes, and pharmacies. Biomedical waste is also generated in body piercing salons, tattoo shops, and laboratories. This waste can pose risks due to the presence of bloodborne pathogens and sharps such as needles and scalpels. Biomedical waste includes:

- Animal waste/carcasses or bedding of animals infected with pathogenic microorganisms infectious to humans
- Human blood and blood products
- Pathological waste
- Sharps

Untreated biomedical waste is handled separately from regular garbage and cannot be disposed of in a landfill unless it has been autoclaved to kill pathogens.

4.8 Asbestos

Asbestos is a heat-resistant fibrous silicate mineral that is used in fire-resistant and insulating materials and fabrics. Asbestos is also a hazardous air pollutant. Airborne asbestos dust and particles are known to cause irreversible lung damage and bronchogenic carcinoma. Asbestos exposure can occur when

asbestos is released into the air. This can happen when asbestos-containing materials are disturbed through construction and demolition activities and building/home remodeling and repairs.

There are a wide variety of products that contain asbestos, including:

- Building materials (roof shingles, siding, insulation, old linoleum, ceiling or floor tiles)
- Auto parts (brakes, spark plugs, mufflers, air conditioning, clutches, hood liners, gaskets, valves)
- Cement
- Heat-resistant fabrics (blankets, firefighting gear, lab equipment)

Asbestos containing material is generally disposed of in MSW landfills permitted to take it.

4.9 Street Sweepings and Vactor Waste

Street sweepings and vactor wastes are two different wastes that are often managed together and are sometimes collectively called “street wastes.” Street sweepings are the result of sweeping streets and parking lots to remove litter, soil, and other debris. Vactor waste results from pumping/vacuuming out stormwater catch basins, ditches, culverts, and similar structures. These materials usually contain heavy metals, petroleum products, and other chemicals, as well as litter. Although this material typically contains large amounts of soil, the other contaminates make it unsuitable for reuse applications.

4.10 Moderate Risk Wastes

Moderate Risk Waste (MRW), also known as Household Hazardous Waste (HHW), is waste or materials that exhibit hazardous properties similar to those of highly regulated hazardous wastes, but are produced in amounts that are relatively low, making them more appropriate for specialized handling rather than full-scale hazardous waste treatment. Residents and businesses in Spokane Valley possess or produce small amounts of hazardous wastes, such as used solvents or other chemicals and leftover amounts of products such as garden chemicals and paints. For most businesses and virtually all residents, the amount of hazardous waste produced falls below the amount that is regulated and so is classified by Washington State law as a MRW. Businesses that create larger amounts of MRWs are regulated as hazardous waste generators (see **Appendix C**). MRW wastes can be taken to MRW facilities for proper handling, shipment and recycling or disposal of the material in a hazardous waste landfill.

4.11 E-Waste

E-waste, or electronic waste, refers to discarded electrical or electronic devices that are no longer in use or have reached the end of their life cycle. This can include anything from old smartphones, computers,

and televisions to household appliances like microwaves, and even more specialized items like medical equipment or gaming consoles.

E-waste can sometimes be considered a form of HHW, depending on its composition. Items like old televisions (especially cathode-ray tube TVs), computer monitors, and certain batteries may be categorized as HHW. Many electronic devices contain hazardous materials like lead, mercury, cadmium, and brominated flame retardants.

E-waste also contains valuable materials like gold, silver, copper, and rare earth metals, which can be recycled and reused. As technology continues to advance rapidly, e-waste is becoming a growing global concern due to the fast rate at which electronics are being replaced or discarded.

4.12 Miscellaneous Wastes

Miscellaneous solid waste includes non-hazardous, non-standard waste materials that do not fall into the major solid waste categories described above. These wastes are either not easily classified under standard waste categories and/or are handled separately from other wastes. Examples of miscellaneous wastes include bulky items such as furniture, mattresses, appliances, clothing, and textiles. These wastes are handled and recycled where available markets exist or are disposed of in accordance with solid waste regulation.

5.0 MSW COLLECTION, TRANSFER, TRANSPORT & DISPOSAL

While Washington cities, towns, and counties have primary responsibility for managing solid waste collection and disposal, they are not required to directly provide those services. Within Spokane Valley, waste and recycling services are managed through a cooperative system between the city, dedicated contractors, and regional service providers. The following figure, **Figure 5.1,** outlines the waste collection and disposal systems present within Spokane Valley.

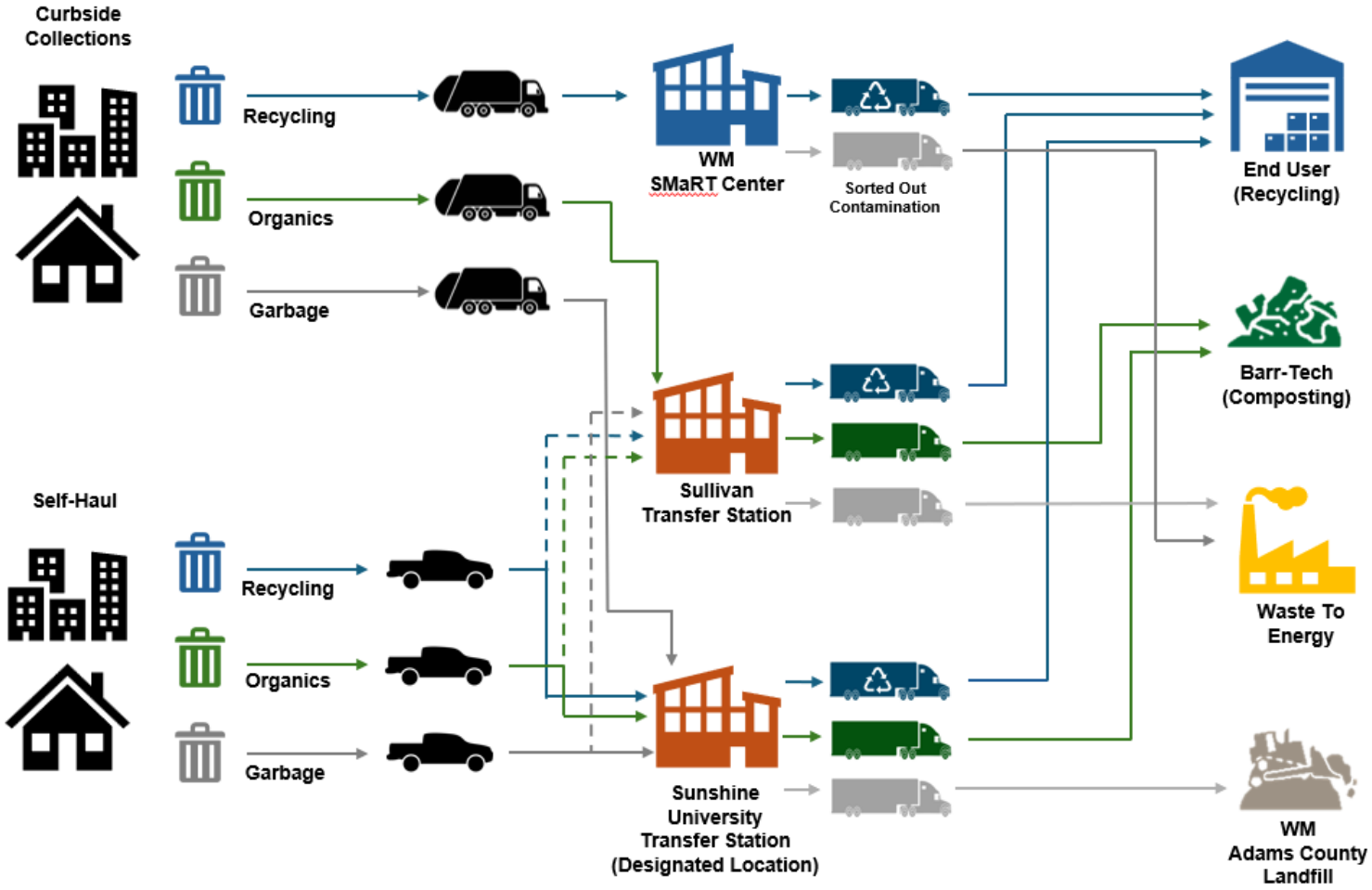


Figure 5.1. Spokane Valley Waste Collection and Disposal Systems

5.1 Collection

In Spokane Valley, subscribing to a solid waste collection service is optional. Residents may self-haul waste material to an appropriate disposal location or may subscribe to a service that will collect and transport the material from the curbside. Solid waste collection from residences, multifamily complexes, and commercial establishments is performed through a contract the City currently has with WM. The City contracts with both Sunshine Disposal & Recycling (Sunshine) and WM to provide drop-box services.

The collection of garbage, recycling, and organics using carts and 1-8 cubic yard dumpsters (also referred to as detachable containers) is performed under an exclusive contract by WM. This contract began in 2018 and expires on March 31, 2028, with two, two-year extension options for renewal. Having one hauler perform all the curbside collection results in better rates due to the economy of scale and safer, coordinated streets since there won't be multiple haulers on the same street. The collection of garbage and recyclables using 10-40 cubic yard drop-box (A.K.A. roll-off) containers is performed by both

WM and Sunshine. These two contracts also began in 2018 and expire on March 31, 2028, with two, two-year extension options for renewal.

There are also other collection services active in the City for special types of waste such as biomedical waste, asbestos, etc. Private companies, such as small contractors and "junk" haulers, also provide periodic or one-time services, picking up and hauling loose wastes in trucks or trailers. Non-franchise haulers are not permitted to provide regular/subscription waste collection services. Maintaining franchise agreements for these services helps to reduce costs for residents and provides more reliable service and higher quality services.

5.1.1 Residential Collection Programs

Curbside residential garbage, recycling and organics collection services are provided through a structured, scheduled curbside collection system managed under an exclusive contract with WM.

With the most size options of any city in eastern Washington, residents may choose the size that best fits their needs. Cart sizes provided for each service are:

- Garbage – 10 to 96 gallons (weekly)
- Recycling – 35 to 96 gallons (bi-weekly)
- Organics – 20 to 96 gallons (weekly, seasonal)

Containers used for collection are shown in **Figure 5-2**

. Importantly, Spokane Valley does not have mandatory curbside collection, so subscription with WM for curbside collection is voluntary. Approximately 55% of Spokane Valley residents utilize WM for curbside collection, meaning that the remaining 45% self-hauls their waste[12].

Single-family residents typically subscribe to a plan that combines both garbage and recycling services in a curbside collection program. Customers can subscribe to the recycling service only but cannot opt out of recycling if subscribing to the garbage collection service. Garbage is picked up on a weekly basis, while recycling is collected every other week. This system is designed for convenience, as residents are provided with rolling carts that help minimize heavy lifting and ensure a smooth, reliable collection process.

To support maximum recycling participation, residents may on occasion set out additional recyclable materials in paper bags or cardboard boxes no larger than 2 cubic feet next to their recycling cart for no extra charge. For the cleanliness of our community and safety of the collection drivers, customers who regularly generate extra recyclables exceeding the 96-gallon cart capacity are encouraged to request an additional recycling cart. They are available in all listed sizes for a nominal fee.

The city also offers an annual curbside bulky waste pick-up program provided to all WM single-family customers as part of their regular garbage service at no additional

Figure 5-2 – Garbage, Recycling, and Organics Containers

[12] City provided data based on customer accounts.

charge. One (1) bulk pick-up is free annually per household/account. Additional bulk pick-ups are chargeable per the current rate for the type of material.

Multi-family buildings (apartments) are also provided with garbage and recycling collection services. WM is contracted to provide garbage and recycling collection using carts and 1- to 8-cubic yard dumpsters. Both WM and Sunshine are contracted to provide garbage and recycling collection using 10- to 40-cubic yard drop-boxes. These services are provided on a subscription basis, meaning that the manager or owner of an apartment building may choose to subscribe to one or both services and thus make them available to their tenants. Materials collected for multi-family buildings are the same as for the residential curbside program. The size and number of containers, collection frequency, and other details depend on the subscription level selected.

Organics are a separate optional WM subscription for single- and multi-family residences. Curbside organics collection occurs weekly from March through November and monthly from December through February, using 20- to 96-gallon carts.

Tonnages collected for garbage, recycling, and organics from single-family residential curbside services are shown in **Figure 5-3** below. Tonnages for multi-family units are not tracked and are included within either residential or commercial tonnages with the differentiator being the type of container being picked up (residential-type cart or commercial-type dumpster).

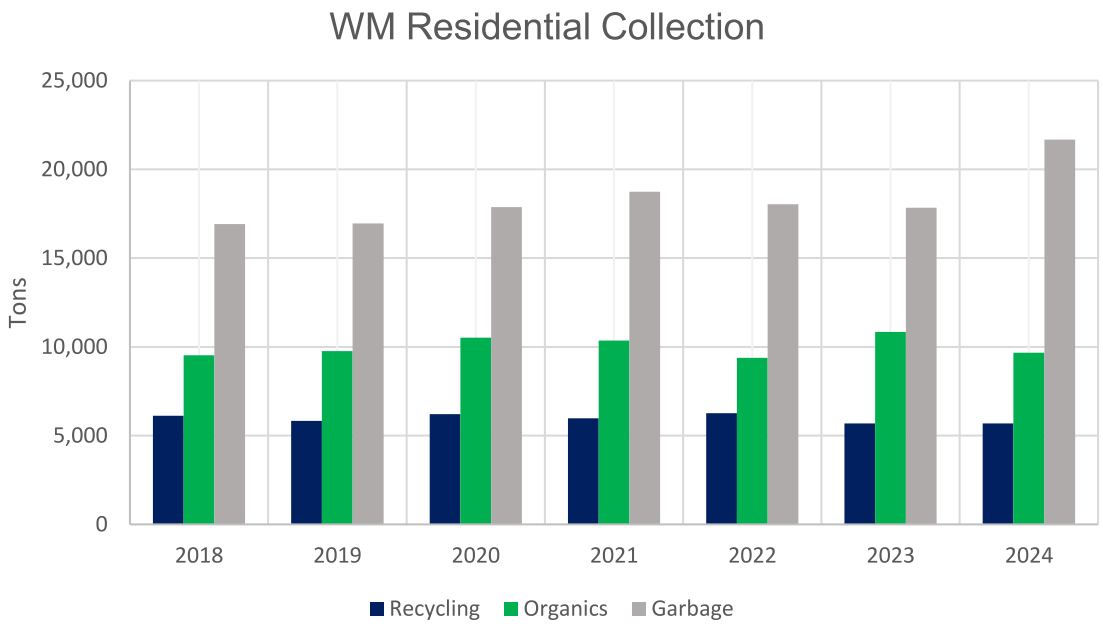


Figure 5-3 - WM Residential Curbside Collection Tonnages 2018-2024 (Source: WM Reports)

5.1.2 Biomedical Waste Collection

The Washington Utility and Transportation Commission (WUTC) regulates transport of biomedical wastes. The WUTC has issued statewide franchises to WM/Stericycle to transport biomedical wastes. WUTC regulations also allow regular solid waste haulers to refuse to collect or haul wastes that contain biomedical waste.

5.1.3 Commercial Collection Programs

WM and Sunshine support and service commercial customers through contracts with the City. Commercial services offered include subscription and periodic collection of garbage and organics.

WM is contracted under an exclusive contract to provide garbage collection using carts and 1- to 8-cubic yard dumpsters. Both WM and Sunshine are contracted to provide garbage collection using 10- to 40-cubic yard drop-boxes.

WM also collects organics for commercial institutions. Commercial organics are collected weekly using 20- to 96-gallon carts.

WM is also contracted to provide garbage and recyclables collection using carts and 1- to 8-cubic yard dumpsters for special events.

Services not mentioned above may be provided by private contractors that do not conflict with or violate regulations and franchise agreements.

Of these services, multi-family and commercial garbage collection manages the largest volume of waste with the quantities collected by WM and additional waste collected in roll-off boxes shown in **Figure 5-4**.

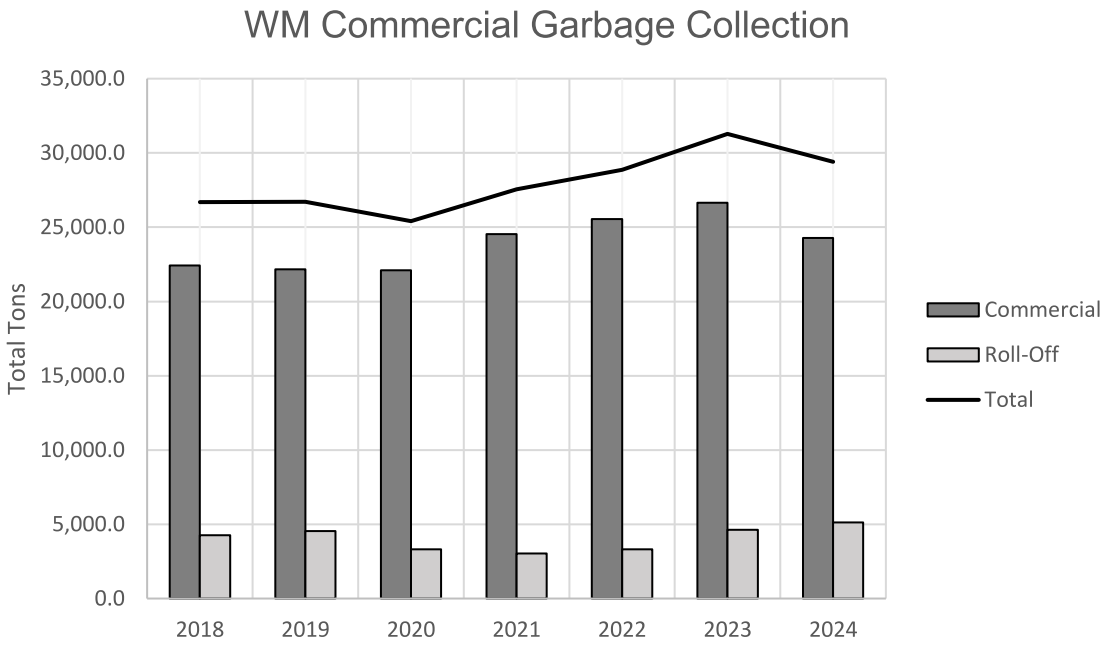


Figure 5-4 - WM Multi-Family and Commercial Garbage Collection Tonnages (Source: WM Reports)

Overall, total waste volumes being collected are increasing with a trend developing of congruent and opposite fluctuations in residential and commercial waste tonnages. That is, when residential tonnages increase, commercial tonnages show a corresponding decrease around the same time, and vice versa. These shifts could be attributed to a variety of influences including changes in construction and remodeling activity in the area, increasing waste and population trends or the shifting of remote work back to in-office work.

5.2 Transfer

There are currently two transfer stations operating in Spokane Valley (see **Figure 5-8**). The University Transfer Station (UTS), owned and operated by Sunshine, is located centrally in the City, just west of University Road and south of Montgomery Drive. The UTS is contracted to be Spokane Valley's designated waste transfer facility for the next 10 years, and the city has the option to extend this service for up to 10 more years. There is also the Sullivan Transfer Station, owned and operated by the Spokane County Regional Solid Waste System (SRSWS), which is located in the northern part of the City, just west of Sullivan Road.

SPOKANE VALLEY UNIVERSITY TRANSFER STATION

This UTS has been in operation at this location since 1983. The transfer station is open to contractors, residents, and commercial haulers for accepting and processing of MSW, recycling, organics, C&D waste, miscellaneous wastes (appliances, etc.), and MRW. All residential and commercial garbage collected from the City by designated haulers (Sunshine and WM) is delivered here.

5.2.1 Garbage

Figure 5-5 below shows the garbage tonnages collected at the UTS over the past several years.

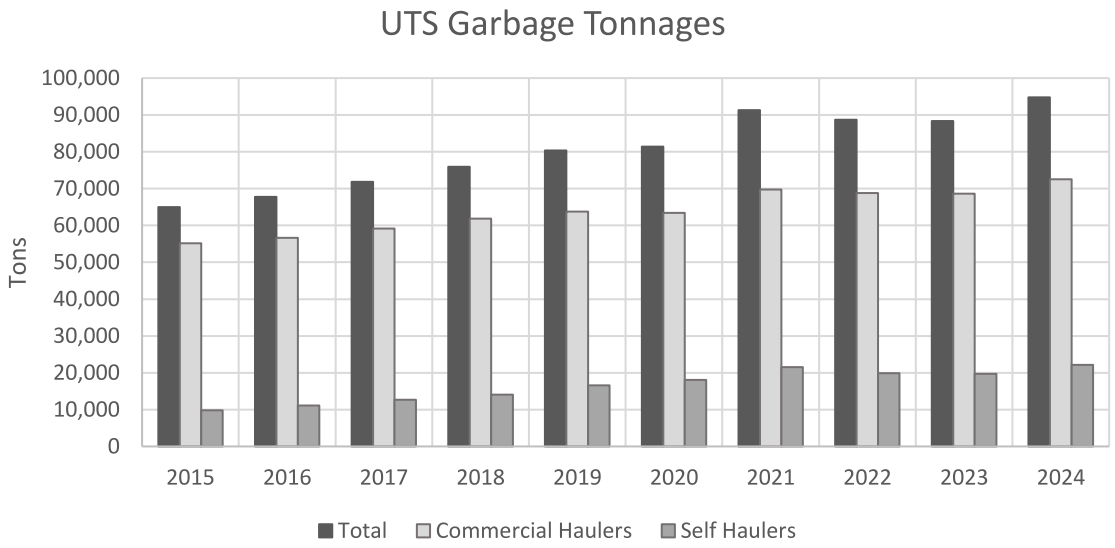


Figure 5-5 - UTS Garbage Tonnages (Source: Sunshine Reports)

The incoming garbage from commercial haulers, designated haulers, and self-haul vehicles continues to trend upward with year-to-year fluctuations. C&D wastes are generated at a rate that is proportional to the construction activity in the area. Annual tonnages vary with changes in population and the economy among a variety of other influences. Large developments (residential or commercial) and other one-time projects can also have a significant impact on annual tonnages.

Over the last decade, the self-haul traffic has doubled. Although commercial and designated haulers bring in the large majority of the garbage volume, the number of self-haul vehicles is 4-times that of commercial/designated haulers. This is an important factor for future transfer station improvements, ensuring that the facility is sized not only to accommodate increasing tonnage and throughput, but also increasing traffic volumes.

	Tonnage	Trip Count	Tons/Trip
Commercial	72,572	14,491	5.0
Residential	22,161	61,833	0.4

In looking at the breakout of garbage tonnages and trips by commercial and residential customers (see **Figure 5-6** and **Figure 5-7**, this trend of increasing trips and tonnages from residential customers and decreasing trips and tonnages from commercial customers continues.

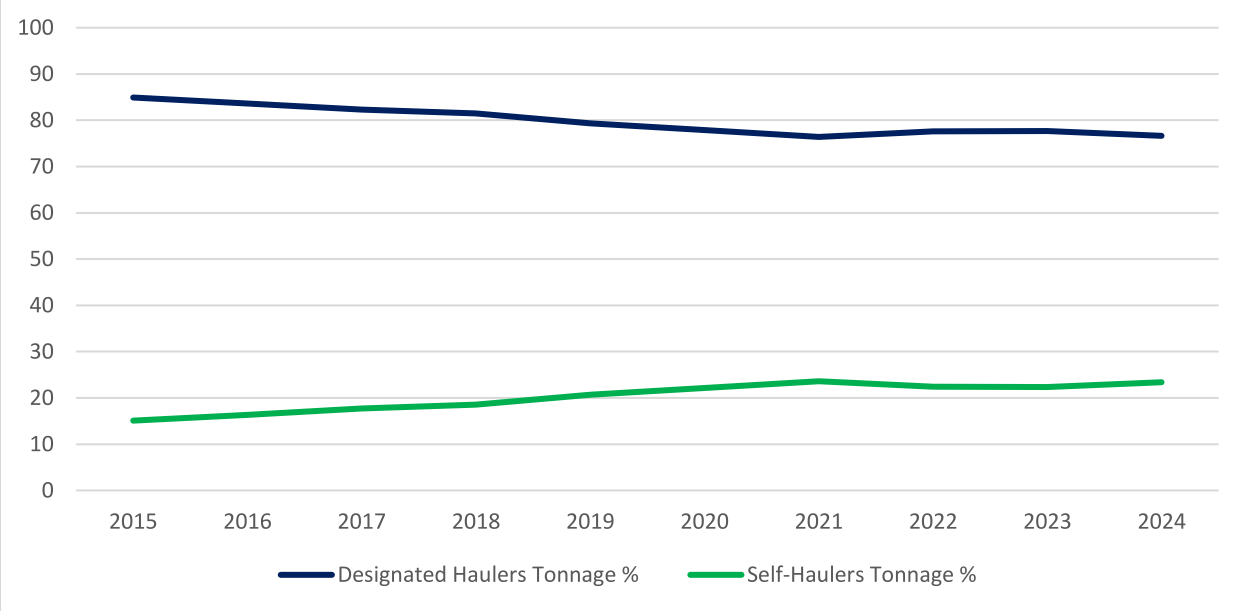


Figure 5-6 – Tonnage Split Between Commercial and Residential Customers at the UTS

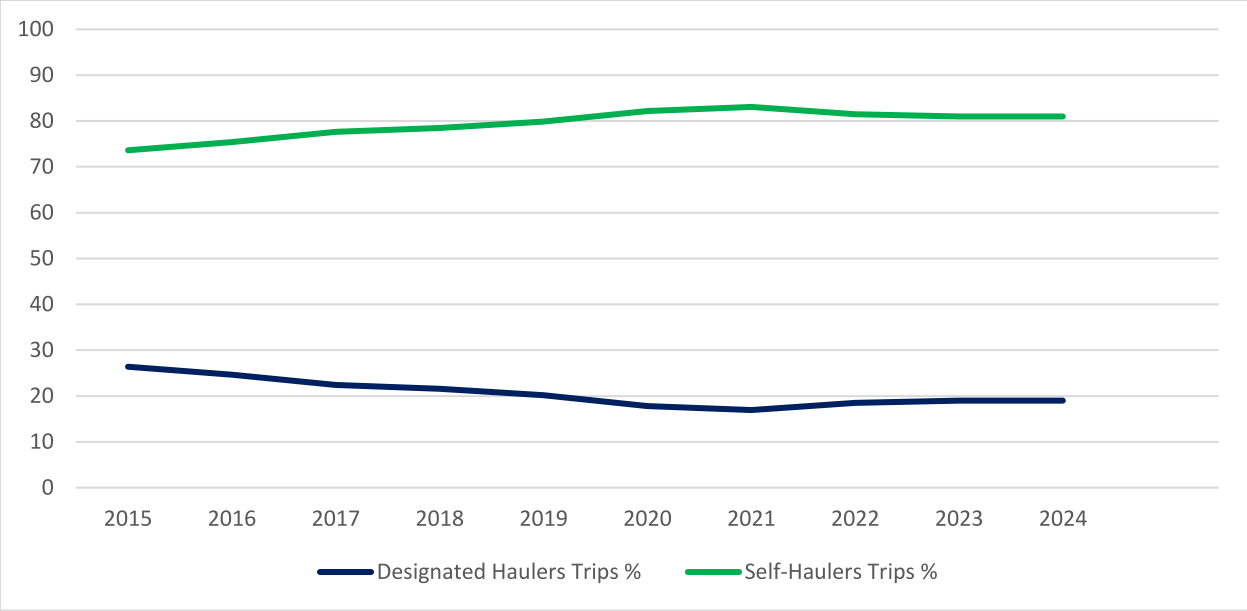


Figure 5-7 – Trips Split Between Commercial and Residential Customers at the UTS

5.2.2 Recyclables

For recyclables, commercial haulers take recyclables to the SMaRT Center, but residential customers bring their recyclables to the UTS where they source separate out the recyclables by type. Cardboard and other recyclables delivered to the UTS are prepared for transport by sorting and baling. Some recyclables (primarily metals and wood) from mixed loads are also separated on the station's tipping floor. Additional information on recycling is found in **Section 6**.

5.2.3 Organics

Residents can bring mixed organic material to the UTS year-round. Organics collected from commercial customers by Sunshine are also brought to the UTS. Here, the materials are collected on the tipping floor and loaded into trailers for transfer to Barr-Tech. Commercial haulers collecting organics curbside take the collected material to the Sullivan Transfer Station. Additional information on organics is found in **Section 7**.

5.2.4 UTS Management

One of the main obstacles transfer stations can face is managing odors, which can significantly disrupt operations and affect nearby communities. The accumulation of waste materials, especially organic matter, can produce strong, unpleasant smells that permeate the area. These odors can lead to complaints from residents and businesses, potentially causing regulatory issues and necessitating costly migration measures. Effective odor control strategies, such as proper ventilation, regular cleaning, and the use of odor-neutralizing agents, are essential to minimize these disruptions and maintain a more pleasant environment for workers and the surrounding community (see **Appendix F**).

Another obstacle at transfer stations is queuing and traffic congestion. This can cause long wait times for public customers and delays to collection trucks, which in turn may affect collection service route times. To improve wait times, and accommodate current and future area growth, improvements will be made at the UTS beginning in 2025 with design, and construction being complete in 2026. Improvements will focus on expanding the area for waste tipping/drop-off, improving the overall throughput capacity of the station.

5.3 Transport and Disposal

Sunshine is responsible for and provides appropriate transport services for all the received garbage, C&D waste, recycling, organics, special wastes, and MRW from the UTS to the appropriate facility for processing or disposal.

5.3.1 Garbage

All garbage collected by designated haulers within the City is brought to the UTS. This waste, along with garbage that is self-hauled to the UTS, is consolidated into transport vehicles (long haul trucks and trailers) and disposed of offsite primarily at the Adams County Regional Landfill, owned and operated by WM. This landfill, which is just over 100 miles away from the UTS, is the closest regional landfill to Spokane Valley. This newly opened site has decades of capacity, making it a reliable long-term solution for waste disposal.

There are no active end-point garbage disposal facilities (landfills) in Spokane Valley. In other areas of Spokane County, there is the City of Spokane Waste-to-Energy (WTE) Facility, One active MSW landfill (Northside Landfill), one active WM C&D landfill, and several private inert landfills (see **Figure 5-**). The Northside Landfill is not open to the public and is used by the City of Spokane for emergency disposal purposes (in case the WTE facility is temporarily shut down) and for disposal of materials that cannot be processed at the WTE facility.

5.3.2 Emergency Disaster Debris Management

In the event of a disaster, Sunshine Disposal will coordinate with Spokane County to manage debris removal and disposal operations. If Sunshine's UTS becomes inoperable during such an event, the City of Spokane Valley has contingency plans in place, including access to designated backup facilities in the Spokane region to ensure continued debris management services. This redundancy is critical for maintaining public safety, minimizing environmental impacts, and supporting efficient recovery efforts during emergency situations.

5.3.3 Recyclables

The recyclable materials baled at the UTS are transported to end markets to be turned into new materials.

5.3.4 Organics

The organics from both the UTS and the Sullivan Road Transfer Station are transported to Barr-Tech composting facility in nearby Lincoln County. Sunshine transports material from the UTS and the SRSWS transport material from the Sullivan Road Station. Barr-Tech has stringent requirements for quality of received materials and will turn away excessively contaminated loads.

5.3.5 Construction and Demolition (C&D) Waste & Inert Waste

Some C&D wastes are disposed of with MSW either through curbside collection (small quantities) or by self-hauling to the UTS. Larger quantities or commercial quantities of C&D are generally disposed of at the Graham Road Landfill, owned and operated by WM. Segregating C&D waste from MSW can result in significant cost savings in comparison to transferring and disposing of the often dense and heavy waste at an MSW landfill. The Graham Road Landfill is open to the public and accepts C&D waste, petroleum-contaminated soils, inert wastes, asbestos, and other special wastes.

5.3.6 Biomedical Waste

Biomedical waste collected by companies in the area including WM Healthcare Services and Trilogy Medwaste, is incinerated or autoclaved with the residual ash or remaining non-infectious material is landfilled. On occasion, small amounts of biomedical wastes end up being improperly disposed of with

general MSW by small generators such as veterinarians and dental offices. The larger issue with biomedical waste is residential sharps (syringes). When improperly disposed of with MSW or other waste streams, needles pose a safety risk to waste and recycling handlers, drivers, and operators. Residents may collect used hypodermic needles in either labeled sharps containers or in rigid red plastic bottles, such as detergent bottles. These containers can be dropped off at the UTS within Spokane Valley or at a variety of private organizations around the region. WM Healthcare also offers a SafeDrop Sharps Mail Back program open to residential locations.

Sharps and other biomedical wastes are generated at residential locations from home health care, especially for diabetes and other health problems, and from illegal drug use. Residential sources often lack access to proper disposal methods, and residential sharps thrown in the garbage can pose a hazard to waste collectors and others.

5.3.7 Asbestos

Asbestos waste from Spokane Valley is disposed of at the Graham Road Landfill. Asbestos waste constitutes a small volume of the total waste disposed of at this facility, which has a life expectancy of almost 100 years. This waste requires special handling, typically by abatement professionals.

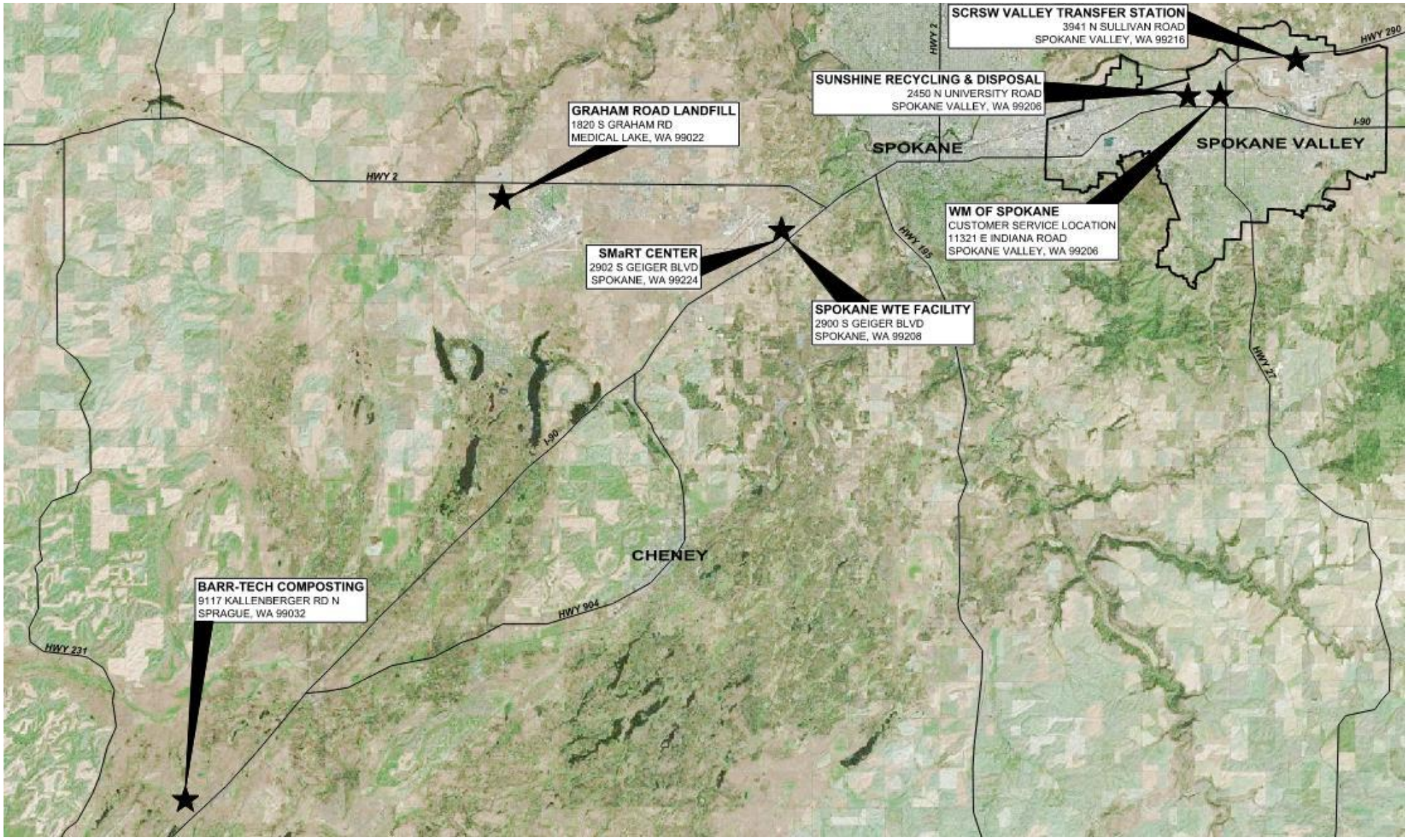


Figure 5-8 – Regional Disposal and Transfer Facilities Map

5.3.8 Street Sweeping/Vactor Waste

In Spokane Valley, street sweeping and the collection of vactor wastes with vacuum trucks are performed by private companies under contract with the City. These wastes are disposed of at the Spokane Valley Regional Decant Facility, a specialized site designed for handling the liquids and solids collected from street and stormwater maintenance operations. The facility is used by local government agencies, including the City of Spokane Valley and the Washington State Department of Transportation (WSDOT). Here, the liquids are removed from the solids allowing the solid material to be transported for disposal.

5.3.9 Moderate Risk Waste

MRW is mostly generated in small quantities by households and local businesses. If other alternatives to disposal are not provided, MRW materials will end up being disposed of with MSW being sent to the landfill. Although MRW is allowed to be disposed of in a landfill, residents and small business operators are highly encouraged to take their MRW to designated drop-off sites or companies. These collection points are specifically designed to safely receive, sort, and temporarily store the materials. Once collected, certified contractors transport the waste to specialized disposal facilities that are equipped to handle such materials. At these facilities, the waste is treated through stabilization, neutralization, or incineration in facilities engineered to contain hazardous emissions.

The quantity of MRW collected at the UTS has been on the decline since the peak during the Covid-19 pandemic. During this time, many people were cleaning and clearing out residences and had more time to separate and drop off their MRW. This could be one cause for the decline in MRW quantities in addition to other unknown influences such as a reduction in the use of household chemicals, a changing economy, or changes to access of drop-off points. **Figure 5-9** below shows the recyclables tonnages collected at the UTS over the past several years.

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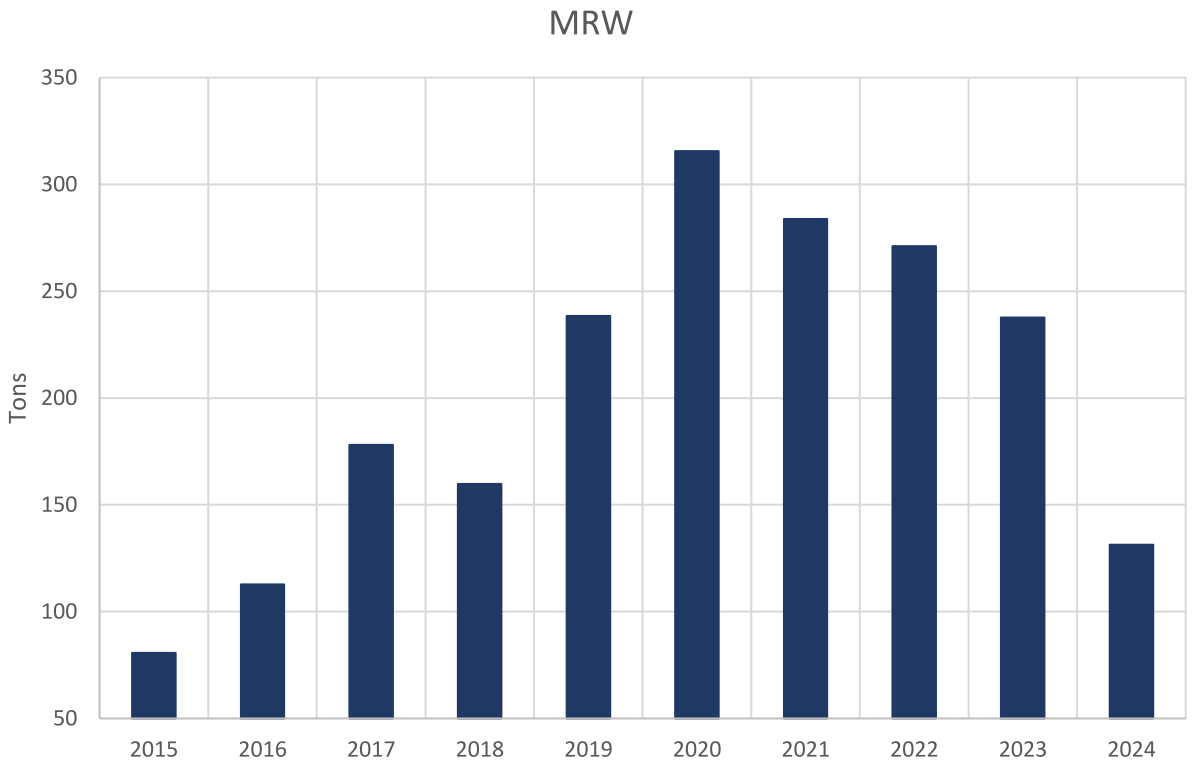


Figure 5-9 - MRW Tonnages Collected at the UTS

6.0 WASTE REDUCTION, REUSE, & RECYCLING

RCW 70A.205.005 states, “It is the responsibility of county and city governments to assume primary responsibility for solid waste management and to develop and implement aggressive and effective waste reduction and source separation strategies”. The legislature’s first priority is waste reduction and, secondly, recycling.

The Environmental Protection Agency (EPA) has developed a hierarchy for solid waste management (see **Figure 6-1**) that prioritizes strategies to reduce waste and minimize environmental impacts. This hierarchy helps municipalities, industries, and individuals make the best choices for waste management and prioritize extending the useful life of products and materials. By following this same hierarchy, Spokane Valley is able to reduce waste being disposed and, even more importantly, reduce the waste produced overall.

1. **Source Reduction:** This is the top priority and is aimed at reducing or eliminating waste before it’s even created. By designing products and processes that use fewer resources and produce less waste the environmental burden is most effectively lessened. Source reduction can include choosing more sustainable or less toxic materials, modifying industrial or manufacturing processes so that waste generation is minimized, or simply buying less.
2. **Reuse:** The next best option for materials is to reuse them whenever possible. Reuse generally entails finding ways to use an item or material in its original form rather than disposing of it. Reusing not only extends the useful life of materials but also reduces the demand for new resources.
3. **Recycling:** When reuse isn’t possible, recycling provides a valuable alternative. Recycling prevents materials from becoming garbage by recovering them and processing them into new products.

Each step in this hierarchy is designed to encourage more sustainable choices by shifting the focus from simply disposing of waste to actively managing resources to promote practices that conserve energy and natural resources and reduce pollution.

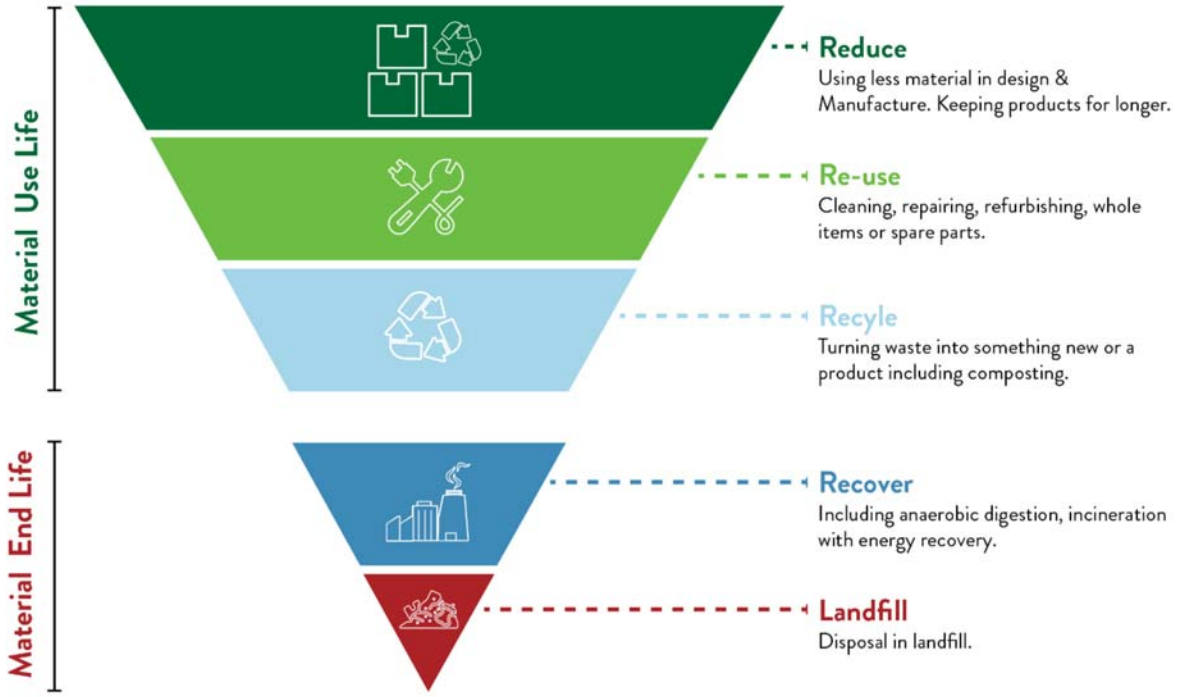


Figure 6-1 – EPA Hierarchy for Solid Waste Management

6.1 Waste Reduction

Reducing waste at the source within Spokane Valley is promoted and achieved through encouraging behavior modification of residents through outreach and education (described in **Section 8**) and by utilizing a pay-as-you-throw (volume-based) system for setting residential garbage collection fees.

Various initiatives can be promoted to encourage waste reduction including:

- **Mindful Purchasing Decisions** - Choosing products with minimal packaging/packaged in bulk, opting for quality goods with a longer useful life, and minimizing the use of disposable products that need to be replaced regularly.
- **Adopting Reusables** - Using reusable bags, bottles, and containers and switching from single-use items to reusables such as insulated water bottles and lunch boxes rather than cheap bottles/bags.
- **Smart Food Planning, Purchasing, and Usage** - Thoughtful planning can reduce food waste, help to reduce spoilage, surplus, and grocery costs.

Volume-based collection fees provide important feedback to residents and businesses and help educate them to the idea that there is a cost associated with the amount of waste they produce. In Spokane Valley, garbage collection costs vary according to the size of the container and frequency of collection for both residential and commercial customers.

6.2 Reuse

The reuse of materials rather than wasting them is a practice that can have a big impact across the city. Reuse of materials not only removes items from the waste stream/disposal, it offers a product to other residents at a discounted or no-cost and keeps the material or product local. Although many of these individual efforts only deal with a few items, altogether these activities provide a significant benefit to the local economy and environment. Classic reuse organizations such as thrift stores, garage sales, and Habitat for Humanity still thrive and are now supplemented by online selling/swapping markets such as OfferUp and Facebook Marketplace. Local retailers are also aiding in the reuse of materials. Defective or returned merchandise that has been historically discarded has now found a secondary market in liquidation stores and online auction sites.

6.3 Recycling

“Recycling” refers to the act of collecting and processing materials to return them to a similar use. Recycling does not include materials burned for energy recovery or destroyed through pyrolysis and other high-temperature processes. The State’s definition of recycling is “recycling means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport” (Chapter 173-350 WAC). As indicated in the definition, the common use of the term “recycling” to refer to the act of placing materials in a special cart or other container to be collected separately from garbage is a misnomer, and recycling does not actually occur until the materials are processed and then used to create new products. On the other hand, keeping recyclable materials separate from garbage at the point of generation is often a critically-important first step in ensuring that the materials are actually recycled.

6.3.1 Recycling Contamination

One of the most prevalent and difficult challenges with recycling is contamination Contamination in recycling has several significant impacts that compromise the effectiveness of recycling programs. First, it reduces the quality and market value of recyclable materials, as buyers are less willing to accept or pay for contaminated loads. In some cases, entire batches are rejected and sent to landfills (adding cost), undermining the effectiveness of recycling programs. This leads to increased costs for municipalities and haulers, who must pay for both additional sorting and disposal.

Contamination most commonly occurs when:

- Non-recyclable materials (e.g. plastic bags, food, Styrofoam) are placed in recycling bins.
- Recyclables are not cleaned (e.g. greasy pizza boxes, jars with food residue).
- Items are sorted or disposed of incorrectly
- Materials are bundled improperly (e.g. bagging recyclables in plastic bags).

Contamination also creates operational problems at material recovery facilities (MRFs), where items like plastic bags, garden hoses, and cords can jam or damage machinery, causing downtime and expensive repairs. Additionally, hazardous contaminants like batteries or propane tanks pose serious safety risks, including fires. High contamination rates can lower overall recycling recovery rates, as good materials may be discarded due to cross-contamination. A recycling audit that was completed in 2023 identified that the more persistent contaminants found in Spokane Valley's recyclables included non-recyclable paper, plastics, metals, and loose materials such as food and textiles. Further details and findings of the Recycling Audit and Characterization Study can be referenced in **Section 6.5.2**.

Contamination concerns can lead to the removal of certain materials (such as containers full of liquid or recyclables in plastic bags) from designated recyclable lists, as their high risk of soiling other recyclables makes them impractical to process effectively. It is a multi-prong issue that is hard to manage and prevent. The recycling landscape has changed over the past several years:

- The tolerance for contamination in segregated materials has decreased,
- The prevalence of wish-cycling[13] has increased, and
- MRF technology has rapidly improved, better capturing unapproved material or "contamination"

These factors combined affect the overall contamination rate. As expected, the contamination rate in Spokane Valley is generally increasing while the overall tons of material sent for recycling is decreasing, as displayed in **Figure 6-2**.

[13] Wish-cycling refers to the act of placing non-recyclable or improperly prepared items into recycling bins with the hopeful (but incorrect) assumption that they will be recycled, which often leads to contamination and the rejection of entire recycling loads.

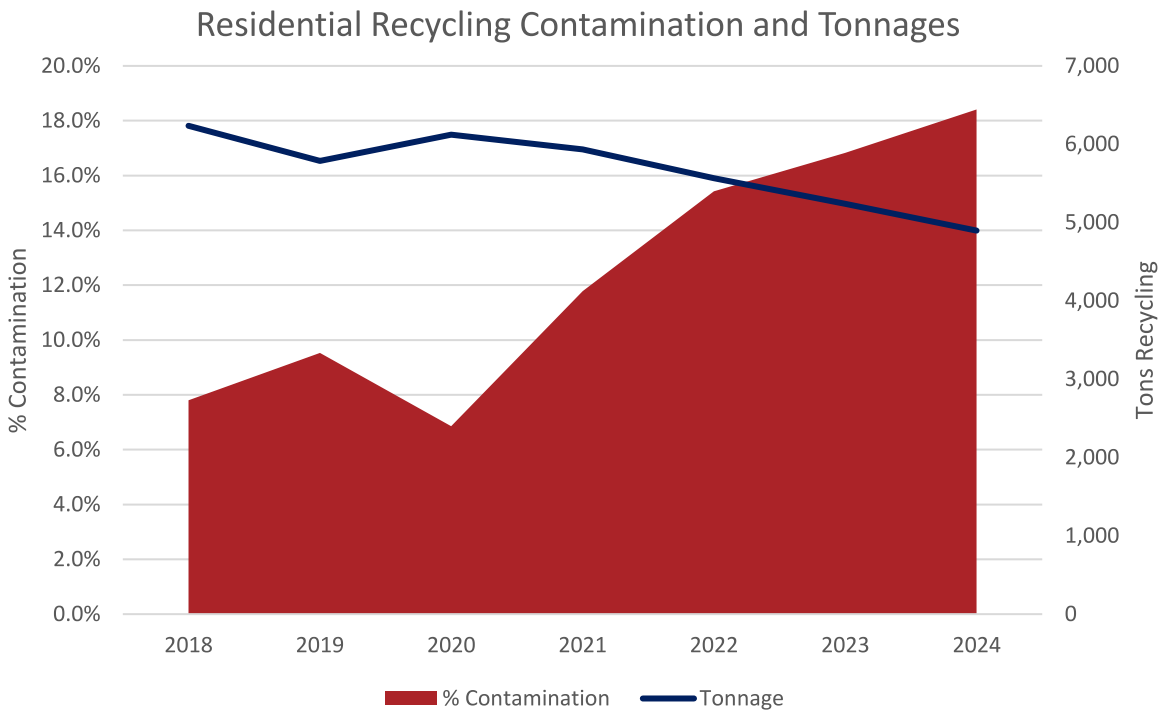


Figure 6-2 – Residential (Curbside) Recycling Contamination and Tonnages in Spokane Valley (Source: WM Reports)

Contamination in recycling can cause economic, environmental and even safety issues including:

- Creates unsafe working conditions for workers
- Reduces efficiency and increases the cost/effort of processing/sorting recyclable.
- Causes useable recyclable material to be disposed of if it cannot be sold due to contamination
- More personnel needed for hand sorting
- Causes downtime and damage to the sorting equipment
- Increases staffing needs for monitoring at drop-off locations
- Increases staffing needs for additional pickers at MRF

Although some causes of contamination can be attributed to carelessness or using recycling bins as an extra garbage can, much of the contamination stems from good intentions gone awry. The most common causes of contamination here are:

- Confusion over what can be recycled
- Adding materials to the recycling bin that consumers think “should” be recyclable
- Misunderstanding about regional differences in what is collected for recycling
- Residents store recyclables in non-recyclable bags and toss the whole bag with recyclables in the cart

As described in Ecology's Recycling Contamination Reduction Best Management Practices (Publication 20-07-031), these contamination related issues can be combated with multiprong approach including:

1. **Communication & Outreach** to help the consumer know and follow best recycling practices. See **Section 8**
2. **Operations & Collection** which include logistical solutions at the infrastructure level, like making sure there is adequate bin capacity, the bins are conveniently located, and are blue.
3. **Policies & Mandates** to, for instance, require developments to plan for recycling.
4. **Measurement & Reporting** for the collecting and sharing of data on the levels, types, and sources of recycling contamination.
5. **Incentives & Pricing** such as implementing economic incentives like variable fees or financial rewards.

6.3.2 WM SMaRT Center

Contamination continues to be combatted locally in the Spokane area with education and outreach, providing clear guidance on acceptable recyclables. However, the SMaRT center, a "State of the Art" SM recycling facility owned and operated by WM, still commonly finds unacceptable materials being thrown in the recycling bins including:

- Plastic bags and film
- Bagged recyclables
- Plastic cups
- Polystyrene/styrofoam
- Hoses, wire, Christmas lights, and other tanglers
- Dirty diapers
- Miscellaneous household items
- Medical waste
- Containers partially filled with food or liquids
- Garbage (batteries, paint, fluids)
- Hazardous waste (propane tanks, car batteries, oils)

To address ongoing contamination challenges and improve material recovery, WM made a significant investment in 2024 to upgrade the Spokane Materials and Recycling Technology (SMaRT) Center. This $18 million enhancement includes the installation of six high-speed conveyor belts, six advanced optical sorters, and a robotic sorting pod capable of processing up to 100 items per minute. These improvements are powered by cutting-edge AI and computer vision technology, allowing for more precise identification and separation of recyclable materials.

The upgraded system not only improves the removal of contaminants but also increases the facility's processing capacity by an estimated 37%. This added efficiency ensures that the SMaRT Center can support both current recycling volumes and anticipated future growth in the region. WM's investment underscores its long-term commitment to innovation, sustainability, and delivering reliable recycling services to the Spokane Valley community.

6.3.3 Curbside Recycling Options

Recycling is generally accomplished through either single stream or source separated methods. For single stream recycling, recyclable materials are put into a single bin by residents for collection and transport to a MRF. For source separated recycling, materials are sorted into different bins either at the curb for collection, or at facility such as a transfer station, recycling center or supplemental drop off location.

Single stream recycling is convenient for residents and generally increases participation rates. Single stream also has lower financial and environmental costs associated with the efficient single truck/cart collection process. This recycling method also allows for flexibility in modifying the materials collected.

However, with this method, contamination is a continuing issue with a typical range across the country between 17% and 25%[14]. Additionally, the overall quality of the sorted material is lower than that in source separated recycling.

Source separated recycling requires more time and commitment to sort and separate the different recyclable materials. It also requires multiple bins and collection vehicles and the collection process is slower and overall more costly than single stream recycling in areas where a MRF is already located. It can be difficult to change the commodities collected as the success in this method the continuing education and habits of participants. However, this type of recycling does result in much cleaner, higher-quality materials, lower contamination rates of around 5% or less[15], and does not require sophisticated processing technologies. **Table 6-1** below outlines the advantages and disadvantages of both approaches[16, 17]. Source separation of recyclables at transfer stations or other drop-off facilities can be an added alternative, either as the sole recycling option or as supplementary to curbside collection.

Table 6-1 – Curbside Recycling Options Pros and Cons

Recycling Approach	Pros	Cons
Single-Stream Recycling	Most convenient for residents	Higher contamination rates
	Higher participation rates	Lower material resale value
	Lower collection costs	Higher processing costs
Source-Separated Recycling	Lower contamination	Less convenient for users
	Higher material quality and resale value	Lower participation
	Better environmental outcomes	Higher collection costs

6.3.4 Residential Curbside Recycling

For many residents, curbside recycling is integrated with regular garbage collection or offered as a standalone service, ensuring convenience and consistent picks-ups. Curbside recycling is single stream, with all recyclable materials being put into the same bin by residents for collection and transport to the SMaRT center. Here, workers, machinery, AI, and robotics sort the material into the different commodities and remove non-recyclable materials. The separated materials are then transported to end markets to be recycled or, in some cases, beneficially reused.

The collection frequency for the residential curbside recycling program is currently every-other-week. Although some studies have shown that more frequent collected leads to increased diversion of recyclables, the current schedule is a relatively good balance of diversion and cost for residents, especially as it is only one of many ways to recycle in the city.

In general, the amount of material being collected curbside from residents, and ultimately recycled, has been trending downward since 2018 (see **Figure 6-3**). This trend can be attributed to several factors discussed in subsequent sections of this chapter.

[14] The State of Curbside Recycling Reports (2024), *The Recycling Partnership*
[15] Single and Dual Stream Recycling, *EPA*
[16] Single Stream Versus Source Separation Recycling, *Recycle Nation*.
[17] Single-Stream vs. Source-Separation Recycling, *Placon.com*.

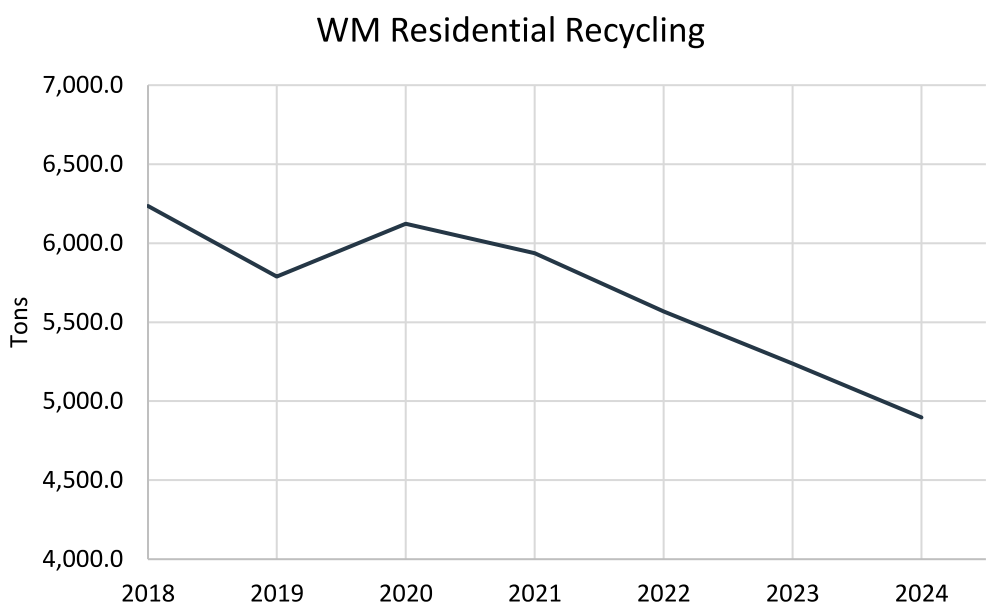


Figure 6-3 – WM Residential (Curbside) Recycling Tonnages (Source: WM Reports)

6.3.5 Recycling Drop-Off

Typical household recycling such as cardboard, cereal boxes, milk jugs, and aluminum cans, can be dropped off at the UTS. Here, materials are source-separated. That is, when residents bring in their recycling, they hand sort it into various bins. While this requires more effort from the customer to separate as part of the disposal process, the time spent sorting reduces material processing needs and contamination and, when done correctly and monitored, can increase the materials value and recyclability. This could be one cause for the general increasing trend in the quantity of material being recycled at the UTS (see **Figure 6-4**).

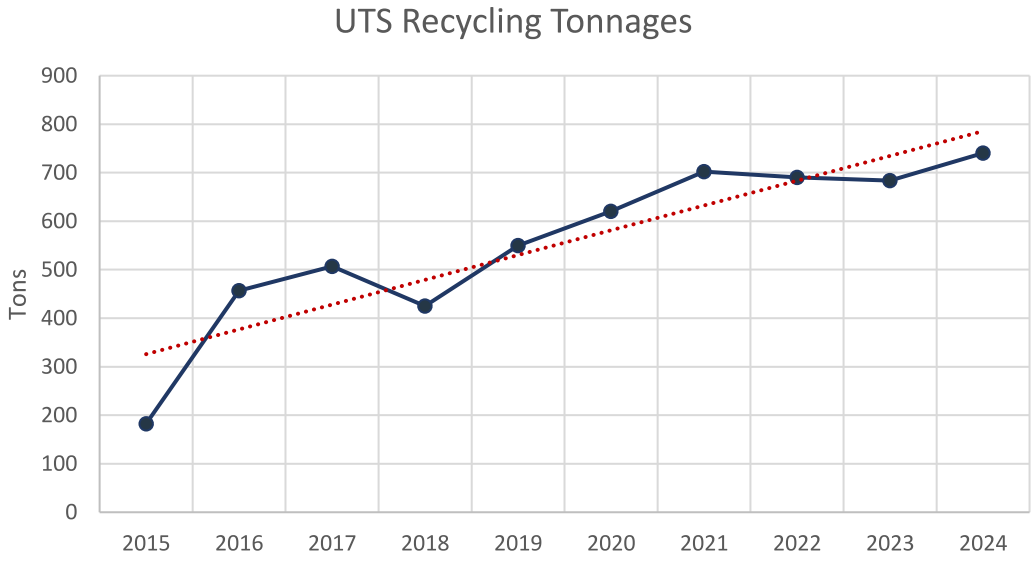


Figure 6-4 - Recycling Tonnages Collected at the UTS (Source: Washington Department of Ecology)

In addition to the UTS, there are many other private companies and non-profit groups that have drop-off sites for specific or limited materials. Collection programs can change often, but the Spokane Kootenai Waste & Recycle Directory (http://spokaneriver.net/wastedirectory/) is a great resource for finding current drop-off locations for specific materials. These types of programs allow materials to be recycled that cannot be included in a curbside program for logistical or economic reasons. For instance, plastic grocery bags are difficult to collect curbside because they get tangled in and damage the machinery at the SMaRT center. However, these bags, often collected at grocery stores in the City, can become a valuable commodity and may be used to create construction materials such as new outdoor decking.

6.3.6 Commercial Recycling

Both service contractors in Spokane Valley offer commercial recycling services. WM collects recycling from commercial establishments and multifamily housing complexes that utilize dumpsters or roll-offs. Sunshine also collects recycling in roll-offs from commercial and multi-family housing customers. Customers can choose to include multiple materials in their recycling program or just individual materials, such as cardboard or office paper, depending on their individual needs.

6.4 Product Stewardship Programs

Washington State has several recycling programs dedicated to product stewardship. Product stewardship, sometimes called Extended Producer Responsibility (EPR), places the responsibility of managing the life-cycle impacts (including end-of-life management) of certain products. Several Product Stewardship programs include:

6.4.1 Paint Recycling: PaintCare

The PaintCare paint recycling stewardship program is a statewide initiative in Washington that provides convenient, environmentally responsible options for disposing of leftover household and commercial paint. Funded by a fee on new paint purchases, the program allows residents and businesses to drop off unused paint at participating retail locations – such as Sherwin-Williams, Rodda Paint, and Ace Hardware – as well as at the UTS and Sullivan Transfer Station. Accepted items include most interior and exterior paints, primers, stains, and sealers, provided they are in original, sealed containers with readable labels.

6.4.2 Mercury Lights: LightRecycle

The LightRecycling Washington program provides free recycling for mercury-containing lights, including compact fluorescent lamps (CFLs), liner fluorescent tubes, and high-density discharge (HID) lamps). Funded by an environmental handling charge on new bulb purchases, the program helps prevent mercury pollution by ensuring safe collection and processing of these hazardous materials. In Spokane Valley, residents and businesses can drop off eligible lights at designated collection sites such as the UTS and Sullivan Transfer Station and participating retailers listed on LightRecycle.org. Limits apply – typically up to 15 fluorescent lights and 2 HID lamps per day – so users are encouraged to check with the site before visiting.

6.4.3 Solar Panel Stewardship

The Washington State Solar Panel Stewardship and Takeback Program requires manufacturers of photovoltaic (PV) modules to provide a free and environmentally responsible recycling option for their products. Beginning July 1, 2025, solar panels cannot be sold in Washington unless the manufacturer has an approved stewardship plan with Ecology. Specific drop-off locations in Spokane Valley have not yet been designated as of the publication of this Plan.

6.4.4 Battery Stewardship

Washington's Battery Stewardship Program requires battery producers to fund and implement a statewide collection and recycling system for portable batteries by January 1, 2027, and for medium-format

batteries by 2029. In Spokane Valley, residents can currently drop off household batteries – including lithium-ion and alkaline types – at the Household Hazardous Waste area of the UTS and Sullivan Transfer Station, with expanded collection sites expected as the statewide program rolls out.

6.5 Designating Recyclables

From a logistic and economic standpoint, designating recyclables, or determining what recyclable materials will be collected curbside via carts, dumpsters, and at drop-off locations, is a complex process. Many factors play into what should and can be collected and recycled, some of which include:

- Material contamination
- Recycling markets
- Demand for materials to be recycled
- Demand for products made from recycled materials
- Availability of raw materials
- Proximity to end markets
- Overall cost of collection/processing
- Processing Technology and Capability
- Legislation

The various materials *currently* accepted for recycling as specified in the curbside and drop-box collection contracts include:

- Glass: food or beverage containers - brown, clear, or green
- Paper: office, printer/copy, newspaper, magazines, catalogs, envelopes, paper bags
- Cardboard: boxes (cereal, cookie, tissue, online shopping, etc.), packaging
- Metals: tin, aluminum and steel food or beverage containers, empty aerosol cans, scrap metal
- Plastics: PET/PETE bottles (soda/water bottles), HDPE bottles/jugs (milk jugs; detergent bottles), Dairy tubs (butter, yogurt, cottage cheese), 5-gallon buckets

Notably, with many of the issues surrounding recycling that have occurred since 2018, the City is aware that some of these products are not always recycled, as markets fluctuate. Examples include certain plastics and glass. Given the issues that the City experienced in the last several years, this Plan will focus on recognition of changing markets for recyclables and provide for flexibility for recycling various different commodities over the term of the Plan. Future recycling opportunities of these items is discussed in more detail in **Section 6.5.5**.

The process of designating accepted recyclables is not only complex, but it is also dynamic, with many influencing factors changing over time. For example, in **Figure 6-5**, a change in both the quantities and materials being collected curbside is seen between 2019 and 2024. The tonnage of almost every commodity decreased, along with the total tonnage collected. Over the same period, contamination increased dramatically (see **Section 6.3.1**).

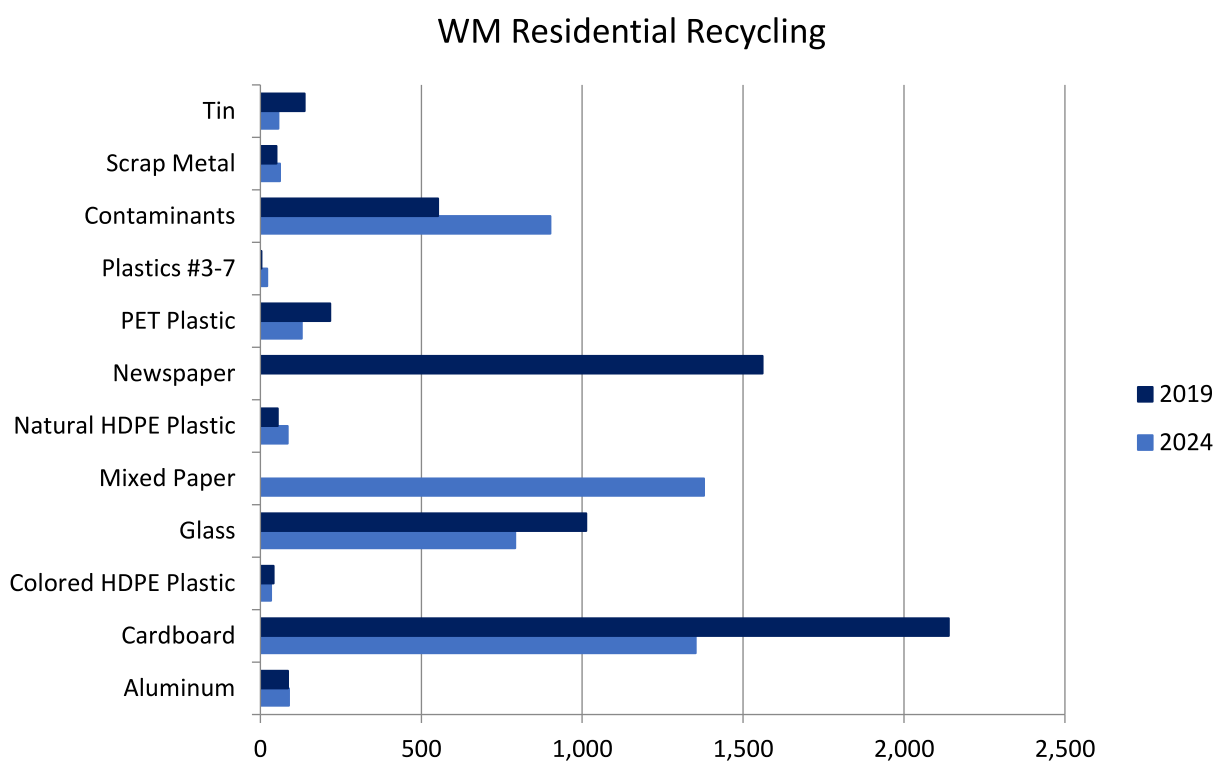


Figure 6-5 – WM Residential (Curbside) Recycling Tonnages (Source: WM Reports)

Notes:
1. In 2019, mixed paper was not collected. In 2024, newspapers were not collected.

6.5.1 Recycling Markets

Recycling is primarily a market-driven industry. Curbside recycling began as part of urban waste management systems when communities and governments introduced waste reduction and recycling mandates to achieve state recycling/diversion goals. These early efforts laid the groundwork for the recycling industry by the early 1990s. At this time, curbside recycling programs were widely promoted as "free," with costs embedded in general garbage service fees. However, while the public may have viewed recycling as an environmentally responsible action, **recycling was never truly "free"** as there are trucks and fuel to buy, people to pay, infrastructure to maintain, etc. As a result, many customers were unaware that recycling carried real and ongoing expenses and is subject to constant economic pressures, including fluctuating commodity markets, rising labor and equipment costs, and broader economic shifts. At the same time, customers often expect stable or predictable rates, which creates tension when market conditions or operational costs change.

Different recyclable materials have different economic profiles. Metals like aluminum and steel have typically remained profitable to recycle because of strong commodity markets and relatively efficient recycling processes. Paper and cardboard have also seen strong periods where the sale of baled cardboard covered the costs associated with the efforts of recycling (sorting, baling and transport). However, plastics profits have been cyclical and challenging due to the vast array of plastic types and material shapes, mixed materials in one product, fluctuations in oil prices, and the difficulties associated with sorting and cleaning different types of plastics.

Modern recycling economics continues to be dynamic. Local, regional and global challenges continue to influence the practicality and the financial implications of recycling. As shown in **Figure 6-6,** disruptions

such as economic recession and global demand have a direct effect on commodity value. This continuous evolution means that what was a valuable commodity in one era might become challenging in another, and vice versa. During these ebbs and flows, the costs associated with collecting and sorting recyclables are often not offset by the sale of the materials.

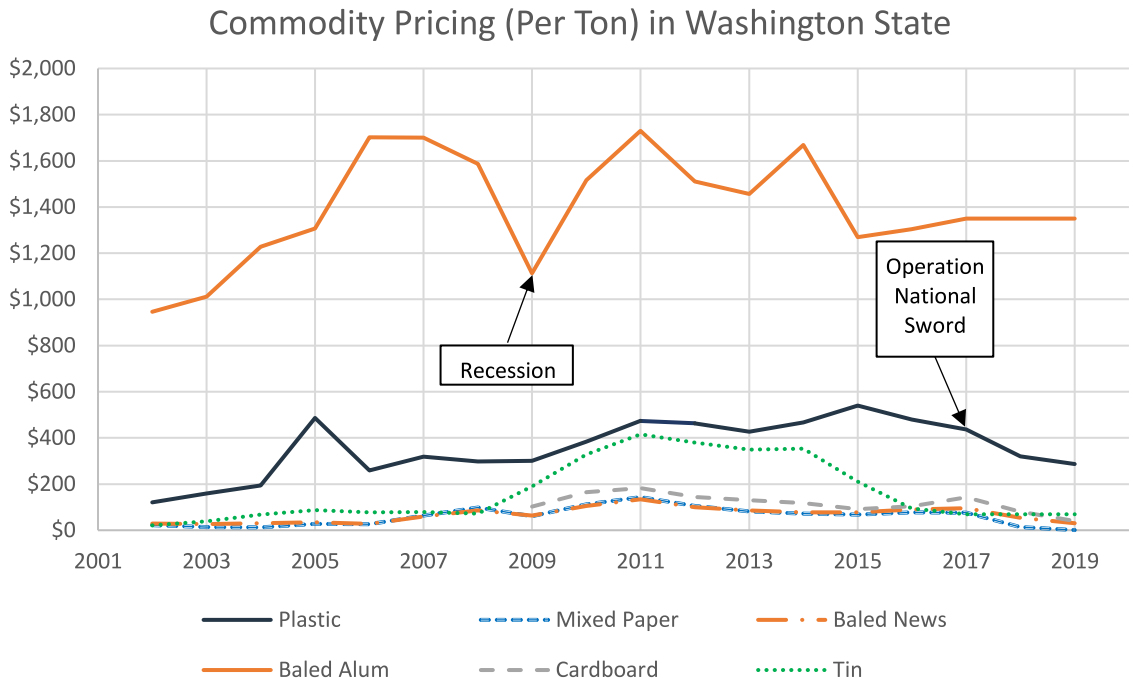


Figure 6-6 - Washington Recycling Commodity Pricing (Source: Mill Trade Journal Recycling Markets)

Over the past decade, several key trends have emerged in the regional [Pacific Northwest (PNW)] recycling markets. Although they are just one piece of the recycling puzzle, these trends can be used to help inform decisions around recycling over the next few years.

As shown in **Figure 6-7** through Figure **6-10**, the following are observed:

- #1 PET (Polyethylene Terephthalate, soft drink bottles) has consistently been in demand.
- #2 HDPE (High-Density Polyethylene, milk jugs), specifically natural HDPE, continues to be one of the few profitable commodities (and is one of the more common plastics used) despite being volatile.
- #3 - #7 plastics have shown no profitability over a long period of time.
- Cardboard and paper are unpredictable and when the value swings low, it can be difficult to find a market for accumulated cardboard
- Metals continue the historic trend of remaining profitable, especially aluminum.

Glass, especially mixed glass, although it is the consummate recyclable, is the least valuable commodity due to its heavy weight. There are limited processing facilities and the ones that do exist are a long distance away so the cost to transport glass is high. It tends to be cheaper to get raw materials than process glass waste. There are also some contamination issue when it comes to separating clear and colored glass.

When the commodity price of a recyclable material falls below $0, it means that recycling facilities must pay to have the material removed. This cost is compounded by the costs to collect, process or sort, bale

and transport the material. This negative value reflects market conditions, making it financially burdensome to recycle.

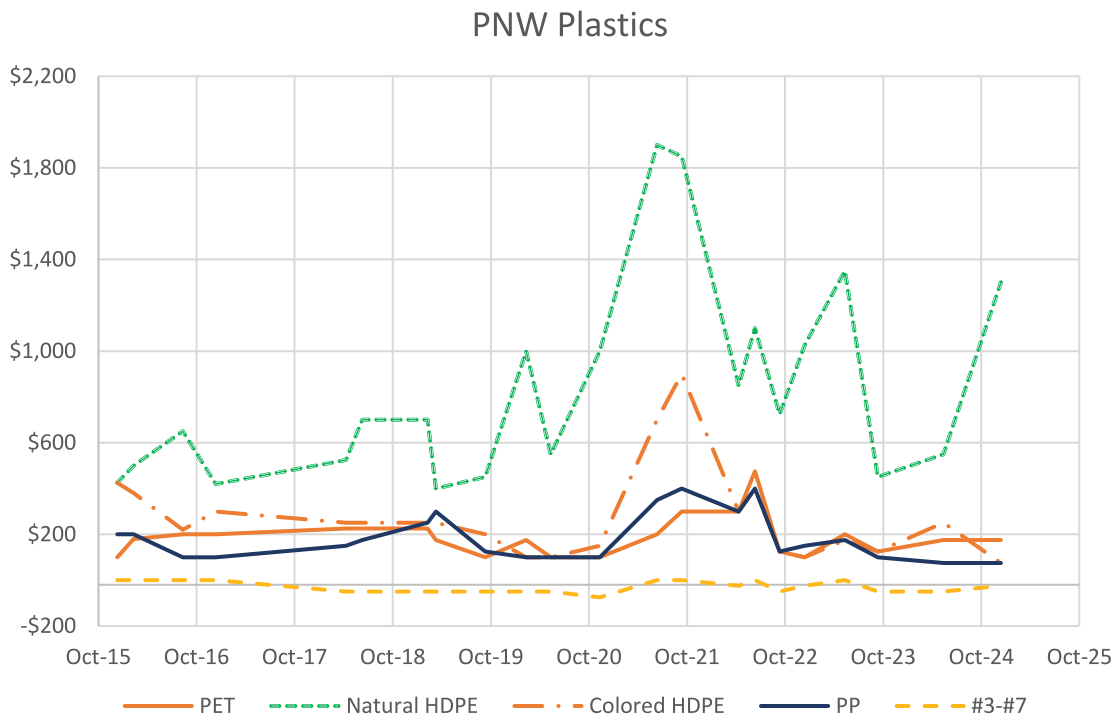


Figure 6-7 - PNW Commodity Pricing for Recycled Plastics (Source: RecyclingMarkets.net)

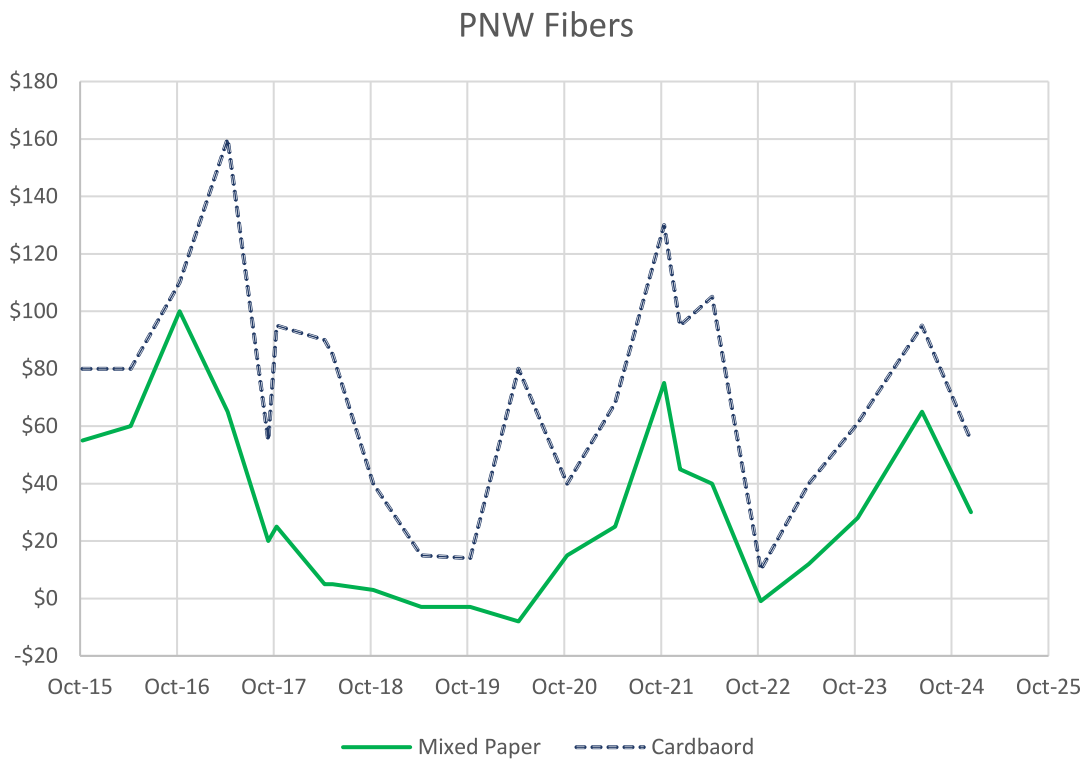


Figure 6-8 - PNW Commodity Pricing for Recycled Fibers (Source: RecyclingMarkets.net)

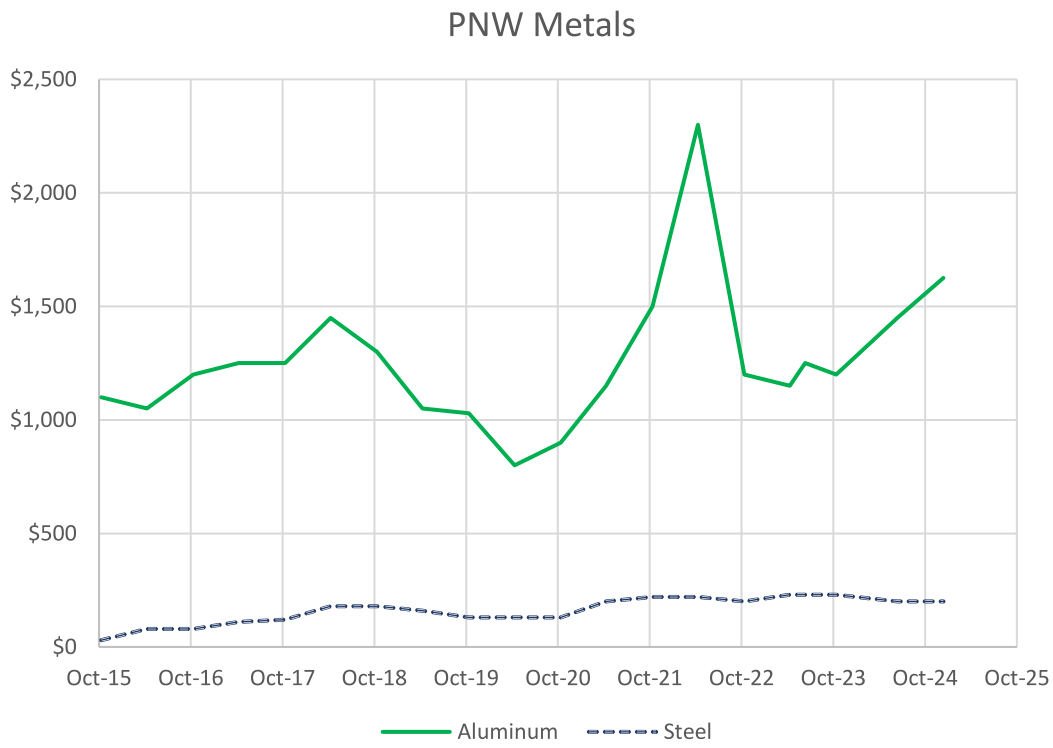


Figure 6-9 - PNW Commodity Pricing for Recycled Metals (Source: RecyclingMarkets.net)

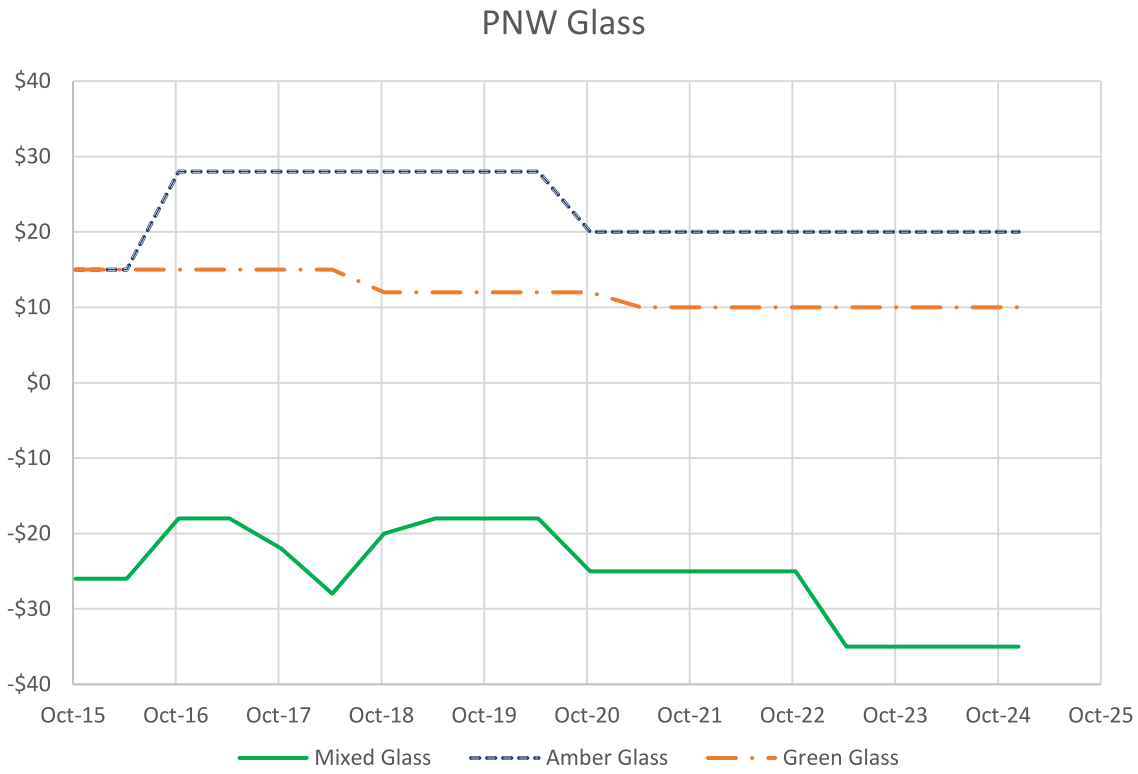


Figure 6-10 - PNW Commodity Pricing for Recycled Glass (Source: RecyclingMarkets.net)

6.5.2 Recycling Audit and Characterization Study

To better understand the state of recycling in Spokane Valley and to help inform future decisions around recycling, a recycling audit was completed in 2023 (see report in **Appendix H**). The multi-season audit was helpful to know what is getting recycled. It was the first step in addressing recycling contamination as part of the City's Contamination Reduction and Outreach Plan (CROP) and it provided a baseline for future data collection and comparison.

A two-season study of curbside recyclables generated by the residents of Spokane Valley was completed. The goal of the study was to assess the composition of the City's recyclables and provide data on the extent and nature of contaminants in the recycling stream. MSW Consultants, under contract to Great West Engineering, Inc., provided technical and analytical support for the study, which involved the development of a representative sampling plan, assistance in field data collection, analysis of results, and preparation of this summary report.

To complete the study, a randomized list of residences was generated and then on the given sampling week, curbside retrieval of the setouts from these residences followed the normal recycling collection schedule by WM. WM delivered the carts to the sorting location where the materials were sorted into 22 different categories (see list of categories in **Appendix I**) and weighed to determine the overall weighted composition of the materials in pounds (see pictures in **Figure 6-11** of sorting activities). **Figure 6-12** shows the results of the audit segregated into high level categories. **Figure 6-13** through **Figure 6-16** show the results of the audit separated into their separate categories (paper, plastics, metals, and contaminants). These percentages were determined by weighing each sorted commodity.

Key takeaways and observations from the study included:

- Persistent contaminants found during both seasons included non-recyclable paper, plastics, metals, and loose materials such as food and textiles
- Paper products, and especially cardboard, were the largest component of recycling
- Contamination trended by neighborhood/region
- It was apparent that multiple residents used their recycling can for just trash
- The number of residences that bagged recyclables was very, very low
- The contamination rate was very similar to that seen by WM during the same year from the Spokane Valley recycling trucks that were inspected/sorted at the SMaRT center
- The prevalence of yard/green waste was close to none
- Carts that were very full or overflowing contained either large amounts of cardboard or trash
- There were no significant variations between the two sorting seasons (July and October)

Figure 6-11– Photographs of Sorting Activities During Recycling Audit

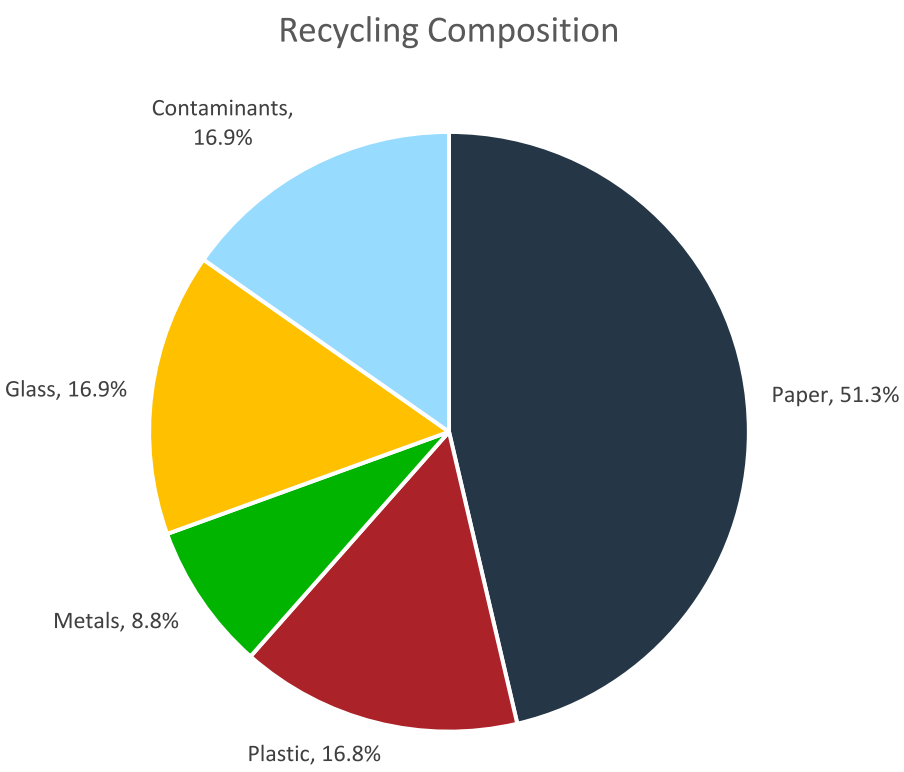


Figure 6-12 – Composition of Materials from Recycling Audit

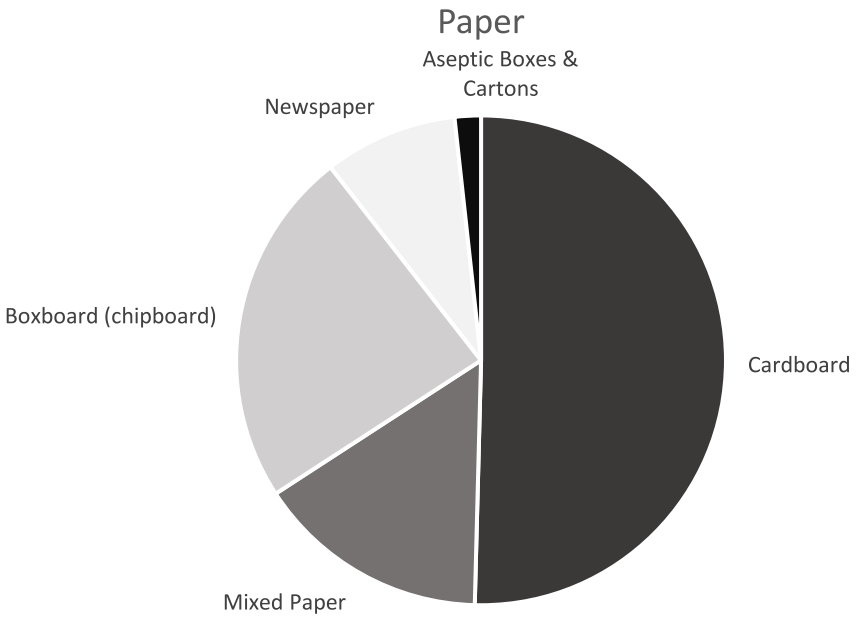


Figure 6-13 – Breakdown of Paper Recycling from Recycling Audit

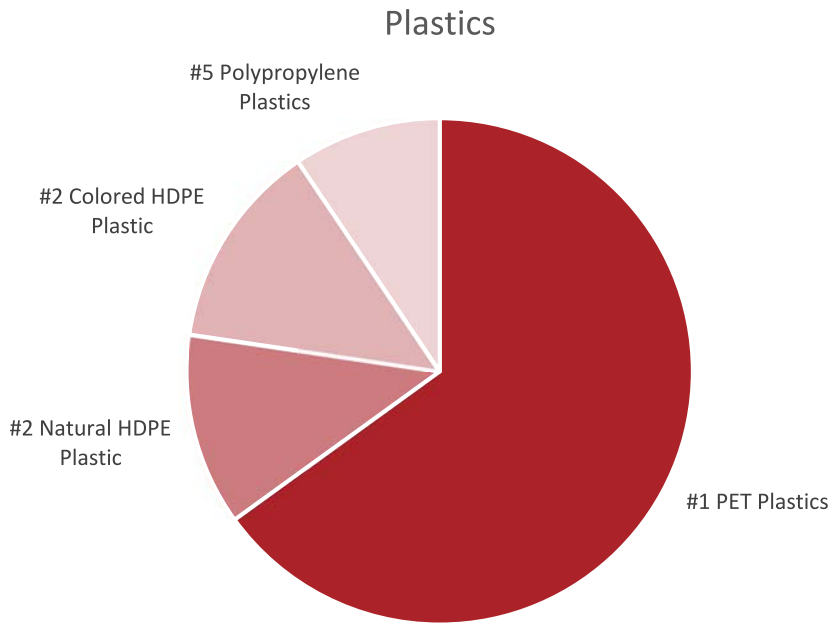


Figure 6-14 - Breakdown of Plastics Recycling from Recycling Audit

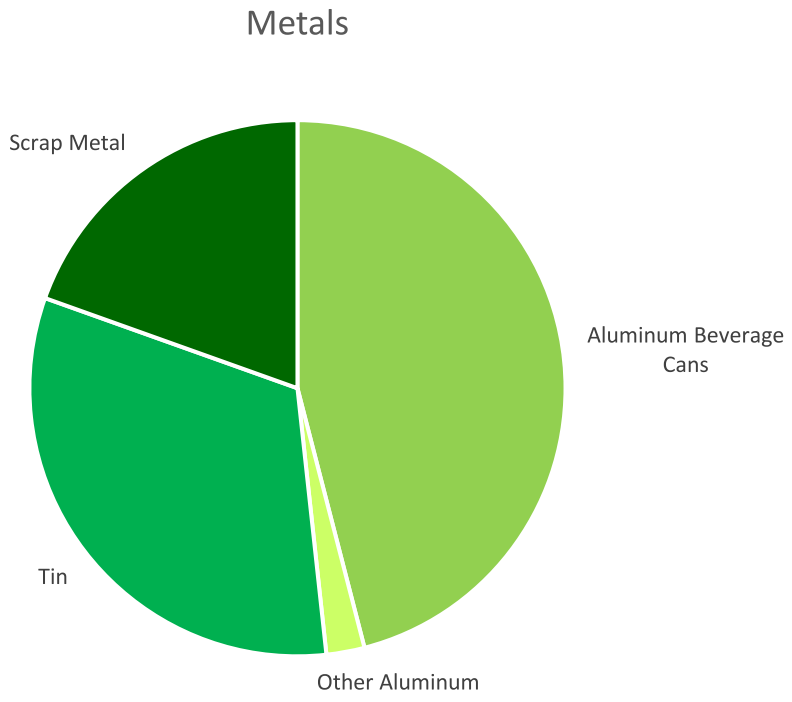


Figure 6-15 - Breakdown of Metals Recycling from Recycling Audit

6.5.3 Recycling Contamination

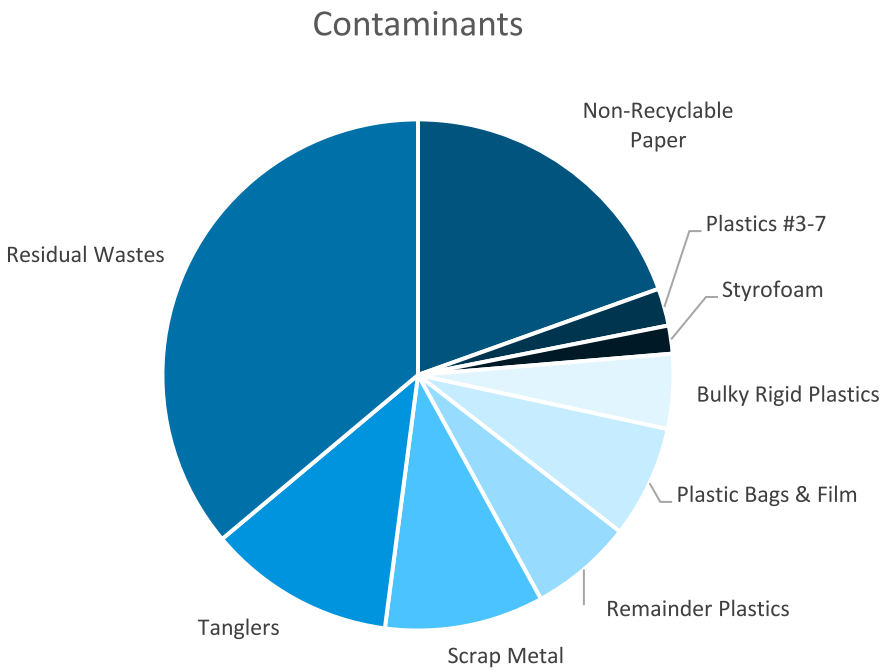


Figure 6-16 - Breakdown of Contaminants from Recycling Audit

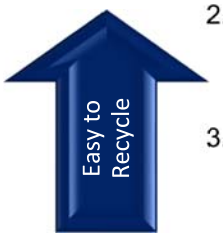
The subcategories of recycling contaminants seen above are defined as follows:

- Remainder Plastics: mixed or miscellaneous plastic items that don't fall into the commonly recycling categories
- Residual Wastes: non-recyclable materials that remain after the sorting and processing of recyclables

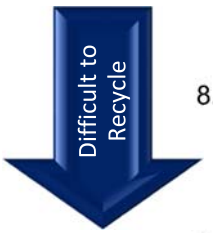
6.5.4 Ranking Recyclables

The multi-prong approach to ranking recyclable materials is based on a multitude of environmental, economic, political, logistical, and sociological factors. The intent of creating these material rankings is to create a designated recyclables list for the City to target with their recycling programs, both curbside and at drop off sites. By focusing recycling efforts on targeted recyclables, resources can be focused on achieving the maximum benefit for the citizens of Spokane Valley.

The following list **generally** includes the most common recyclable materials in the Northwest ordered (roughly) from easiest to hardest to recycle in residential curbside programs. This list takes into account public familiarity, the robustness of curbside collection systems, contamination concerns, transportation and processing logistics and associated (environmental and financial) costs, and available local and regional facilities:



1. **Aluminum (Cans):** Aluminum is widely recognized as the poster child of recycling. Its uniform composition, low in weight, and nearly universal acceptance in curbside programs make it extremely easy for residents to collect and for processors to handle. The recycling process itself is energy efficient and the payouts from scrap recycling add an economic incentive that reinforces its prominence.
2. **Steel (Cans):** Much like aluminum, steel, commonly found in food and beverage cans, benefits from a well-established collection network. It is robust against contamination, and local facilities are set up to recapture this material with minimal processing complications. The fact that steel retains its value over multiple recycling cycles further enhances its collection and reuse process.
3. **Cardboard (Corrugated Boxes and Packaging):** With the rise of e-commerce, cardboard is everywhere. While its bulky nature and frequent contamination (from tape, glue, or food residues) can complicate processing, many local recycling programs provide separate or drop-off options for cardboard. This makes it easy to collect, though processing requires additional sorting or cleaning in some cases. Like other paper based commodities, cardboard must be stored under cover to prevent moisture contamination.
4. **PET Plastics (Resin #1, Soda Bottles):** PET plastics thrive in single-stream recycling programs. Their clear labeling and straightforward identification help residents sort them easily. While a quick rinse is generally needed to avoid contamination, the extensive local infrastructure and processing systems ensure PET bottles are rapidly reprocessed into new products.
5. **HDPE Plastics (Resin #2, Milk Jugs,):** HDPE is one of the most readily used plastics and one of the easiest plastic polymers to recycle. It is also easily collected curbside and simple air/mechanical technology can be used at MRF's to segregate the material.
6. **Paper Products (Office Paper, Newspapers):** Paper is ubiquitous in nearly every household and office. Although relatively easy to collect through standard curbside pickup, paper's recyclability can hinge on preventing contamination (for example, by food or oils) and maintaining fiber quality.
7. **Glass (Bottles and Jars):** Although glass is endlessly recyclable without losing quality, it presents challenges in collection. Its fragility increases the likelihood of breakage during collection, its high weight makes it economically and environmentally prohibitive to transport long distances, and when local recycling options are not available, the material is instead beneficially re-used, often as a replacement for gravel in landfill access roads or for landfill daily cover. Many municipalities in the northwest have shifted from curbside glass collection to designated drop-off points. However, this extra handling step can make glass somewhat less convenient to recycle on a residential basis.



8. **Other Miscellaneous/Mixed Plastics (HDPE, LDPE, PVC, etc.):** Beyond PET and bulky HDPE, other plastics often require more stringent sorting protocols due to the variety of resin types and the potential for contamination. The diversity and sometimes unclear labeling of these plastics add hurdles both for collectors and processors. Segregating the different plastics at the MRF often requires sophisticated and/or expensive technologies.
9. **Specialty Metals (e.g., Copper):** Copper and similar specialty metals are highly valuable and 100% recyclable; however, they rarely make it into the average household's recycling bin. Instead, these materials are typically collected via scrap metal programs or specialized facilities. As a result, while the recycling process itself is efficient, the overall ease of collection in a residential setting is lower.

This ranking reflects common patterns in the region where municipalities frequently design their recycling systems around the materials most likely to originate from households. The Northwest's strong infrastructure favors items that are both widely produced and straightforward to sort while materials like specialty metals and glass are better captured through targeted initiatives.

Figure 6-

To determine which materials should be recycled in Spokane Valley, a number of influences were considered and weighted by order of importance to the city. These are shown in **Figure 6-17**. Using these factors, each potentially recyclable commodity was given a rank of 1 through 5, with 5 being the highest points possible, meaning the commodity is the most favorable for that recyclability influence. The combined weighted value resulted in scores for each commodity, allowing the list to be ordered accordingly from highest to lowest priority material to be collected curbside (See **18** for this list and **Appendix X** for the score card). The top portion of the list are the materials that should be prioritized, starting at the top, for recycling. The middle portion should continue to be monitored in the future and the bottom portion would be better suited to be collected at facilities such as the UTS, rather than curbside.

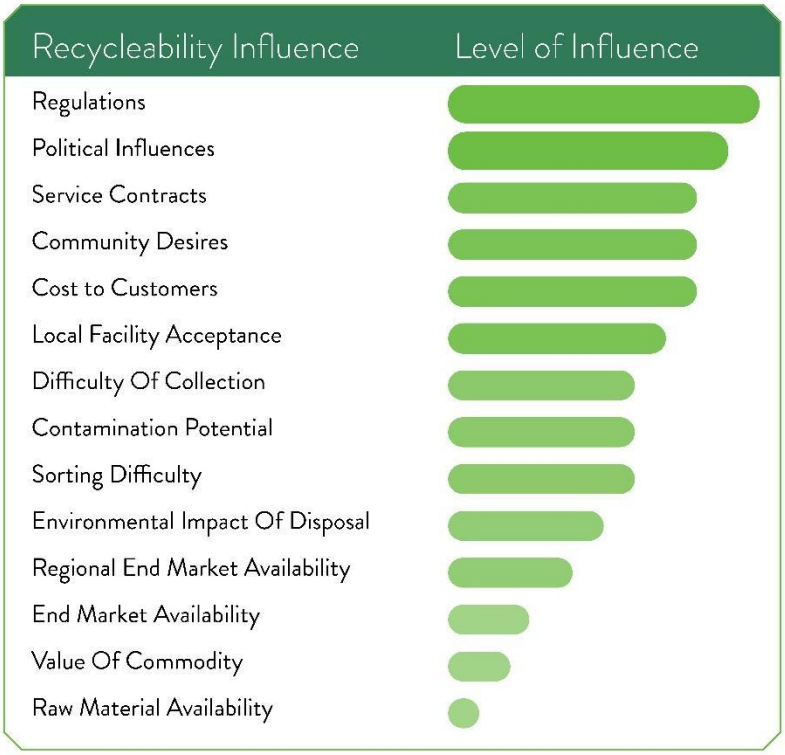


Figure 6-17 – Recycling Influences

This list is not intended to create a requirement that every recycling program in the City collect every designated material. Instead, the intent is that through a combination of public and private programs, residents and businesses should have an opportunity to recycle all the designated materials through at least one program, if markets exist.

Market conditions for recyclables can change drastically in a short amount of time, the list of designated materials will likely require periodic updates. These updates are considered minor and will be made according to the Plan Update Process outlined in **Appendix C**. Many influences can substantiate an addition or deletion of material including, but not limited to:

- 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 acceptable items based on new uses for materials or technologies that increase demand

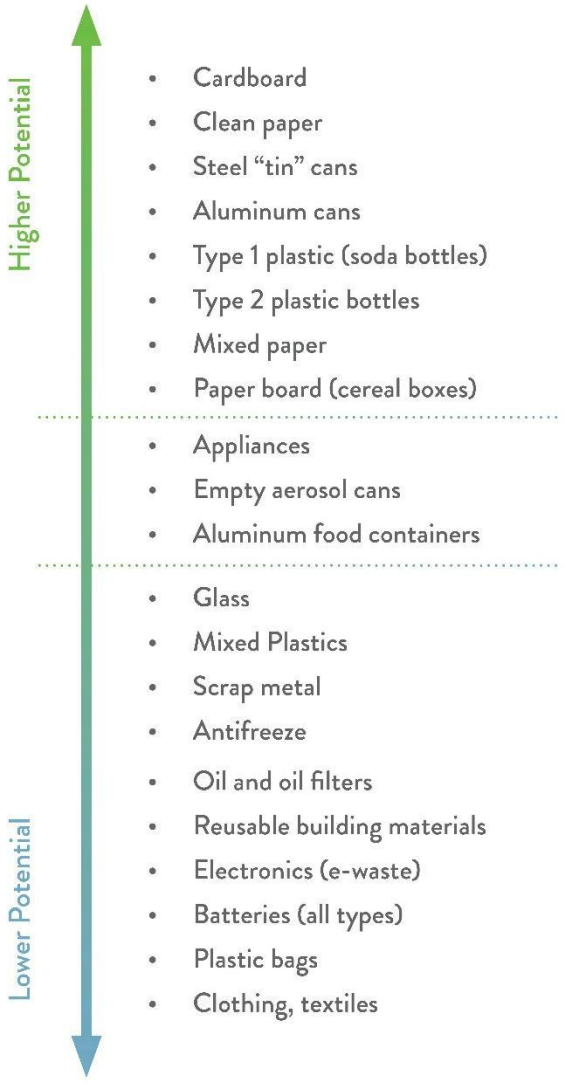


Figure 6-18 – Designated Recyclables List

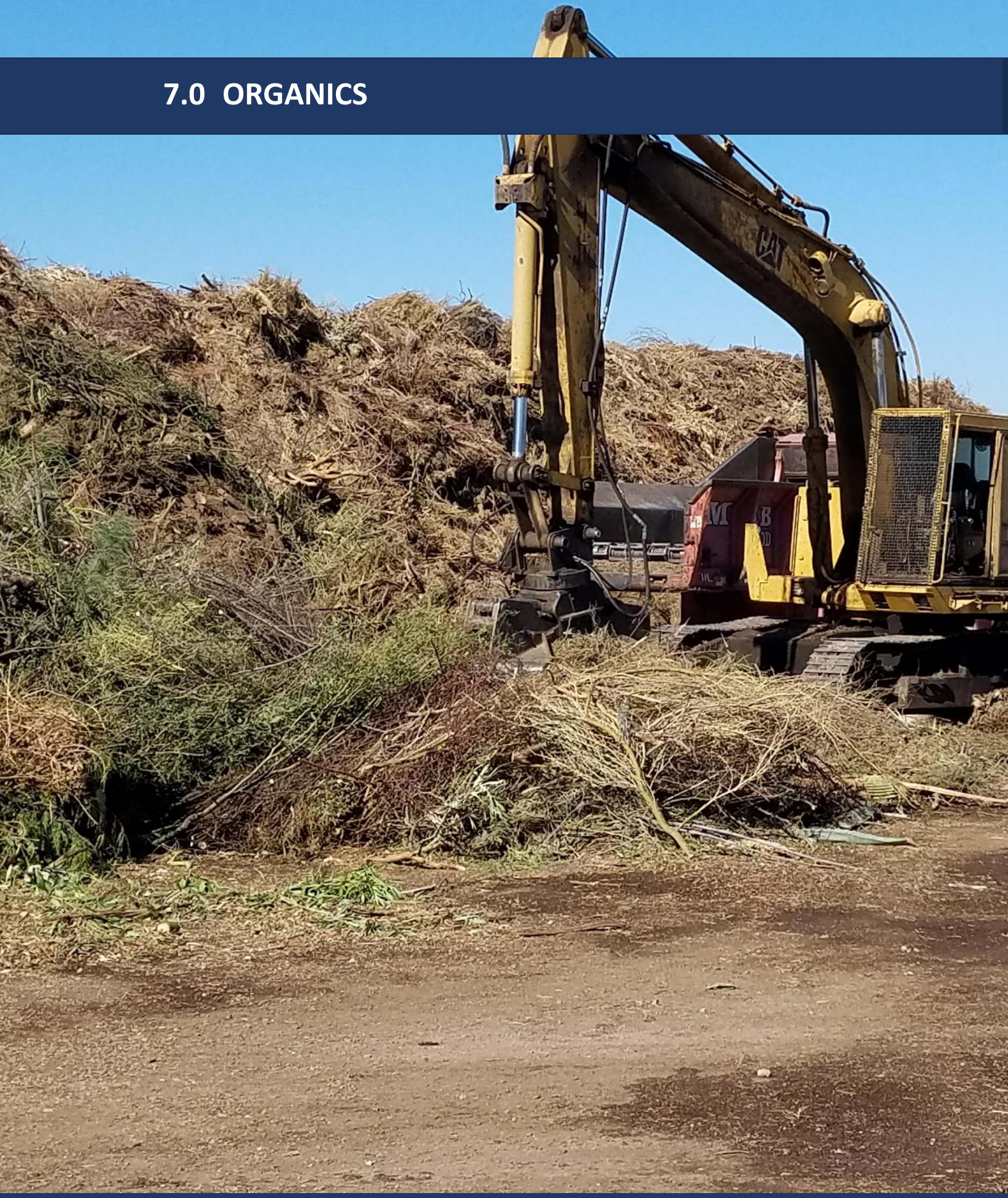
- New local or regional processing or demand for a particular material develops

- No market can be found for an existing recyclable material, causing the material to be stockpiled with no apparent solution in the near future.

- Legislative mandate(s)

- The environmental cost of collecting and/or recycling a material increases to the point that cost outweighs the benefit

7.0 ORGANICS



In Spokane Valley, the organics waste stream includes green waste (yard waste), wood waste, and food waste. Organics are collected curbside residentially, by request commercially and can be dropped off at the UTS. (See **Section 4** for definitions and characteristics of these waste types.)

7.1 Residential Organics Program

For curbside residential collection, mixed organics (yard debris and food waste) are collected weekly by WM in carts from March through November and monthly from December through February. Multi-family complexes can also subscribe to mixed organics collection. The residential program peaked in 2020/2021 (**see Figure 7-1**) likely due to both the pandemic and unusually strong windstorms. Overall, the residential collection program remains popular with an average of almost 10,000 tons of organic material being collected curbside annually. This accounts for more than a third of the total material (waste, recycling, and organics) that is collected curbside.

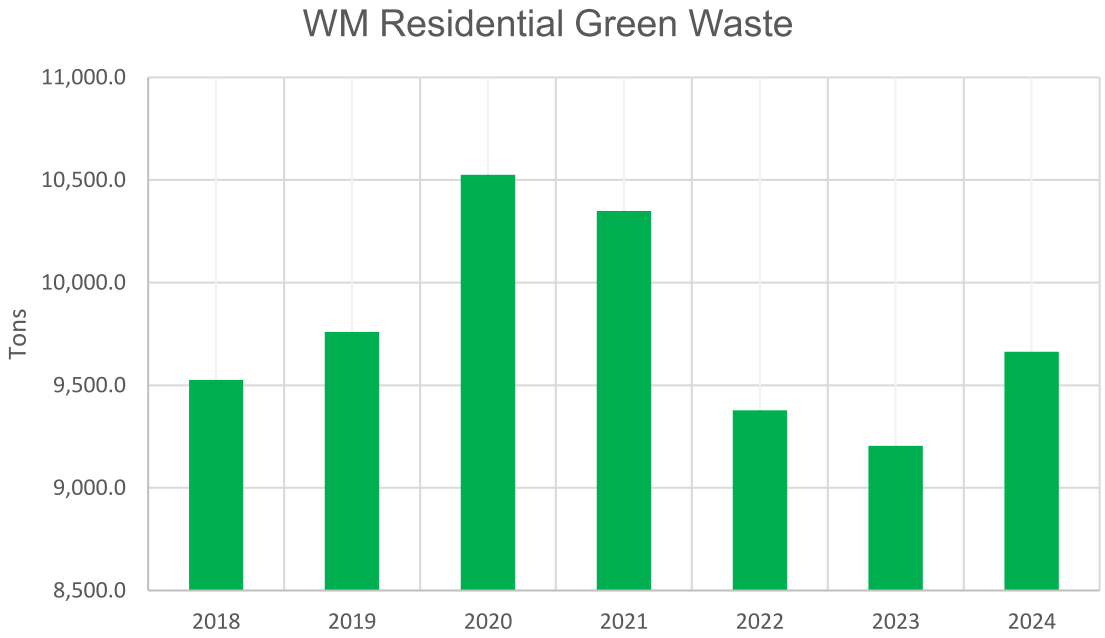


Figure 7-1 – WM Residential (Curbside) Green Waste Tonnages (Source: WM Reports)

Notes:
1. Data from WM reports.

The residential curbside organics program in Spokane Valley operates without flow control, meaning that the City does not mandate where collected organic materials must be processed. As a result, organics collected at the curb are first transported to the Sullivan Road Transfer Station and then delivered to Barr-Tech for composting. This open system allows for flexibility in processing but limits the City's ability to direct materials to a specific facility or manage end-use outcomes.

7.2 Organics Drop-Off Program

The UTS has a fee-based drop-off program for organics where residents can bring mixed organic material. The program is offered year-round and tonnages over the past several years average out to

around 5,000 tons annually (see Figure 7-2). The 2020/2021 peaks seen in curbside organics are mirrored in the organics tonnages seen at the UTS.

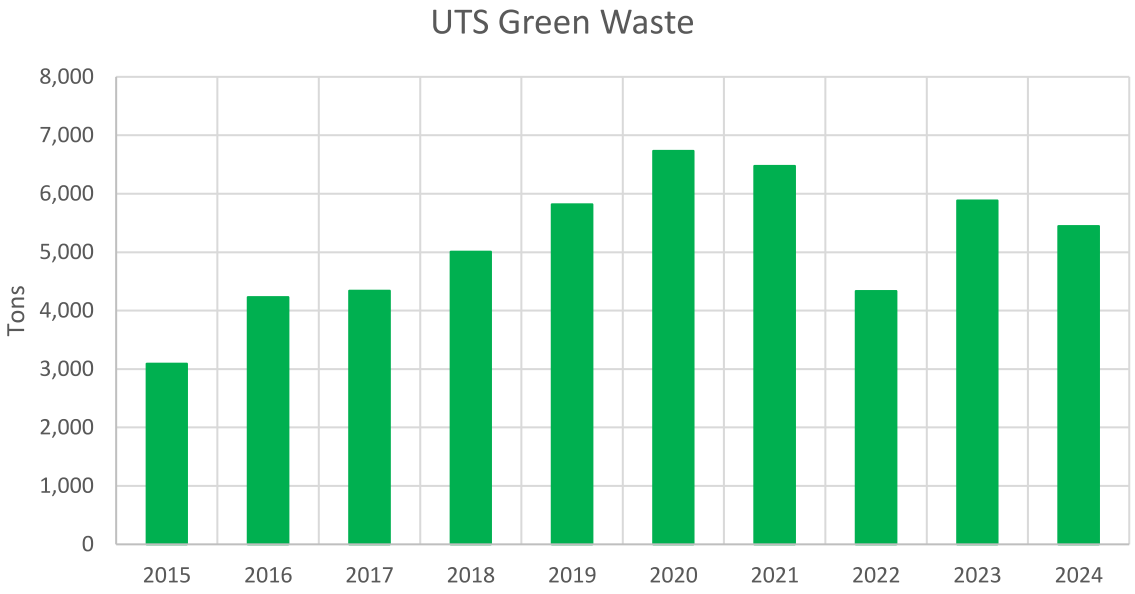


Figure 7-2 - UTS Green Waste Tonnages (Source: Sunshine)

7.3 Commercial Organics Program

Subscriptions for organics collection are offered to businesses and other commercial entities in Spokane Valley by WM using carts from March through November and monthly from December through February. As seen in **Table 7-1**, WM's commercial program focuses on food waste and Sunshine accepts a wider range of organic materials. This is likely due to differences in handling and transfer of organic materials, as described in **Section 7.4**. Commercial collection of organics is minimal compared to residential tonnages, with both WM and Sunshine customers having around 100 tons of material collected annually[18].

7.4 Organics Market

Organic material collected in Spokane Valley, and the entire Spokane region, is taken to Barr-Tech, located 22 miles to the west. Here, the materials are processed, screened, and composted using advanced aerated static pile (ASP) technology. This process speeds up composting and allows for more material to be processed in a smaller footprint than traditional composting. Sunshine transfer trucks haul the raw collected organic material from the UTS and the SCRWD hauls from the Sullivan Transfer Station to Barr-Tech. After processing, the finished compost is sold in the regional market to residential, commercial, and agricultural customers.

[18] Data provided by WM reports and Sunshine reports.

Figure 7-3 – Barr-Tech Facility

7.5 Opportunities and Limitations

Organic material continues to be a sizable portion of waste that gets disposed of in Washington and in Spokane Valley. **Figure 7-4** shows the results of the statewide waste characterization study completed in 2023. Residential organic material is the largest component of the waste stream, with tonnages 4-times as large as most other residential categories. Over 1-million tons of commercial and residential organics were disposed of in Washington in 2023, making diversion of organics a high priority for the state.

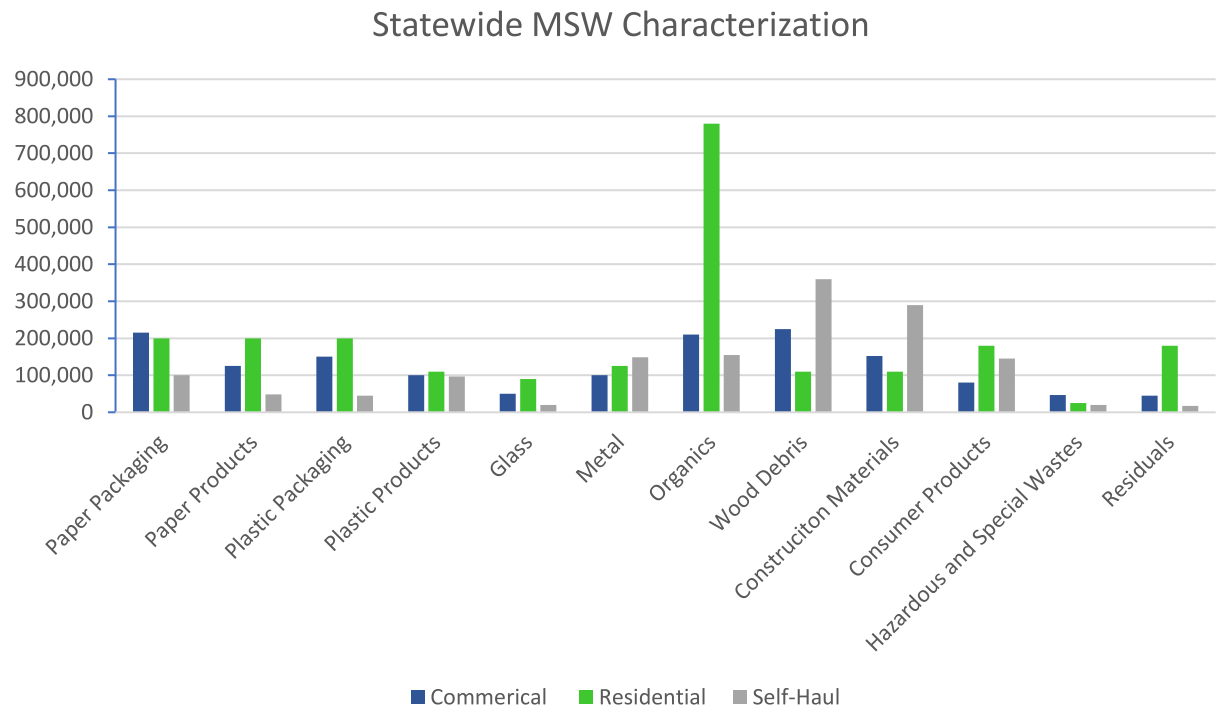


Figure 7-4 - Statewide MSW Characterization (Source: Washington Ecology)

Capturing additional organic materials from the waste stream is a seemingly obvious and simple solution to increased waste diversion. However, there are factors that can make diverting organics from the waste stream difficult. These include:

- **Contamination:** Non-organic materials, like plastics and metals, often end up mixed with organic waste, making processing more difficult and expensive. Compostable packaging has also proven to be a contamination issue, as Barr-Tech does not have the technology to degrade this material.
- **Infrastructure:** Some areas lack the necessary facilities to handle large amounts of organic waste and others, like Barr-Tech, must make sizeable investments to expand their throughput capacity.
- **Collection & Transportation Costs**: Transporting organic materials long distances via route trucks is an inefficient use of drivers' time and fuel. Combining loads of organics into transfer trucks is much more efficient but requires an area for materials to be unloaded and reloaded into the transfer trucks.
- **Public Participation:** Many people are unaware of proper organic waste disposal methods, are unwilling to separate their waste and organics or are unwilling to pay additional fees for curbside collection of organics.

Some communities and municipalities overcome these challenges by encouraging composting at the source through back backyard composting. These types of programs can be effective on a small scale but also require a high-level effort in educating residents on proper composting. When done incorrectly, backyard composting can attract pests, produce odors, or decomposition could be ineffective at killing off microbes. Additional issues can include lack of space, especially in multi-family housing, HOA rules against composting, and limited resources (time or funds) for individuals to compost successfully.

7.6 Organics Regulations

As described in **Section 2.4** on recent legislation changes, the Organics Management Law was passed and is now in effect. These regulations include a staggered implementation plan, with the full program including mandatory collection of organics, including food waste, from residents and businesses by 2030. The timeline for this staggered implementation is included in **Figure 7-5**.

As part of the new regulations, Ecology has designated Organics Recycling Collection Areas (ORCAs) where local governments must provide year-round curbside collection for organic waste. These areas are determined based on population density and waste management infrastructure. Spokane Valley and the Spokane area have been designated as an ORCA and therefore must adhere to the implementation timeline.

There are, however, exceptions to compliance with the timeline based on several factors including:

- Distance to organic materials management facilities is too far to be feasible
- The cost of delivering to such facilities is economically prohibitive
- **The capacity of organic materials at facilities in the nearby vicinity cannot handle the uptick in organic materials**
- Challenges due to the restrictions in the transport of organic materials under chapter 17.24 RCW to control the spread of pests or disease.

For Spokane Valley, the current facility taking organics (Barr-Tech) has little to no capacity for increasing material

acceptance. Because of this limitation, Spokane County (on behalf of Spokane Valley) will apply for a renewable waiver from Ecology to delay the start of an increased organics collection service. This service and frequency waiver lasts up to five years but is renewable as needed. Spokane Valley will need to apply in 2026 at the earliest for the waiver to apply to the 2027 year-round organics collection service requirements and will apply in 2029 at the earliest for the 2030 non-elective organics collection service requirements. By the end of 2027, Spokane Valley will identify a path to achieve compliance prior to the expiration of the waiver and will amend the SWMP accordingly (see **Appendix C**). Spokane Valley will likely need to work in conjunction with other industry professionals in the region to formulate a solution to this regional issue.

In the future, an additional organic materials management facility may be sited in various locations throughout Spokane County. Although no suitable sites currently exist within Spokane Valley city limits, establishing a regional facility would expand the City's capacity for organics collection and help the region abide by the Organics Management Law. **Figure 7-6** identifies all potential siting areas within Spokane County. Any area shown with colored hatching and located outside designated "overburdened communities" is eligible for future development of an organics facility.

Also part of the Organics Management Law, Ecology's Compost Procurement Ordinance (CPO) requires cities and counties with populations over 25,000, or those providing residential organics collection, to adopt measures for purchasing and using compost in public projects. The ordinance aims to promote the use of compost to enhance soil health, prevent erosion, filter stormwater runoff, and support plant growth. By mandating the procurement of compost, the ordinance helps build markets for compost products and supports the state's broader goals of reducing waste and improving environmental sustainability. The City's CPO can be found in **Appendix F.**

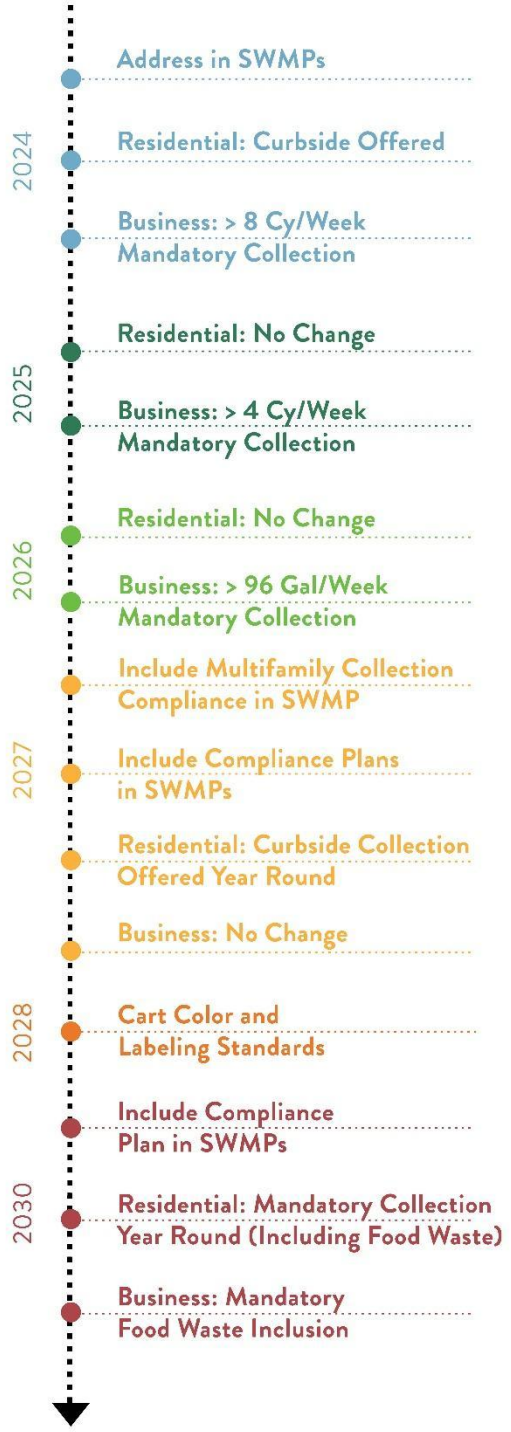


Figure 7-5 – Organics Law Implementation Timeline

The City will soon be undertaking the update to its Comprehensive Plan. Pursuant to RCW 36.70.330, development regulations implementing the Plan will allow for the siting of organic materials management facilities in industrial areas to the extent necessary to provide for the establishment of the organic materials management volumetric capacity identified under RCW 70A.205.040(3)(a)(ii). The siting will attempt to minimize the incompatible uses and potential impacts on residential areas. **Figure 7-6** shows the (potential) organics facility siting map created for all of Spokane County. The map, focused in on the Spokane Valley area, shows areas existing zoning areas where a composting facility could be located according only to zoning requirements. These potential development areas are indicated as being within the colored/highlighted areas/zones, and outside the overburdened communities (green cross-hatched areas) of the state. No such areas are located within eh city limits of Spokane Valley.

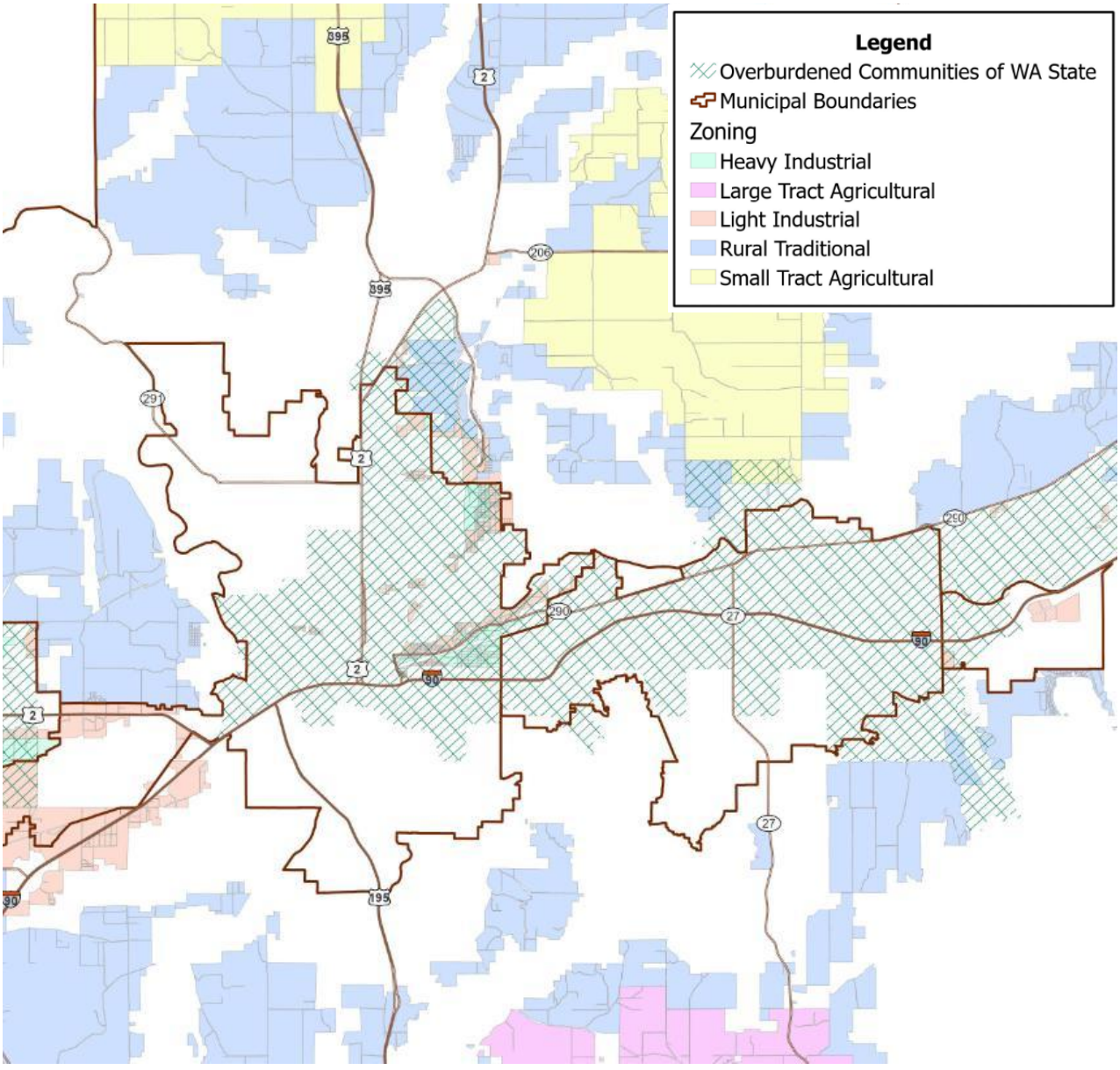


Figure 7-6 – Spokane County Potential Organics Facility Siting Map (Source: Spokane County)

8.0 EDUCATION AND OUTREACH

Education and outreach in Spokane Valley are provided to empower the community to manage waste more responsibly and foster environmental stewardship. These services are primarily provided by WM and Sunshine as part of their service contracts. These programs help to promote the waste resources available to residents including collection services, disposal options, recycling, and diversion of organics and MRW. However, outreach tends to focus primarily on recycling and overall waste reduction.

In addition to the education and outreach services currently provided by WM and Sunshine (detailed below), both contractors can offer additional outreach services to both residential and commercial customers through various platforms including educational tours and public events.

8.1 WM Program

WM uses a multi-channel approach to educate residents and businesses on proper recycling, garbage, and organics disposal. Customers with cart or dumpster receive updated materials at least annually, designed specifically for Spokane Valley's program to promote proper sorting and reduce contamination.

In addition to printed and digital outreach, WM has a local Education and Outreach Coordinator who provides prescheduled live educational events and facility tours for both businesses and individuals, supporting a deeper understanding of responsible waste and organics management.

WM also provides the following ongoing resources to residents:

- **Cart Decals:** all recycling containers/carts are identified with a list of proper recyclables, a telephone number and a website to obtain more information.
- **Website:** The website (www.wmnorthwest.com/spokanevalley) provides information on recycling, yard and food waste, and garbage collection for single and multi-family residences and businesses along with literature developed by WM.
- **Annual Service Guide:** An updated service guide is available on WM's website and is also distributed via mail or e-mail annually to all residential customers. The 2024-2025 service guide provides information on proper cart use, reduction, and reuse ideas and websites for additional waste resources.

- **Email:** Emails specific to service questions (pnwrsservices@wm.com) and recycling questions (recycleinlandnw@wm.com) are provided.
- **Oops Tags:** WM drivers use Oops tags to notify customers when they have placed the wrong items in a recycling cart.
- **Call Center:** A toll-free phone line is provided that accepts voicemails 24 hours a day and is answered by a live person during business hours.
- **Events:** WM regularly attends and has a table at local events from which they hand out informational materials and answer questions. WM also hosts events like *Touch-a-Truck* and sponsor youth education events including *Unlock Your Future*.
- **Customer Service Office:** Located at 11321 East Indiana Road, this office is open for walk-in customers.
- **MyWM App:** Android and iPhone application that was designed for tech-savvy customers to access account information, request services, and check schedules.

At multi-family complexes, WM contacts the complex owner or manager annually to encourage recycling participation, address concerns, space or contamination problems, and offer outreach services to residents. WM also provides durable bags for multifamily complex residents to collect and store their recyclable inside until they are ready to be emptied in the outdoor recycling containers. The bags include the list of recyclables and preparation instructions.

WM meets monthly with City of Spokane Valley staff to review services. WM provides an Education and Outreach Plan to the City annually for review and collaboration, as well as an annual report on service and education efforts.

A summary of WM's outreach and education is provided in their quarterly and annual reports.

8.2 Sunshine Program

Sunshine assists the City with education and outreach on a multitude of topics from proper use of the UTS to instructions for preparing recycling for collection/drop-off. As part of their operations, Sunshine provides services to both inform and educate residents and also to provide them with resources for questions and concerns. Services are available to single-family and multi-family residents and include:

- **Website:** Sunshine's website (https://sunshinedisposal.com/) includes information on the UTS, commercial services available to Spokane Vally residents and a frequently asked questions (FAQ) section.
- **Email:** A general email address (service@sunshinedisposal.com) is provided and monitored for questions and issues.
- Brochures: Web bases guides/brochures are provided through the website that details what types of materials are accepted for recycling and organics diversion.
- **Staff:** Sunshine employees are available at the UTS to answer questions, intake MRW, and monitor the recycling drop-off area. Staff receive training regularly to stay apprised of regulatory and policy changes and industry best management practices (BMPs).
- **Call Center:** A toll-free phone line is provided that accepts voicemails 24-hours a day and is answer by a live person during business hours.
- **Community Outreach:** Sunshine staff participates in community education opportunities in partnership and on behalf of the City to provide information on solid waste management best practices and changing regulatory requirements.
- **Civic Group Engagements:** Attendance at regular gatherings of business and civic leaders provide Sunshine staff another opportunity to keep decision-makers informed about the best and most efficient solid waste management practices for their organizations and groups.
- **Event Support:** Sunshine provides financial and resource support to numerous community organizations and events with the goal of improving solid waste handling practices around the community while supporting important local gatherings.

- **Advertising & Sponsorships:** Paid advertisements and sponsorships allow Sunshine to reach larger audiences with messages about diverting recyclable materials from the waste stream.

With Sunshine's contract renewal for transfer station and disposal services, education and outreach will include more collaboration between Sunshine and the City. Together an education and outreach plan will be developed each February to plan related services for the year. Additionally, Sunshine will provide annual reports to the City summarizing their educational efforts.

8.3 City Program

Spokane Valley relies on its contractors, through their contracts, to provide outreach and education for the City. Due to recent legislations and shifts in the solid waste industry, the City finds that the complexity of managing waste-related programs continues to grow, demanding additional staff time and specialized expertise to ensure effective program administration. With this, the City is looking into a full-time solid waste program manager who will continue to work closely with WM and Sunshine and will be able to supplement the education and outreach each are already providing.

8.4 Waste-Type Specific Programs

8.4.1 Asbestos

The City of Spokane Valley helps promote proper asbestos disposal by including a statement on renovation permits guiding people to contact the Spokane Regional Clean Air Agency (SRCAA) for information about asbestos, and by requiring evidence of contact with the SRCAA on demolition permits.

8.4.2 MRW

Public education and information about the MRW program is provided primarily by Sunshine and also in WM's annual service guides. Others in the area, including garbage haulers and recycling companies, also provide information on diverting MRW from the waste stream and making sure it does not get comingled with recycling. Sunshine employees at UTS that collect MRW from residents are available to answer questions and provide information on what MRW is and how to dispose of it properly. Individuals that work in the MRW area receive additional specialized training on safety, waste screening, and handling of the household hazardous waste (HHW) materials collected in the MRW facility.

8.5 Opportunities

Education and outreach can be an effective tool for providing information and resources to residents and businesses and can influence behaviors towards improved solid waste handling, reuse, and recycling efforts. However, even the most robust programs fail to address or inspire every person. It takes just one careless individual using their recycling bin as a trash can to contaminate an entire truck load of clean recycling. To maximize the impact and effectiveness of education and outreach programs to positively affect behavior change, the messaging needs to be repeated and education and outreach programs are often used in conjunction with monitoring and/or enforcement programs to provide helpful feedback.

Efforts on education and outreach must be tempered so that available resources are utilized in a way that maximizes the benefit to the community and environment in Spokane Valley. There are a multitude of programs in place around the state that have proven to be beneficial to their respective communities. Many of these programs are in place in the communities surrounding Spokane Valley. Working with other solid waste managers in the region and around the state will benefit Spokane Valley by learning from others' successes and failures and the lessons learned along the way. It will be important for the City to lean into available resources and implement improvements to their education and outreach programs in workable segments.

9.0 IMPLEMENTATION PLAN

9.1 Introduction

This chapter lists all of the goals and supporting recommendations from developed from data and discussion presented previous chapters and presents a plan to implement the recommendations. These recommendations are intended to guide decision-making activities for Spokane Valley for the next six years, while also providing direction for the next 20 years. Implementation of individual program elements will be accomplished through annual budgets and contracts.

9.2 Six-Year Implementation Schedule

Building off the four goals created to assist in achieving the City's vision, recommended action items were then developed to help reach those goals. All action items were reviewed and ranked according to criteria of importance, achievability, applicability to vision, and resources. The recommended action items are presented in this section organized by the goal each supports. For reference, the goals are recapped in **Figure 9-1** below.

Figure 9-1 – Recap of Plan Goals

The City of Spokane Valley is primarily responsible for implementing the recommendations made in this Plan. However, additional resources, including existing and future contractors, will be utilized as appropriate to the nature of the recommended activity. As work evolves, the planned resources may be supplemented and/or utilized differently from this initial implementation plan which includes the following resources along with their designation for display in the Implementation Plan shown in **Table 9-1**.

SV – City Staff	C – Consultant (Future)
SU – Sunshine	W – WM

Table 9-1 - Implementation Plan

Action Item	Implementation Year(s)	Goal(s) Supported				Resource
		Goal 1 Affordable	Goal 2 Reliable	Goal 3 Environment	Goal 4 Education	
Goal 1: Maintain affordability of solid waste services without compromising the level of service.						
Pursue regional collaboration and partnering	2026 - 2030					All
Investigate, and implement as appropriate, options for curbside collection of solid waste streams (such as mandatory collection for residents and/or businesses; making recycling an add-on subscription-based service)	2026 - 2027					SV, WM, SU, C
Review solid waste collection contracts prior to renewal and evaluate for removal of items/services with marginal benefit	2026 - 2027					SV, C
Continue competitive contract procurement as appropriate	2026 - 2027					SV, C
As resources allow, research and apply for additional funding opportunities for waste reduction/diversion, education, and outreach programs	2026 - 2030					SV
Investigate the needs and requirements for managing and improving the reliability and effectiveness of the solid waste services and monitor using performance indicators and metrics for each stream	Implement: 2027 Review Annually					SV, WM, SU, C

Action Item	Implementation Year(s)	Goal(s) Supported				Resource
		Goal 1 Affordable	Goal 2 Reliable	Goal 3 Environment	Goal 4 Education	
Goal 2: Ensure the solid waste system remains reliable through disruptive changes and events.						
Evaluate options for infrastructure partnerships to meet future demands for collection, disposal, transfer, recycling, organics diversion, and management of household hazardous waste	2026 - 2030					SV, WM, SU, C
Participate in regional solid waste work group(s) for collaboration on managing growth and change	2026 - 2030					SV
Communicate through Association of Washington Cities (AWC) on regional and statewide solid waste issues	2026 - 2030					SV
Add language to future contracts that provides for unforeseen changes such as those in population, demographics, waste composition, market conditions, and regulations	2027 - 2028					SV, WM, SU, C
Develop new or add to existing city contingency and emergency preparedness plans for solid waste	2027					SV, WM, SU, C
Review city code regarding solid-waste related violations, solid-waste contract violations (rogue haulers, out-of-city hauling of roll offs, etc.), industry changes, and legislative mandates and determine if new code/ordinances should be added	2027					SV, C

Action Item	Implementation Year(s)	Goal(s) Supported				Resource
		Goal 1 Affordable	Goal 2 Reliable	Goal 3 Environment	Goal 4 Education	
Goal 3: Protect the environment through proper management of solid waste streams including garbage, recyclables, organics and household hazardous waste.						
Adopt a core recycling list consistent with state and regional acceptable recyclables lists and works with local recycling markets and facility capabilities	Implement 2026 Review Annually					SV, WM, SU
Identify and implement effective and viable measures for encouraging and facilitating multi-family diversion of recyclables and organics	Investigate: 2026 - 2027 Implement: 2028					SV, WM
Investigate performing routine waste stream surveys and periodic recycling sorts to identify City areas needing additional outreach and education to promote waste reduction, reduced contamination, and proper diversion and disposal	2028					SV, SC, C
Support specialized solid waste services that provide responsible collection and/or processing of household hazardous waste or recyclables outside those specified in the accepted recyclables list	2026 - 2030					SV

Action Item	Implementation Year(s)	Goal(s) Supported				Resource
		Goal 1 Affordable	Goal 2 Reliable	Goal 3 Environment	Goal 4 Education	
Goal 4: Provide education and outreach to inform the communities of solid waste services and best practices and encourage optimal use of solid waste services.						
Inventory current city and regional education and outreach efforts and assess changes to be made to current education and outreach plan	2026					SV, WM, SU
Investigate optimal frequency and venues of messaging	2026 - 2027					SV, SC
Provide outreach and education to promote solid waste service subscriptions to reduce litter and solid waste accumulation on properties.	2026 - 2030					SV, WM, SU
Provide outreach and education on the proper handling and disposal/recycling of household hazardous waste	2026 - 2030					SV, WM, SU
Evaluate expanding education and outreach to a variety of social media platforms	2027 - 2028					SV, SC, C
Direct citizens to existing locations and resources for proper handling of materials	2026 - 2030					SV, WM, SU
Collaborate messaging and programming with other jurisdictions in the region	2026 - 2030					SV, WM, SU, C

9.3 Funding

Solid waste programs in Spokane Valley are funded primarily through user service fees (see **Figure 9-2**). These fees are collected by the City's contracted service providers and used to collect, transport, and dispose of collected waste, support waste reduction programs and waste diversion programs, and support outreach and education programs. Administrative fees, collected as part of the total garbage fee, are used to administer the solid waste program and maintain infrastructure heavily utilized for waste hauling and disposal, such as the local access streets throughout the City.

The Washington State Department of Ecology administers the Local Solid Waste Financial Assistance (LSWFA) program. This program provides funding for local governments to develop and implement solid and hazardous waste management plans, enforce waste regulations, and generally improve waste reduction activities. Spokane Valley has received a LSWFA grant for the upcoming biennium. The grant will be used to purchase lithium-ion battery storage and clean-up of homeless encampment waste. There are also additional grants related to solid waste management the State of Washington offers to help offset costs. These grant opportunities will continue to be researched in the future as a means to supplement the City's exiting solid waste program and services. Additional grant opportunities could possibly help to fund education and outreach efforts for things like reducing contamination and increasing participation in recycling and organics programs in the future.

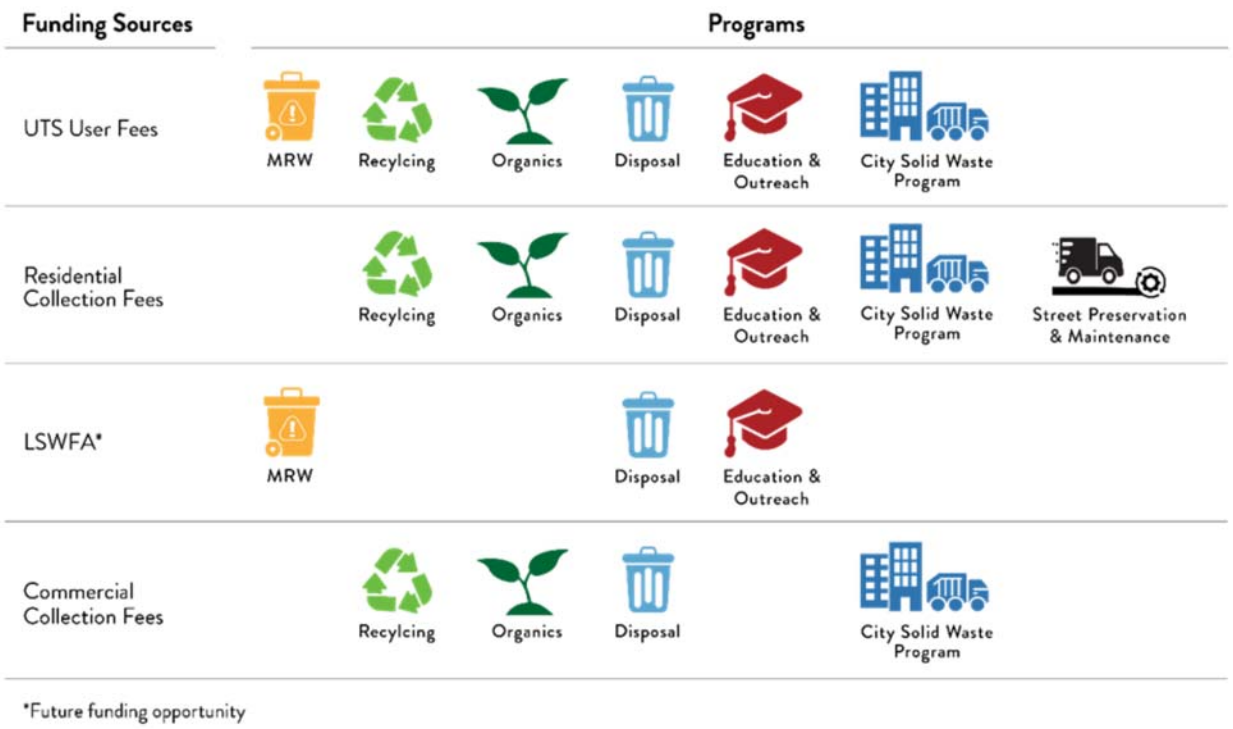


Figure 9-2 – Funding Sources and the Programs Supported

9.4 Twenty-Year Capital Improvements Schedule

Spokane Valley does not own, operate, or directly fund solid waste facilities and is reliant upon its contractors for existing and future services. The primary facilities the City utilizes include, either directly or through their contracted service provider, are the UTS, WM Adams County Landfill, Barr-Tech, and the WM SMaRT center. To provide long-term, reliable solid waste services, Spokane Valley proactively administers contracts inclusive of long-term plans and required facility improvements to accommodate growth. With the projected population and waste growth over the next 20 years (see **Figure 9-3**), planning work done now will ensure continuity and services in the future. Note that this waste growth includes all waste streams generated (garbage, recycling and organics) as facilities msut be capable of handling all waste streams in the future.

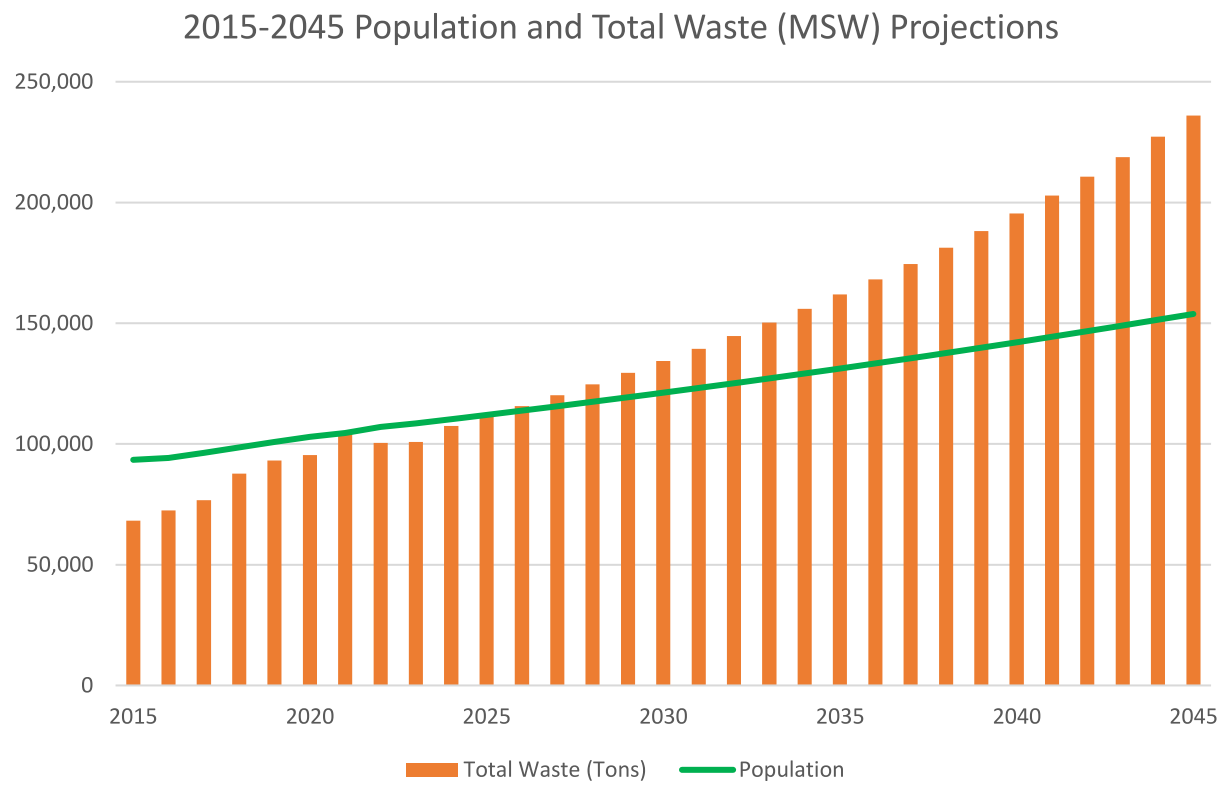


Figure 9-3 - UTS Waste (MSW) and Spokane Valley Population Forecasts[19]

9.5 Facility Capacities and Improvements

Under the Growth Management Act (GMA), Spokane County makes a projection of the total countywide population and employment in 2037 and allocates anticipated population growth to its incorporated cities. The cities, in turn, must then adopt regulations that can accommodate this allocated growth. This pro-

[19] Population data through 2024 from U.S. Census Bureau.

active growth planning ensures that the City's facilities and infrastructure can accommodate the anticipated growth.

9.5.1 Barr-Tech

Barr-Tech is positioned to expand its operations in the future both through physical capacity and technological scalability. However, this expansion will require large financial and operational investments. Barr-Tech currently operates on a state-of-the-art 40-acre facility which has additional land for potential future modular expansions. A case study from Engineered Compost Systems points to a facility capacity of around 110,000 tons per year (TPY) through continued use and expansion of their advanced covered Aerated Static Pile (ASP) and CompTroller systems. Reaching this throughput capacity will require investments or process optimizations. These improvements must be coupled with continued outreach, education, and monitoring of organics programs to minimize contamination levels and the time, space, and facilities required by Barr-tech to remove feedstock contamination.

9.5.2 SMaRT Center

The WM SMaRT Center is designed for both high current performance and significant scalability. The facility is engineered to boost its recycling throughput by up to 37% as part of its ongoing technology upgrade and expansion strategy. The most recent $18-million dollar upgrade, completed in early 2025, added robotic systems and optical sorters. This capacity increase is driven by advanced sorting technologies including multiple optical sorters, robotics, sophisticated conveyor systems, and highly automated baling processes. These enhancements not only improve the facility's efficiency but also position it to handle greater the northwest.

9.5.3 Adams Reginal County Landfill

The Adams County Regional Landfill is owned and operated by WM. This is an expansive facility designed for long-term operation. The landfill sits on a (roughly) 3,300-acre property, with a permitted waste footprint of 550 acres. The landfill is designed to have an operational life of between 80 and 150 years. The facility will develop in phases, with new areas opening approximately every 20 years to accommodate ongoing waste disposal needs. Sunshine contracts with WM to ensure Spokane Valley's garbage is responsibly managed and disposed of at a regulated facility. This collaboration supports environmentally sound practices that protect public health and promote sustainability in the region.

9.5.4 Sunshine University Transfer Station

After research and solicitation of proposals, Sunshine was selected to provide a transfer station and transfer, disposal, and MRW services for the next 10 years, with the option for the City to extend for an additional 10 years. This arrangement meets the long-term service the City needs and allows Sunshine to increase capacity at UTS, improve disposal load efficiency, and reduce landfill trips.

Sunshine is currently expanding its capacity to receive and process household waste as the UTS (**Figure 9-4**). This project is anticipated to be completed by December 31, 2027. Current plans include transforming the existing baler building into a dedicated transfer building, adding a conveyor and compactor system, and improving traffic flow around the site. Sunshine's contract with the City includes performance standards that ensure consistent throughput at increased volumes for commercial trucks and self-haulers even during peak collection times to continue meeting customer service expectations as the City grows.

Figure 9-4 – University Transfer Station

9.5.5 Sullivan Road Transfer Station

The Sullivan Road Transfer Station has volumetric transfer capacity to meet the state's organics diversion goals. Volumetric transfer capacity considers both new organic tons generated through populations growth or diverted organic tons from the MSW stream. When organics tons are diverted from the MSW stream, more tipping floor space can be allocated to organics instead of MSW. Capacity can also be increased at the facility by extending operational hours if space becomes constrained.

10.0 ENFORCEMENT AND ADMINISTRATION

Spokane Valley is a non-charter code city that operates under a Council-City Manager system of government. This form of government provides a separation of politics from day-to-day administration of the City's activities and also allows for professional management of the City's activities. Solid waste services are performed by private companies, overseen by the City. The City is also involved in solid waste though the City Code, which has provisions that address problems with properties that accumulate junk, such as inoperable cars and poorly-managed piles of organic materials that are attracting pests.

10.1 Spokane Regional Health District

The Spokane Regional Health District (SRHD) plays a key role in both pollution prevention and solid waste enforcement. Through its Local Source Control and Pollution Prevention Program, SRHD provides free, hands-on assistance to businesses and multi-family housing to identify and address potential sources of pollution. The Spokane County Regional Solid Waste System (SCRSWS) supports this effort by supplying outreach materials for distribution. In addition to its pollution prevention work, SRHD is responsible for issuing permits for solid waste facilities and enforcing regulations under RCW 70A.205. The agency conducts periodic inspections to ensure compliance and responds to complaints related to illegal dumping, improper waste handling, and other violations outside municipal boundaries. SRHD's Environmental Public Health staff coordinate with Ecology and local code enforcement agencies to investigate violations and implement corrective actions.

10.2 Washington State Agencies and Regulations

The three State agencies that are primarily involved in solid waste management are Ecology, the WUTC, and the Washington State Department of Agriculture (WSDA).

Washington Department of Ecology: The Solid Waste Handling Standards were promulgated by Ecology. In addition, Chapter 173-351 WAC, Criteria for Municipal Solid Waste Landfills, contains the current standards for municipal solid waste landfills. The Model Litter Control and Recycling Act (RCW 70.93.060) prohibits depositing garbage on any property that is not properly designated as a disposal site. Ecology also responds to complaints regarding hazardous material spills or releases.

Washington Utilities and Transportation Commission: The WUTC regulates residential and non-residential garbage collection services, primarily in unincorporated areas as well as for incorporated areas that have not taken control of the collection system. Cities are permitted by State law to choose their form of waste collection regulation. WUTC authority does not extend to companies operating under contract with any city or town, such is the case in Spokane Valley. This regulatory system was set up by the State Legislature in the 1960's to ensure that every citizen and business, no matter how remotely located, can get garbage collection service.

Washington State Department of Agriculture: Since the previous 2014 SWMP, WSDA has added MSW, yard debris, organic feedstocks, organic materials, and agricultural wastes as regulated commodities. As such, transport of these regulated commodities from a quarantine area is prohibited unless accompanied by a special permit issued by WSDA. It has been decided that Spokane Valley is within the apple maggot quarantine zone. This means that Spokane Valley cannot accept any organic waste from areas with apple maggots.

10.2.1 State Environmental Policy Act

The EPA has developed the State Environmental Policy Act (SEPA) checklist (see **Appendix E**). The SEPA checklist is a tool used by governmental agencies to assess the potential environmental impacts of proposed projects. Its primary purpose is to determine whether a proposal is likely to have significant adverse environmental effects and to identify measures to avoid, minimize, or mitigate these impacts. The checklist includes sections that require detailed information about the proposal, such as its location,

purpose, and the nature of the activities involved. It also covers various environmental elements like air quality, water resources, wildlife, and land use. This comprehensive approach ensures that all potential environmental impacts are considered early in the planning process, facilitating informed decision-making and compliance with environmental regulations.

10.2.2 Collection (WM) and Drop-box Contracts (WM & Sunshine)

The Contractor is required to comply with all federal, state, and local regulations and ordinances applicable to the work to be done under their contract. The Contractor is to continually monitor and evaluate all operations to ensure that compliance with the provisions of their Contract is maintained. The City will monitor the Contractor's operations.

When collecting recyclables and organics, containers with visually obvious contaminants will not be collected, and the container will be tagged. The customer will learn about the specific problem(s), the reasons for the rejection and options for either removing the contaminated materials or having it collected garbage.

As technology continues to evolve, automated video recording captured at the time of service from collection trucks will be able to provide another digital method of feedback compared to traditional cart tagging processes.

For multifamily complexes, the contractor and City work jointly to address recycling contamination issues and will work with individuals where possible to address contamination issues.

At the UTS, spotters / screeners work to screen customers and the waste they are brining in to prevent inappropriate wastes, especially MRW, from entering the streams, educate and assist customers with recycling, and to make sure all customers are recycling or disposing of items properly.

Appendix A

Regulatory Compliance

Appendix A

Regulatory Compliance

Chapter 70A.205 RCW The Washington State Solid Waste Management – Waste Reduction and Recycling Act, assigns local government the primary responsibility for managing solid waste (Washington State Legislature, 2020). In 1989, the Washington State Legislature amended this chapter to provide added direction to local governments to incorporate waste reduction and source separation strategies into coordinated systems of solid waste management. The purpose of the chapter is to protect the environment and health of our residents as well as conserve resources in our state.

The purpose and authority for solid waste planning is derived from Chapter 70A.205 RCW (Washington State Legislature, 2020). This chapter contains the regulatory requirements that each plan must encompass. Each of these regulations is listed in **Table A.1**, along with the section in the Plan for where the regulation is met. Also included in this section are the required elements for Moderate Risk Waste Plans.

Table A.1. Regulatory Compliance Summary Table

Solid Waste Management Planning Element	Regulation or Ordinance	Section
Inventory of Existing Facilities, Capacities, and Deficiencies.	RCW 70A.205.045(1)	5.3.2
Twenty-Year Projection of Facility Needs	RCW 70A.205.045(2)	9.4
Review of Federal, State, and Local Regulations and Ordinances Related to Solid Waste planning (Including Relevant Impacts on Land Use Planning)	RCW 70A.205.045(3)	2.4
Financing Solid Waste Infrastructure and Operations – Six Year Capital Program for Solid Waste Facilities	RCW 70A.205.045(3)(c)	9.2
Financing Solid Waste Infrastructure and Operations – Funding Strategy	RCW 70A.205.045(3)(d)	9.3
Surveillance and Control	RCW 70A.205.045(4)	10.0
Waste Collection – Description of Service Areas and Needs	RCW 70A.205.045(5)	5.1
Waste Collection – WUTC Hauler Areas	RCW 70A.205.045(5)(a)&(b)	5.1
Waste Collection – Population Densities	RCW 70A.205.045(5)(c)	2.1.2
Waste Collection – Six Year Needs	RCW 70A.205.045(5)(d)	9.2
Waste Reduction and Recycling Programs - Reduce Waste Generated	RCW 70A.205.045(6)	6.1
Waste Reduction and Recycling Programs - Source Separation Incentives/Mechanisms	RCW 70A.205.045(6)	6.1
Waste Reduction and Recycling Programs - Recycling Opportunities	RCW 70A.205.045(6)	6.3
Recycling and Waste Diversion – Waste Reduction Strategies	RCW 70A.205.045(7)(a)	6.1
Recycling and Waste Diversion – Source Separation, Urban	RCW 70A.205.045(7)(b)(i)	6.1
Recycling and Waste Diversion – Source Separation, Rural	RCW 70A.205.045(7)(b)(i)	6.1
Recycling and Waste Diversion – Non-Residential Monitoring	RCW 70A.205.045(7)(b)(ii)	6.1
Recycling and Waste Diversion – Organics Management	RCW 70A.205.045(7)(b)(iii)	7.0
Recycling and Waste Diversion – Education Programs	RCW 70A.205.045(7)(b)(iv)	8.0
Recycling and Waste Diversion – Designation of Recyclable Materials	RCW 70A.205.045(7)(c)	6.4

Solid Waste Management Planning Element	Regulation or Ordinance	Section
Recycling and Waste Diversion – Description of Markets	RCW 70A.205.045(7)(c)	6.4.2
Recycling and Waste Diversion – Review of Waste Generation Trends	RCW 70A.205.045(7)(c)	6.4.3
Recycling and Waste Diversion – Description of Waste Composition	RCW 70A.205.045(7)(c)	6.4.3
Recycling and Waste Diversion – Description of Existing and Future Programs	RCW 70A.205.045(7)(c)	6.4.2
Recycling and Waste Diversion – Implementation Schedule	RCW 70A.205.045(7)(c)	9.2
Assessment of Plan Costs on Solid Waste Collection (WUTC review)	RCW 70A.205.045(8)	9.3
Facility Siting Requirements	RCW 70A.205.045(9) & RCW 70A.205.110	10.0
CROP - Recycling Contamination Reduction	RCW 70A.205.045(10)(a)	6.0
CROP - Key Contaminants	RCW 70A.205.045(10)(b)	6.0
CROP - Impact of Key Contaminants on Collection	RCW 70A.205.045(10)(c)	6.0
CROP - Impact/Costs of Key Contaminants to System	RCW 70A.205.045(10)(d)	6.0
CROP - Implementation Schedule	RCW 70A.205.045(10)(e)	11.0
Waste Collection – Urban and Rural Designation	RCW 70A.205.050	5.1
Organics Collection - Urban Residents	RCW 70A.205.102	7.1
Organics Collection - Businesses	RCW 70A.205.102	7.3
Organics - Plan for Implementing Organics Collection	RCW 70A.205.103(3)(a)	7.5
Organics - Identify Potential Composting Sites	RCW 70A.205.103(3)(a)(i)	7.5
SWAC Participation	RCW 70A.205.110	3.0
Hazardous Waste – Assessment of Moderate Risk Waste	RCW 70A.300.350(1)(a)	4.9
Hazardous Waste – Public Involvement and Education	RCW 70A.300.350(1)(b)	8.4.2
Hazardous Waste – Hazards of Improper Use and Disposal	RCW 70A.300.350(1)(b)(i)	4.9
Hazardous Waste – Proper Handling, Reducing, Recycling, and Disposing	RCW 70A.300.350(1)(b)(ii)	4.9
Hazardous Waste – Inventory of Generators and Managers of Waste	RCW 70A.300.350(1)(c)	4.9
Hazardous Waste – Public Involvement in Developing Plan	RCW 70A.300.350(1)(d)	8.4.2
Hazardous Waste – Eligible Zones	RCW 70A.300.350(1)(e)	4.9
Hazardous Waste – Local Government Elements	RCW 70A.300.350(1)(f)	8.4.2
Hazardous Waste – Coordination with Other Hazardous Materials-Related Plans	RCW 70A.300.350(2)	2..4
Hazardous Waste – Coordination with Privately Owned Hazardous Waste Facilities	RCW 70A.300.350(3)	2.4
Hazardous Waste – Preparation of Hazardous Waste Guidelines and Reviewing Pilot Project	RCW 70A.300.350(4)	2.4
Hazardous Waste – Consultation with Local Groups for Public Education	RCW 70A.300.350(5)	8.4.2
Locally Defined Amendment Process	Recommended by Ecology	Appendix B
Support of States SWMP and Priorities	Recommended by Ecology	2.4
SWAC Bylaws	Recommended by Ecology	N/A
Transmittal Letter	Required by Ecology	

Solid Waste Management Planning Element	Regulation or Ordinance	Section
Interlocal Agreements	Required by Ecology	N/A
Evidence of Public Meeting(s)	Required by Ecology	
Resolution of Plan Adoption from All Jurisdictions	Required by Ecology	N/A
Comments and Responses From Ecology and WUTC Review	Required by Ecology	
SEPA Documentation	Required by Ecology	Appendix D

Appendix B

Spokane Valley History

Appendix B

Spokane Valley History

B.1 History

The solid waste program in Spokane Valley has evolved in parallel with broader shifts in environmental policy and regional growth. In its early years, as part of the greater Spokane area, the not yet incorporated city relied on conventional, often unregulated waste disposal methods typical of mid-20th-century practices which included open dumps and minimal infrastructure. The history of solid waste management in Spokane County mirrors the broader evolution seen throughout Washington State, evolving from unregulated dumping practices to a modern, highly structured system rooted in environmental stewardship and public health.

A significant turning point came with the statewide regulatory reforms during the early 1960s. In 1961, under the oversight of the Washington Utilities and Transportation Commission (WUTC), solid waste collection companies were issued certificates of Public Necessity and Convenience. This move, from treating waste disposal merely as a service to regulating it as an essential public utility, helped ensure that waste was collected safely and efficiently across the state. This regulatory framework laid the groundwork for subsequent legislative action.

The passage of the Solid Waste Management Act in 1969 further transformed the industry by transferring the primary responsibility for solid waste management from private entities to local governments. For the Spokane area, this meant that local authorities began to develop comprehensive programs and strategies tailored to the unique challenges of their region. These early local initiatives focused on creating structured solid waste management programs that emphasized sanitary and environmentally responsible collection and disposal.

At the time of the City's incorporation in 2003, it was a part of the Spokane Regional Solid Waste Management System and the City participated in the Spokane County Solid Waste Management Plan (SWMP) and program through an interlocal agreement. On November 16, 2014, the City's interlocal agreement with the Spokane Regional Solid Waste Management System expired. Prior to this expiration and in view of it, the City Council considered options and voted to assume responsibility of managing the solid waste generated in the City.

This responsibility was progressively assumed primarily through the following key Council actions:

- In 2014 – contracting for University Road Transfer Station operation, adopting the City's own Solid Waste Management Plan and Moderate Risk Waste Plan.
- In 2016 – contracting for the collection of garbage, recyclables, and compostables and contracting (2 contracts) for Solid Waste Drop Box Services. Note – the City also allows citizens

the option of self-hauling their solid waste including garbage, recyclables, compostables (organics, appliances, and household hazardous waste to the City's transfer station, as well as gives citizens the opportunity to sign up for recycling service only.

- In 2021 – the City's Solid Waste Management Plan was amended to include a Contamination Reduction and Outreach Plan (CROP).
- In 2024 – the City signed a new contract for the University Road Transfer Station operation.

Today, as required in Chapter 70A.205 RCW and Chapter 70A.300 RCW, the City has a Solid Waste and Moderate Risk Waste Management Plan. This combined plan lays out the City's strategies for efficient waste collection, recycling, and disposal and also the handling of Moderate Risk Waste (MRW) while promoting waste reduction and contamination mitigation. By law, this plan needs to be kept current, reviewed, and revised periodically.

Appendix C

Plan Amendment Process

Appendix C

Plan Amendment Process

C.1 Plan Updates

Ecology requires local governments to maintain their solid waste plans in current condition. To accomplish this, this SWMP will be reviewed periodically, but no less than annually and updated as needed through minor edits, and amendment or a formal revision. The difference between these plan changes is the review required for each.

Minor Edits: Minor edits to plan may be required to keep the plan current with actual conditions. Minor edits include small changes that do not require review from the City Council or Ecology. Examples of minor edits include fixing spelling or grammatical errors, changing a phone number or address, or modifying expiration dates of contracts.

Amendments: Are substantiative, yet minor changes that generally occur within the five-year time period after a solid waste plan is approved. These changes that may occur, whether due to internal decisions or external factors, can be adopted through review and approval of the City Council. For these types of changes, Ecology will be notified of the change but a formal review/revision process and associated public comment period is not required. Examples of these types of changes could include amending the list of designated recyclables or adding a new task to the Education and Outreach program.

Revisions: Revisions are more significant changes that, in addition to city Council approval, could require review and approval by Ecology and/or opportunities for public review and comment. A revision to the plan is a minimum of every five years. This Plan will be completed in 2025 and will require a revision process to begin no later than 2030. Outside this revision period, if major modifications are made to the solid waste program, the Plan may require a revision. Examples of these types changes could include the addition of a program or elements required to comply with new regulations, a change to the designated waste transfer facility, or removal or a program due to industry changes.

C.2 Plan Amendment Process

To propose Plan amendments before the scheduled formal revision, individuals or organizations will petition the City of Spokane Valley in writing. The petition will describe the proposed amendment, its specific objectives, and explain why immediate action is needed prior to the next scheduled review. The Public Works Director will investigate the basis for the petition and prepare a recommendation for the City Manager.

If the City Manager decides that the petition warrants further consideration, the Public Works Director will draft a proposed amendment. This process will also be used if City staff initiate amendments to the Plan. The proposed amendment will be submitted to the City Council and undergo the normal review and approval process. Depending on the degree of change, an amendment will be added to the Plan or an official Revision of the Plan will be made.

Implicit in the development and adoption of this Plan is the understanding that emergency actions may need to be taken by the City in the future for various reasons, and that these actions can be undertaken without needing to amend this Plan beforehand. For instance, an accident, fire or other mishap could interrupt transfer or disposal services and create a temporary or longer-term need for alternative disposal

arrangements. In the case of an emergency, City staff will inform Ecology and other key stakeholders as soon as feasibly possible, but not necessarily before new actions are implemented. If the emergency results in permanent and significant changes to the System, an amendment or revision to this Plan will be prepared. If, however, the emergency actions are only undertaken on a temporary or short-term basis, it will not be considered necessary.

Appendix D

Hazardous Waste Inventory

Appendix D

Inventory of Dangerous Waste Generators and Handling Facilities

D.1 Inventory and Zoning

RCW 70A.300.350(a) requires MRW plans to contain an assessment of the quantities, types, generators and fate of MRW in each jurisdiction. The following information addresses potential MRW generators, dangerous waste generators (i.e., large-quantity generators), contaminated sites, transporters and processing facilities, and locations where hazardous waste facilities are allowed to be sited ("zone designations").

D.1.1 Potential MRW Generators and Participation in MRW Collections

The data necessary to conduct an assessment of the current rate of MRW generation and participation in MRW collection programs is unavailable, since the City has not previously operated its own MRW collection program.

D.1.2 Dangerous Waste Generators

Ecology's records show that the following numbers of businesses and institutions in the City that were registered as hazardous waste generators as of August 2014:

- 7 large-quantity generators
- 6 medium-quantity generators
- 9 small-quantity generators[1]
- 9 non-generating sites and transporters with active EPA or state identification numbers, but who did not generate waste in the most recent year.

In addition, there are assumed to be other businesses in the City that could be small generators of hazardous wastes, including car repair shops, hospitals, dentists, furniture refinishers, veterinarians, and various construction companies, that have not registered with Ecology. Many of these companies are likely small-quantity generators that are handling their wastes properly and hence not subject to reporting requirements.

D.1.3 Remedial Action Sites

Ecology's list of confirmed and suspected contaminated sites in the City can be found at www.ecy.wa.gov/programs/tcp/cleanup.html. The sites can be summarized in five categories (data on the number of sites shown below is current as of August 2014):

- Brownfield Sites: There are no brownfield sites identified in the City. Brownfield sites are abandoned or under-utilized properties where potential liability due to environmental contamination and clean-up costs complicate redevelopment.

[1] This figure includes only those small-quantity generators that have chosen at their option to get an EPA identification number, and the actual number of small-quantity generators is assumed to be higher.

- Environmental Covenants Register: There are two sites in the City that are identified for the environmental covenants registry. This registry is a list of sites that have residual contamination after clean-up has been completed. These sites have environmental covenants or deed restrictions limiting the types of uses for the property.
- Leaking Underground Storage Tanks: There are no leaking underground storage tank sites identified in the City.
- State Clean-Up Sites: There are eleven sites shown for the City on the list of cleanup sites:
  - Contaminated Sites – 4 sites. There are four sites in the City where cleanup activities have been initiated but not yet completed.
  - No Further Action Sites – 7 sites. These sites were previously on the Confirmed and Suspected Contaminated Site list but have now received a No Further Action decision. Two of these sites have deed restrictions or environmental covenants.
- Regulated Underground Storage Tanks: There are 235 tanks shown on Ecology's list of regulated underground storage tanks (as of August 2014). Of these, 136 are listed as operational, 84 have been removed, ten are exempt and five are temporarily closed. Most of these sites are gas stations, but the list also may include industries, commercial properties, and governmental entities.

D.1.4 Hazardous Waste Services (Transporters and Facilities)

There are numerous companies that are registered in Washington as hazardous waste transporters and that could potentially provide services in the City.

D.1.5 Zone Designations

As part of the development of the original MRW plans, local jurisdictions were required by State law (RCW 70.105.225) to designate zones within their borders where hazardous waste facilities would be permitted to operate and to notify Ecology by 1988 of those designations. The City was incorporated in 2003 and so could not perform this activity in 1988, but the current Spokane Valley Municipal Code addresses hazardous storage and treatment facilities as an allowable use in industrial zones (with supplemental conditions).

Appendix E

SEPA

Appendix E

Checklists and Forms

E.1 SEPA Checklist

SEPA[2] 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.

[2] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance

A. Background

Find help answering background questions[3]

Name of proposed project, if applicable:

Spokane Valley Solid Waste Management Plan (SWMP)

Name of applicant:

Spokane Valley Public Works Department

Address and phone number of applicant and contact person:

Robert Blegen, (509)720-5320

10210 E. Sprague Avenue

Spokane Valley, WA 99206

Date checklist prepared:

June 12, 2025

Agency requesting checklist:

Washington State Department of Ecology.

Proposed timing of schedule (including phasing, if applicable):

The recommendations contained in the Solid Waste Management Plan will be implemented primarily over the next five years.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

State law requires that the Plan be reviewed every five years and updated if necessary.

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

No environmental information has been, or will be prepared, as part of this Plan update.

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No current applications are known to be pending for government approvals.

List any government approvals or permits that will be needed for your proposal, if known.

This Plan must be adopted by the Spokane Valley City Council and then the Washington State Department of Ecology must approve the Plan.

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

[3] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background

agencies may modify this form to include additional specific information on project description.)

Recommendations are made in this Plan for solid waste, moderate-risk waste, and other aspects of the solid waste management system. Recommended actions include education and promotion, assignment of implementation responsibilities, and a funding strategy.

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 activities described in the Plan will take place primarily in the City of Spokane Valley.

B. Environmental Elements

1. Earth

Find help answering earth questions[4]

a. **General description of the site:**

The City of Spokane Valley spans approximately 38.5 square miles in eastern Washington, nestled within Spokane County. Located just west of the Idaho border, Spokane Valley is part of the scenic Inland Northwest region. The Spokane River, originating from Lake Coeur d'Alene in Idaho, flows through the city, shaping much of its northern boundary and contributing to its natural beauty. The city's topography varies from riverbanks at around 1,800 feet above sea level to gently rising hills and ridges. This diverse elevation creates a landscape that includes lush riparian zones, open grasslands, and forested areas, all framed by the Selkirk and Dishman Hills.

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

Does not apply.

b. **What is the steepest slope on the site (approximate percent slope)?**

Does not apply.

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.**

[4] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth

Does not apply.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Does not apply.

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.

Does not apply.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

Does not apply.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Does not apply.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

Does not apply.

2. Air

Find help answering air questions[5]

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.

Does not apply.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Does not apply.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Does not apply.

[5] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air

3. Water

Find help answering water questions[6]

a. Surface:

Find help answering surface water questions[7]

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.**

   The surface water resources within the City of Spokane Valley primarily consist of the Spokane River and its associated tributaries, along with several smaller streams and seasonal watercourses. The Spokane River, a major tributary of the Columbia River, serves as a central hydrological feature. While the city itself does not encompass large natural lakes, nearby bodies of water such as Liberty Lake and Newman Lake contribute to the region's overall watershed and provide additional aquatic habitats and water-based amenities.

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.**

   Does not apply.

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.

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

   Does not apply.

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

   Does not apply.

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.**

   Does not apply.

b. Ground:

Find help answering ground water questions[8]

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.**

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[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

[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-Surface-water

[8] 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

Does not apply.

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.**

Does not apply.

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 have runoff control and stormwater management programs in place.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**

No.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

No.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Control systems are in place to prevent waste materials from impacting surface, ground or runoff water at transfer stations and at closed and operating landfills in the County.

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**

Does not apply. The plan encompasses all of the City of Spokane Valley.

b. What kind and amount of vegetation will be removed or altered?

Does not apply.

c. List threatened and endangered species known to be on or near the site.

Does not apply.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.

Does not apply.

e. List all noxious weeds and invasive species known to be on or near the site.

Does not apply.

5. Animals

Find help answering animal questions[9]

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:**

Does not apply, the plan encompasses all of the City of Spokane Valley.

b. List any threatened and endangered species known to be on or near the site.

Does not apply.

c. Is the site part of a migration route? If so, explain.

Does not apply.

d. Proposed measures to preserve or enhance wildlife, if any.

Does not apply.

e. List any invasive animal species known to be on or near the site.

Does not apply.

6. Energy and natural resources

Find help answering energy and natural resource questions[10]

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.

Does not apply.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Does not apply.

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[9] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals

[10] 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

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.**

Does not apply.

7. Environmental health

Health Find help with answering environmental health questions[11]

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.**

Does not apply.

1. **Describe any known or possible contamination at the site from present or past uses.**

Does not apply.

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.**

Does not apply. The Plan documents waste management policies and handling methods. It does not include project development or design. Any future waste handling facility design or development would be separate from the Plan and would address this concern.

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.**

Under guidance of the Plan, MRW is segregated at collection facilities by type of waste (i.e. corrosives, poisons, etc.) and is handled in accordance with state regulations. MRW is stored on double containment systems to ensure no site contamination occurs.

4. **Describe special emergency services that might be required.**

Emergency alarm systems are present at the facilities. If necessary, County fire and emergency services are available.

5. **Proposed measures to reduce or control environmental health hazards, if any.**

The facilities have Spill Prevention and control plans, emergency response plans, and health and safety programs.

b. **Noise**

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

Does not apply.

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)?**

Does not apply. Existing facilities comply with noise regulations.

[11] 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

3. **Proposed measures to reduce or control noise impacts, if any:**

   Does not apply.

8. Land and shoreline use

Find help answering land and shoreline use questions[12]

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.**

   Does not apply.

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?**

   Does not apply. The Plan documents waste management policies, handling methods and public outreach. It does not include project development or design. Any future facilities that are constructed for the management and handling of solid waste and special waste will address this concern.

   1. **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?**

      Does not apply.

c. **Describe any structures on the site.**

   Does not apply.

d. **Will any structures be demolished? If so, what?**

   Does not apply.

e. **What is the current zoning classification of the site?**

   Does not apply.

f. **What is the current comprehensive plan designation of the site?**

   Does not apply.

g. **If applicable, what is the current shoreline master program designation of the site?**

   Does not apply.

h. **Has any part of the site been classified as a critical area by the city or county? If so, specify.**

   Does not apply.

i. **Approximately how many people would reside or work in the completed project?**

   Does not apply.

j. **Approximately how many people would the completed project displace?**

   Does not apply.

---

[12] 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

k. Proposed measures to avoid or reduce displacement impacts, if any.

Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

Does not apply.

m. 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[13]

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Does not apply.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Does not apply.

c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. Aesthetics

Find help answering aesthetics questions[14]

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Does not apply.

b. What views in the immediate vicinity would be altered or obstructed?

Does not apply.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Does not apply.

11. Light and glare

Find help answering light and glare questions[15]

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

---

[13] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing

[14] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics

[15] 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

Does not apply.

b. **Could light or glare from the finished project be a safety hazard or interfere with views?**

Does not apply.

c. **What existing off-site sources of light or glare may affect your proposal?**

Does not apply.

d. **Proposed measures to reduce or control light and glare impacts, if any:**

Does not apply.

12. Recreation

Find help answering recreation questions

a. **What designated and informal recreational opportunities are in the immediate vicinity?**

Does not apply.

b. **Would the proposed project displace any existing recreational uses? If so, describe.**

Does not apply.

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[16]

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.**

Does not apply.

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.**

Does not apply.

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.**

Does not apply.

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.**

[16] 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

Does not apply.

14. Transportation

Find help with answering transportation questions[17]

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.**

Does not apply.

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?**

Does not apply.

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).**

Does not apply.

d. **Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

Does not apply.

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?**

Does not apply.

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.**

Does not apply.

g. **Proposed measures to reduce or control transportation impacts, if any:**

Does not apply.

15. Public services

Find help answering public service questions[18]

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.**

Does not apply.

b. **Proposed measures to reduce or control direct impacts on public services, if any.**

Does not apply.

---

[17] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-14-Transportation

[18] 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

16. Utilities

Find help answering utilities questions[19]

a. **Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:**

Does not apply.

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.**

Does not apply.

C. Signature

Find help about who should sign[20]

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-b-environmental-elements/environmental-elements-16-utilities
[20] 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[21]

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?**

   Implementation of the proposed recommendations should help reduce the amount of water and air discharges, while increasing the proper handling of any solid or toxic wastes that are generated in the City. There should not be an increase or reduction in nose.

   - **Proposed measures to avoid or reduce such increases are:**

     Does not apply.

2. **How would the proposal be likely to affect plants, animals, fish, or marine life?**

   No impacts to plants, animals, fish, and marine life are anticipated.

   - **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

     Does not apply.

3. **How would the proposal be likely to deplete energy or natural resources?**

   The proposed recommendations should help reduce energy demands and help to conserve natural resources by increasing waste reduction and other activities. Increased recycling leads to conservation of natural resources and also reduces energy demands. In general, using recycling materials in place of virgin materials requires significantly less energy in the manufacturing process.

   - **Proposed measures to protect or conserve energy and natural resources are:**

     Does not apply.

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?**

   None of these areas will be negatively impacted by the recommendations in the Plan.

   - **Proposed measures to protect such resources or to avoid or reduce impacts are:**

     Does not apply.

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?**

[21] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-d-non-project-actions

No direct impacts to land or shoreline use are anticipated to result from the proposed recommendations.

- **Proposed measures to avoid or reduce shoreline and land use impacts are:**

  Does not apply.

6. **How would the proposal be likely to increase demands on transportation or public services and utilities?**

   The proposed recommendations should lead to minor reductions in transportation requirement and public services, although if curbside recycling is increased to weekly then there would be additional traffic in the City. Transportation of solid waste out of the City should be lessened by increased waste reduction and recycling.

- **Proposed measures to reduce or respond to such demand(s) are:**

  Does not apply.

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

   No such conflicts are likely. The intent of creating this Plan is to comply with various laws or requirements (especially on the state level) regarding environmental protection and other factors.

E. Signature

I, the undersigned, swear under penalty of perjury that the above responses are made truthfully and to the best of my knowledge. I also understand that, should there be any willful misrepresentation or willful lack of full disclosure on my part, the agency may withdraw any Determination of Nonsignificance that it might issue in reliance upon this check list.

Date: _____ Signature: _____

Please print or type:

Proponent: _____

Address: _____

Phone: _____

Person completing form (if different from proponent):

Name: _____

Address: _____

Phone: _____

Appendix F

Transfer Station Mitigation

Appendix G

City Solid Waste Related Ordinance

CITY OF SPOKANE VALLEY
SPOKANE COUNTY, WASHINGTON
ORDINANCE NO. 23-006

AN ORDINANCE OF THE CITY OF SPOKANE VALLEY, SPOKANE COUNTY, WASHINGTON, AMENDING SPOKANE VALLEY MUNICIPAL CODE CHAPTER 3.47 RELATING TO PURCHASE OF GOODS TO ADD A COMPOST PROCUREMENT REQUIREMENT IN COMPLIANCE WITH RCW 43.19A.150, AND OTHER MATTERS RELATING THERETO.

WHEREAS, in March 2022, Engrossed Second Substitute House Bill (ESSHB) 1799 was signed into Washington law; and

WHEREAS, the primary goal of the law is to increase the diversion of organic materials going to landfills to reduce methane emissions, a significant source of the emissions; and

WHEREAS, the legislature finds that it will be beneficial to improve a variety of aspects of how organic materials and organic material wastes are reduced, managed, incentivized, and regulated under state law; and

WHEREAS, ESSHB 1799 encourages cities to procure more of the compost product and finished products created from organic wastes; and

WHEREAS, Section 701 of ESSHB 1799, now codified as RCW 43.19A.150, requires cities such as the City of Spokane Valley to adopt a compost procurement ordinance to implement RCW 43.19A.120; and

WHEREAS, RCW 43.19A.120 states that when planning government-funded projects or soliciting and reviewing bids for such projects, state agencies and local governments shall consider whether compost products can be utilized in the project.

NOW THEREFORE the City Council of the City of Spokane Valley, Spokane County, Washington, ordains as follows:

Section 1. Purpose. The purpose of this Ordinance is to conform to state law regarding compost procurement.

Section 2. Amendment. Chapter 3.47 Spokane Valley Municipal Code is hereby amended to add:

3.47.050 Compost Procurement.

A. For the purposes of this chapter, unless the context clearly requires otherwise, "compost product" means a product created with mulch, soil amendments, ground cover, or other landscaping material derived from the biological or mechanical conversion of biosolids, or cellulose-containing waste materials as defined in RCW 43.19A.010.

B. When planning City-funded projects or soliciting and reviewing bids for such projects, City departments shall identify whether compost products can be utilized in a City project. In the event that compost products can be utilized, City departments shall require purchase of compost for use in City projects.

C. City departments shall plan for the use of compost in any of the following categories that are applicable to their operations and project types:

1. Landscaping projects;

2. Construction and postconstruction soil amendments;

3. Applications to prevent erosion, filter stormwater runoff, promote vegetative growth, or improve the stability and longevity of roadways; and

4. Low-impact development and green infrastructure to filter pollutants or to keep water onsite or both.

D. Notwithstanding subsections B and C of this section, City departments are not required to use compost products if:

1. Compost products are not available within a reasonable distance, defined as 50 miles, from the project;

2. Compost products that are available do not comply with existing purchasing standards;

3. Compost products that are available do not comply with federal, state, or local health, quality, and safety standards; or

4. Compost purchase prices are not reasonable or competitive.

E. City departments shall give priority to purchasing compost products from companies that:

1. Produce compost products locally within Spokane County;

2. Are certified by nationally recognized organizations like the US Composting Council; and

3. Produce compost products that are derived from municipal solid waste compost programs and meet quality standards comparable to standards adopted by the Washington State Department of Transportation or adopted by rule by the Washington State Department of Ecology.

F. City departments that use compost shall report the following information to the Community and Public Works Department by each December 15:

1. The volume and cost of compost purchased by the City department in that year; and

2. The source or sources of the compost purchased by the City department in that year.

G. The Community and Public Works Department is responsible for:

1. Providing technical assistance and education regarding the use of food and yard waste compost to City departments and staff;

2. Conducting educational outreach to inform residents and businesses about the value of food and yard waste compost and how the City uses compost in its operations each year; and

3. Reporting the total estimated tons of organic material diverted from the City's waste stream because of compost use under this section.

H. By December 31, 2024, and each December 31st of even-numbered years thereafter, the City shall submit a report covering the previous year's compost procurement activities to the Washington State Department of Ecology that contains the following information:

1. The total tons of organic material diverted throughout the year;
2. The volume and cost of compost purchased throughout the year; and
3. The source or sources of the compost.

Section 3. Severability. If any section, sentence, clause, or phrase of this Ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this Ordinance.

Section 4. Effective Date. This Ordinance shall become effective five days after publication of the ordinance, or a summary thereof, in the official newspaper of the City.

Adopted this 14th day of March, 2023.

ATTEST:

Christine Bainbridge, City Clerk

CITY OF SPOKANE VALLEY

Pam Haley, Mayor 3/14/23

Approved as to Form:

Office of the City Attorney

Date of Publication: 3-24-2023

Effective Date: 3-29-2023

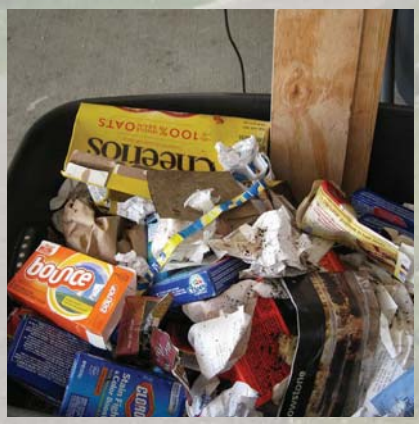
Appendix H

Recycling Characterization Study

City of Spokane Valley

2024 REPORT

Single Stream Composition & Contamination Audit



Prepared by

MSW CONSULTANTS

Study performed under contract to and in joint collaboration with Great West Engineering.

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SINGLE STREAM COMPOSITION & CONTAMINATION AUDIT

1. INTRODUCTION

Incorporated in 2003, the City of Spokane Valley (City) is home to 105,000 residents located in eastern Washington, near the Idaho border. In June 2021, the City adopted the current Solid Waste Management Plan (SWMP or Plan) outlining its strategy for managing solid waste within the City. The Plan recommended maintaining recycling collection services for residential customers in Spokane Valley, while also suggesting that efforts be made to address and reduce contamination in the City's recyclables through the Contamination Reduction and Outreach Plan (CROP).

With this in mind, the City completed a two-season study of curbside recyclables generated by the residents of Spokane Valley. The goal of the study was to assess the composition of the City's recyclables, and also provide data on the extent and nature of contaminants in the recycling stream. MSW Consultants, under contract to Great West Engineering, Inc. provided technical and analytical support for the study, which involved the development of a representative sampling plan, assistance in field data collection, analysis of results, and preparation of this summary report.

2. METHODOLOGY

2.1 WASTE GENERATION

Table 2-1 presents the annual tonnage of single stream recyclables collected in Spokane Valley in 2023. As shown, the City generated almost 684 tons of recyclables in its voluntary curbside recycling program. This study focused on the composition and contamination level of these recyclables.

Table 2-1 2023 Single Stream Recycling (Tons)

Month	Tons
January	46.1
February	51.1
March	51.5
April	73.0
May	56.3
June	47.9
July	65.5
August	73.6
September	53.5
October	60.2
November	51.8
December	53.4
Total	**683.8**

2.2 SAMPLING TARGETS

Field data collection was conducted during the weeks of July 24 (Season 1) and October 23 (Season 2), 2023.

Prior to each field data collection season, MSW Consultants utilized a City-provided list of residential addresses from which to create a randomized sample collection plan each season. Curbside retrieval of randomized recycling setouts of recyclables followed the normal recycling collection schedule. Sunshine Disposal retrieved the residential recycling carts during each season of the study and delivered them to the sort location via box truck. The table below presents the recycling cart retrieval summary for each of the two seasons.

Table 2-2 Cart Retrieval Summary*

Day of Week*	Season 1	Season 2	Total
Monday	43	35	**78**
Tuesday	7	21	**28**
Thursday	27	54	**81**
Friday	54	30	**84**
Total	**131**	**140**	**271**

*Note: Recycling is not collected on Wednesdays.

2.3 STAFFING PLAN

The staffing configuration for the study included:

- A **Field Supervisor** who validated the acquired samples delivered each day, and supported material sorting and weighing efforts, provided quality assurance and control (QA/QC), and had overall on-site responsibility.
- A **Crew Chief** who supervised the sorting crew, performed quality control, weigh-out and data recording, and led worksite health and safety training, etc.
- **Sorters** comprised of part-time and temporary employees.

2.4 SORTING

The characterization of recycling samples was completed in the south parking lot of the Valley Mission Park, along the south side of East Mission Avenue. Day one involved site set-up and orientation for the sorting team, receiving and staging of samples, and the sorting of samples.

Each acquired sample cart from the randomized address had been pre-labeled by a unique identifying number using a paper placard that was affixed to the recycling cart. The sample identification placard stayed with the sample until sorting and weigh-out was completed.

Once a sample was validated and logged into the tablet computer, the sample was spread out onto the sort table and manually sorted into the prescribed component categories. Plastic containers of 18 or 32-gallons were used to contain the separated components. Sorters were trained to specialize in certain material groups, with one handling the paper categories, another the plastics, another the glass and metals, and so on. In this way, sorters were able to become knowledgeable of material categories and definitions within a short period of time. Table 2-3 below summarizes the material categories used during the study within their respective material groups. Divertibility groups are also shown. Please refer to Appendix A for the list of material categories and definitions.

Table 2-3 Material Categories

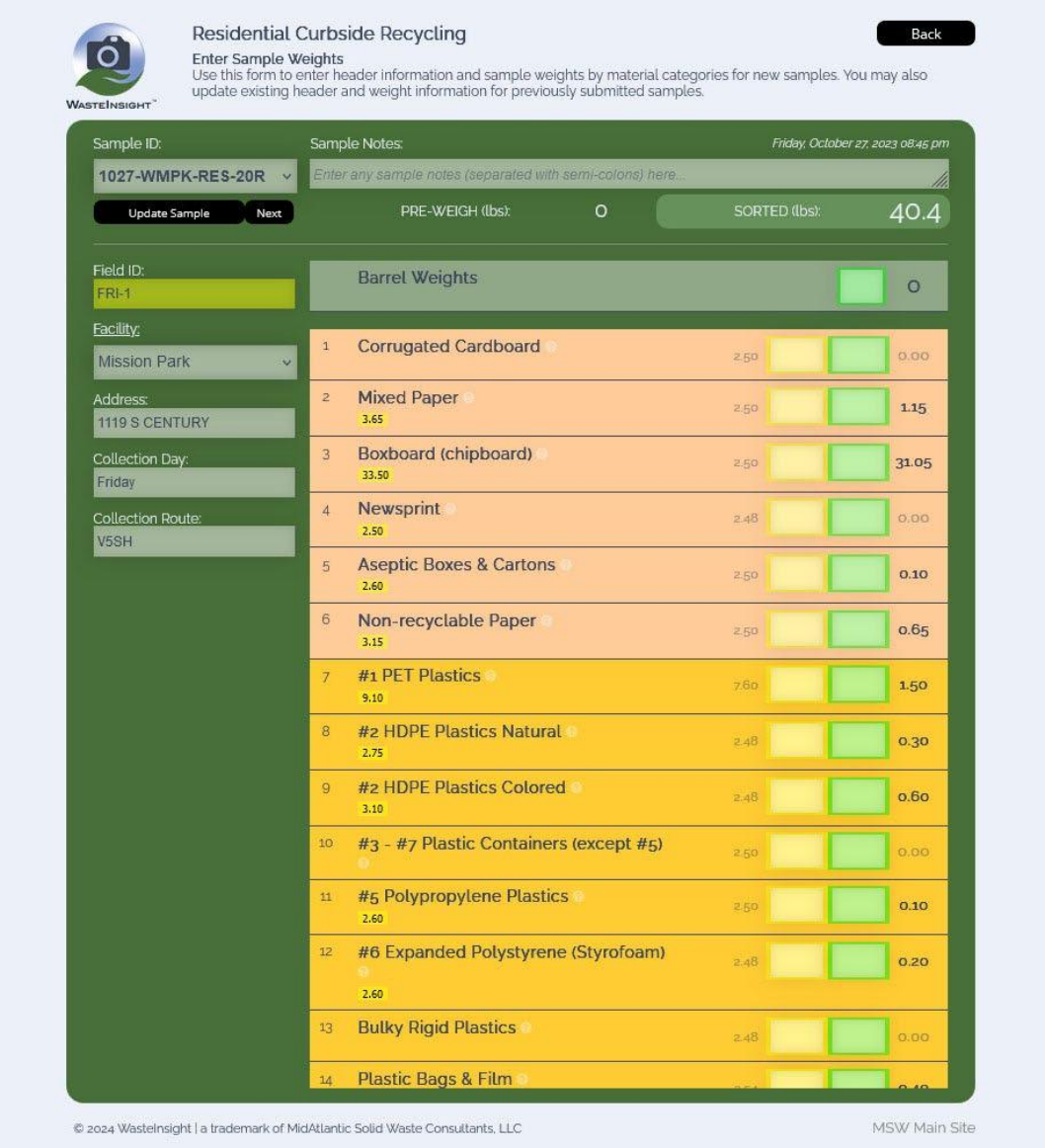
Material	Divertibility Class	Material	Divertibility Class
Paper		**Plastics**	
Corrugated Cardboard	Targeted Fiber	#1 PET Plastics	Targeted Container
Mixed Paper	Targeted Fiber	#2 HDPE Plastics Natural	Targeted Container
Boxboard (chipboard)	Targeted Fiber	#2 HDPE Plastics Colored	Targeted Container
Newsprint	Targeted Fiber	#3 - #7 Plastic Containers (ex #5)	Contaminant
Aseptic Boxes & Cartons	Targeted Fiber	#5 Polypropylene Plastics	Targeted Container
Non-recyclable Paper	Contaminant	#6 Expanded Polystyrene	Contaminant
Metals		Bulky Rigid Plastics	Contaminant
Aluminum Bev.Cans	Targeted Container	Plastic Bags & Film	Contaminant
Other Aluminum	Targeted Container	Remainder/Composite Plastics	Contaminant
Steel/Aerosol Cans	Targeted Container	**Other Wastes**	
Other Scrap Metal	Contaminant	Tanglers	Contaminant
Glass		Loose/Other (Residual) Wastes	Contaminant
Glass Bottles & Jars	Targeted Container		

2.5 DATA MANAGEMENT

After a sample was completely sorted, the Crew Chief oversaw all weighing and data recording of each sample. The sorting crew assisted in carrying any bin containing sorted materials to the scale where the material category was noted along with the weight. The Crew Chief validated the material weight and recorded all data.

The Crew Chief used a tablet computer to record the composition weights. The tablet allows for samples to be tallied in real-time so that field data collection can immediately identify and rectify errors associated with light sample weights. The tablet synchronizes with the Cloud via the internet, providing excellent data security. Each sample was cross-referenced against the Field Supervisor's sample sheet to ensure accurate tracking of the samples each day. A screenshot of the MSW Consultants tablet data entry screen from a sample taken during the project is shown in Figure 2-1.

Figure 2-1 Sample Data Entry Screen



2.6 ANALYSIS

A statistical analysis was performed to calculate the mean composition for each of the material categories and for each material stream in this study. Samples were first normalized by converting the sample data from weight to percentage. Then, the sample mean was determined by averaging the percent composition of each material across all samples. Finally, the margin of error (MOE) has been calculated at a 90 percent level of confidence.

3. RESULTS

Table 3-1 below summarizes the distribution of recycling cart weights during the field data collection across both seasons. Although the cart weights were generally higher during the second season, a normal distribution of weights was observed, and the two seasons combined appear to provide a representative sample population.

Table 3-1 Cart Statistics

Statistic	Season 1	Season 2	Aggregate
Min	1.3	0.0	0.0
Mean	14.7	18.5	16.7
Median	12.4	15.4	14.2
Max	47.1	98.4	98.4

Figure 3-1 provides a broad view of recyclables (aggregated from both seasons) sorted from the samples. As can be seen in the figure, Paper was the most dominant material group, at over 51 percent, followed by Glass (16.9 percent) and Plastic (16.8 percent).

Figure 3-1 Composition by Material Group (Seasons 1 & 2 Aggregated)

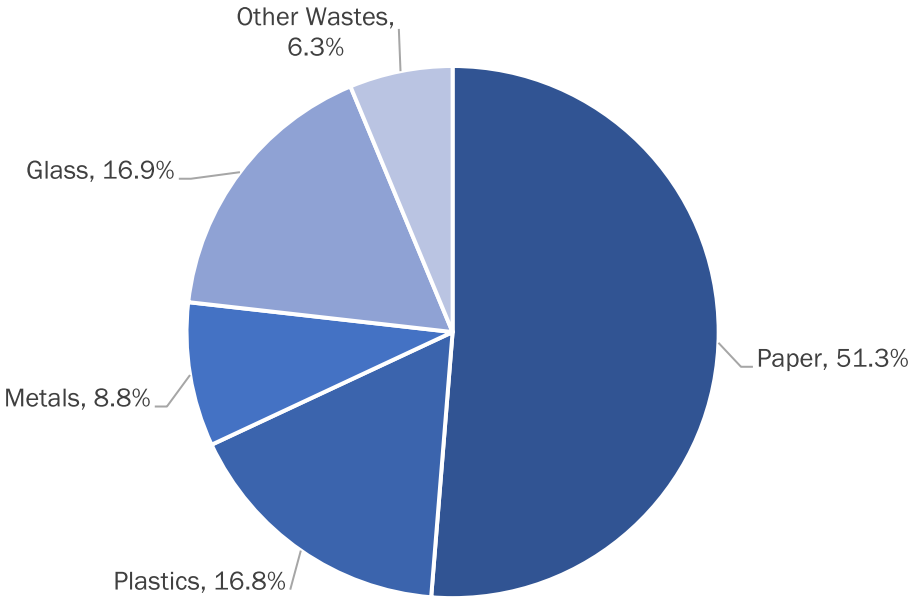


Figure 3-2 provides an overview of divertibility (aggregated from both seasons) as sorted from the samples. This is a useful indicator of how much material that is placed into recycling carts is actually defined as recyclable by the City. As can be seen in the figure, targeted recyclable materials constitute approximately 85 percent of recycling setouts, with about 15 percent identified as non-recyclable contaminants.

Figure 3-2 Divertibility (Seasons 1 & 2 Aggregated)

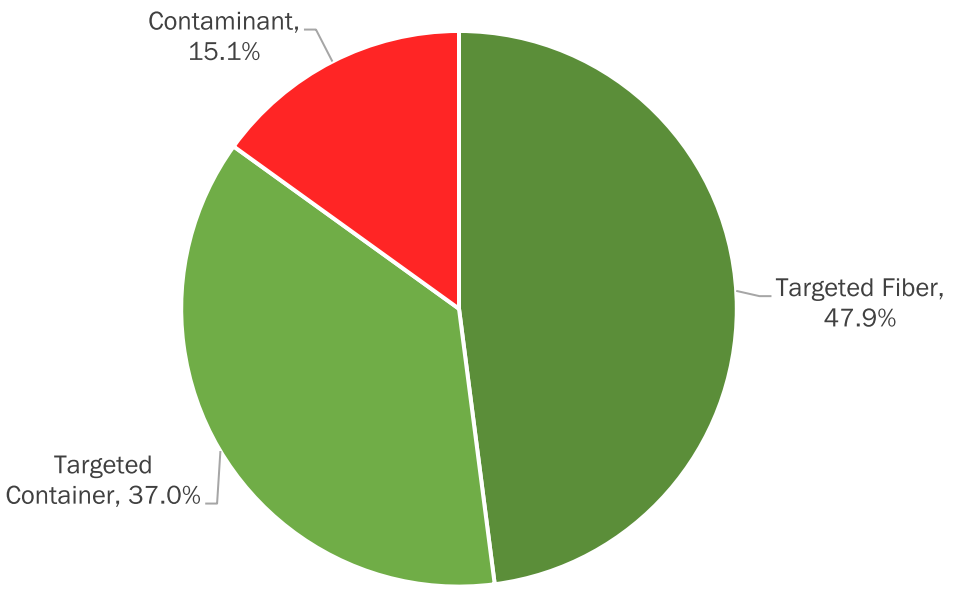


Table 3-2 presents the detailed material composition aggregated from both seasons of data collection. This table applies the calculated composition to the reported annual tons. Detailed composition tables of each season are provided in Appendix B of this report.

Table 3-2 Detailed Recycling Composition

Material	Divertibility Class	Percent	MOE	Tons
Paper		**51.3%**	**3.0%**	**350.7**
Corrugated Cardboard	Targeted Fiber	22.3%	2.2%	152.8
Mixed Paper	Targeted Fiber	8.9%	1.3%	61.1
Boxboard (chipboard)	Targeted Fiber	11.7%	1.3%	79.8
Newsprint	Targeted Fiber	4.3%	1.1%	29.3
Aseptic Boxes & Cartons	Targeted Fiber	0.7%	0.2%	4.9
Non-recyclable Paper	Contaminant	3.3%	0.6%	22.8
Plastics		**16.8%**	**1.6%**	**114.6**
#1 PET Plastics	Targeted Container	7.8%	0.8%	53.6
#2 HDPE Plastics Natural	Targeted Container	1.9%	0.3%	12.8
#2 HDPE Plastics Colored	Targeted Container	1.6%	0.3%	11.2
#3 - #7 Plastic Containers (except #5)	Contaminant	0.4%	0.2%	2.9
#5 Polypropylene Plastics	Targeted Container	1.6%	0.9%	11.0
#6 Expanded Polystyrene (Styrofoam)	Contaminant	0.3%	0.1%	2.0
Bulky Rigid Plastics	Contaminant	0.8%	0.5%	5.5
Plastic Bags & Film	Contaminant	1.2%	0.2%	7.9
Remainder/Composite Plastics	Contaminant	1.1%	0.3%	7.7
Metals		**8.8%**	**1.2%**	**59.9**
Aluminum Bev.Cans	Targeted Container	4.0%	0.8%	27.7
Other Aluminum	Targeted Container	0.2%	0.1%	1.5
Steel/Aerosol Cans	Targeted Container	2.8%	0.5%	19.4
Other Scrap Metal	Contaminant	1.7%	0.8%	11.3
Glass		**16.9%**	**2.6%**	**115.8**
Glass Bottles & Jars	Targeted Container	16.9%	2.6%	115.8
Other Wastes		**6.3%**	**3.4%**	**42.9**
Tanglers	Contaminant	0.2%	0.1%	1.0
Loose/Other (Residual) Wastes	Contaminant	6.1%	3.4%	41.9
Total		**100.0%**		**683.8**
Number of Samples		271		
Targeted Fiber		*47.9%*		*327.9*
Targeted Container		*37.0%*		*252.9*
Contaminant		*15.1%*		*103.0*

The bar chart in Figure 3-3 shows the prevalence of each of the targeted recyclables.

Figure 3-3 Prevalence of Targeted Recyclables (Aggregated from Seasons 1 & 2)

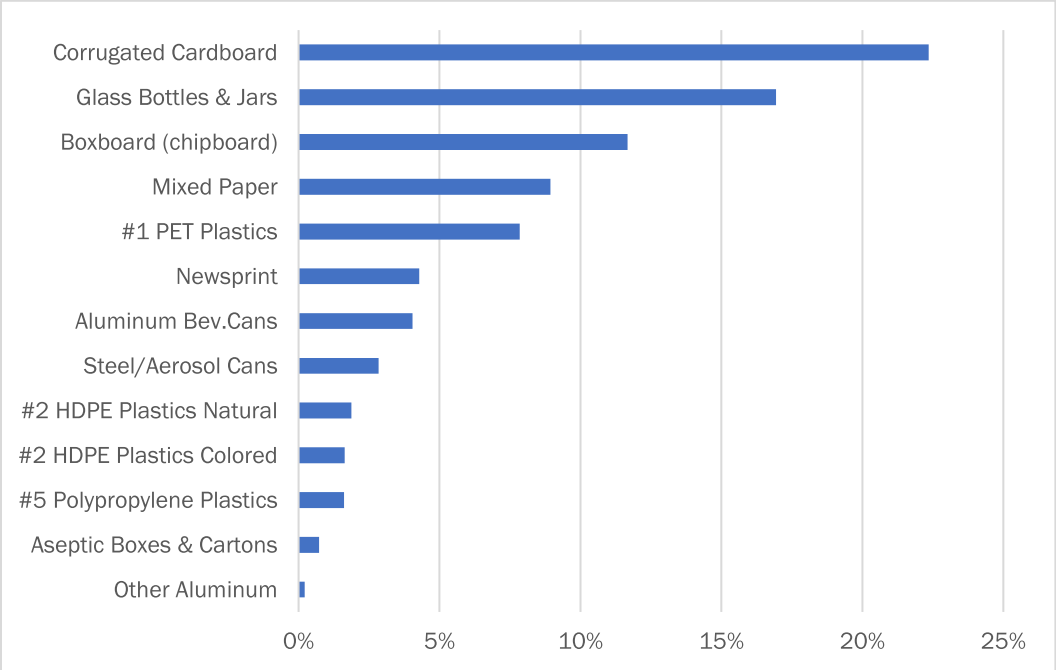
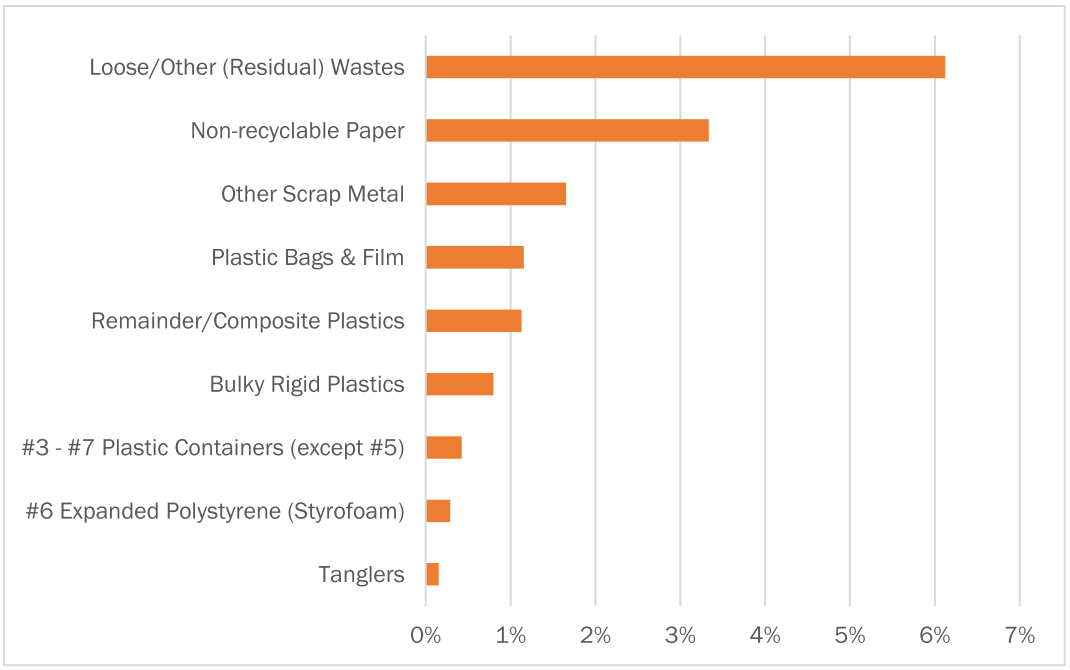


Figure 3-4 provides an overview of the types of contaminants found in the recycling samples. This list includes all materials that are not recyclable and should not have been discarded in the recycling cart. The most prevalent contaminant by weight was found to be mixed household refuse (food wastes, textiles, organic materials, loose trash, etc., which is labeled Loose/Other (Residual) Wastes in the figure).

Figure 3-4 Prevalence of Contaminants (Aggregated from Seasons 1 & 2)



4. CONCLUSIONS & RECOMMENDATIONS

MSW Consultants believes that this study reasonably baselined the composition and contamination level of Spokane Valley's single stream recyclables. Persistent contaminants found during both Seasons include non-recyclable paper, plastics, metals, and loose materials such as food and textiles.

Going forward, the City may wish to expand on this type of research. Should the City conduct a waste characterization study, the waste composition results could be combined with the results to this single stream recycling study to estimate current recycling capture rates. Many cities calculate a recycling rate, which measures the percentage of the entire solid waste stream that gets recycled. However, capture rates are another, highly informative measurement of recycling performance. A capture rate measures the percentage of a specifically targeted recyclable commodity that is successfully recovered in the recycling program (and hence, captured for recycling).

As a final note, although a more in-depth evaluation of the effectiveness of recycling City was not part of the scope of this project, it is likely that some targeted materials are still finding their way to the disposal stream. It is therefore important to maintain routine and clear education and outreach programs and messaging in order to maximize participation in the City's residential recycling programs.

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APPENDIX A

Material Category & Definitions

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Spokane Valley Recycling Audits 2023
Material Categories and Definitions

PAPER

1 CORRUGATED CARDBOARD: Paperboard containers consisting of Kraft (brown) linerboard with corrugated (fluted medium) fillings. Does not include non-corrugated paperboard products such as cereal, shoe, or gift boxes.

2 MIXED PAPER: Includes newspaper, inserts, and related supplements; magazines, junk mail, Kraft paper, miscellaneous office paper and high-grade stationary; paperboard and telephone directories; soft-backed books.

3 BOXBOARD (CHIPBOARD): Chipboard and uncoated paperboard. Examples include cereal boxes and other dry food boxes, toilet paper and paper towel inner tubes, etc.

4 NEWSPRINT: The class or kind of paper chiefly used for printing newspapers – i.e. uncoated ground wood paper, including inserts.

5 ASEPTIC BOXES & CARTONS: Aseptic juice boxes and gable top cartons.

6 NON-RECYCLABLE PAPER: a) Wax corrugated cardboard; b) Wet/soiled/compostable/other paper products including paper napkins, towels, and tissues; paper plates, cups, coffee filters, paper egg cartons, soiled fast food paper bags and wrappers, waxed paper, parchment, and food contaminated or wet pizza boxes, and refrigerated or frozen food packaging. c) All other paper that is not recyclable or compostable. Examples include paper used to dispose of chewing gum, hard cover books, paper sprayed with paint heavy glue or tape, cigarette packages, photographs, cardboard with Styrofoam glued to side(s), and paper coated with plastic or metal.

PLASTIC

7 #1 PET PLASTICS: Includes empty plastic bottles, produce clamshells, and other products made of polyethylene terephthalate, and identified by the SPI resin identification code# "1."

8 #2 HDPE PLASTICS NATURAL: Includes empty translucent plastic bottles and other products made of high-density polyethylene plastic, and identified by the SPI resin identification code# "2."

9 #2 HDPE PLASTICS COLORED: Includes empty colored plastic bottles and other products made of high-density polyethylene plastic, and identified by the SPI resin identification code# "2."

10 #3 - #7 PLASTIC CONTAINERS (EXCEPT #5 AND STYROFOAM): Includes blow-molded rigid plastic containers labeled #3-#7 (excluding PP #5 and #6 Styrofoam).

11 #5 POLYPROPYLENE PLASTICS: Includes clear and colored bottles, jars, non-bottle, non-jar containers coded polypropylene (PP #5). Examples include some dairy product cups and tubs (yogurt, sour cream), deli tubs, some drink cups, pill bottles, some clamshell containers and drink cups.

12 #6 EXPANDED POLYSTYRENE (STYROFOAM): Plastic products made of #6 PS expanded polystyrene (Styrofoam). Examples are cold and hot drink cups, packing peanuts, molded shipping packaging, coolers, take out food trays and clamshells, etc. This subcategory excludes rigid #6 PS packaging.

13 BULKY RIGID PLASTICS: Plastic items "bigger than a breadbox." 5- gallon buckets, milk and soda crates, baskets, flower pots, trays, etc. Also includes plastics such plastic furniture, toys, laundry baskets, coolers, etc. Excludes #3 PVC.

14 PLASTIC BAGS & FILM: All film bags and other plastic film. Includes garbage bags, dry cleaning bags, bubble wrap, air pillows, cereal bags, household shrink wrap, pallet wraps, tarps, sandwich bags, zip (recloseable) bags, produce bags, frozen vegetable bags, food wrappers such as candy-bar wrappers and chip bags, mailing pouches, bank bags, X-ray film, and metallized film (wine containers and balloons).

15 REMAINDER/COMPOSITE PLASTICS: This category includes a wide variety of smaller plastic packaging and non-packaging that are either unlabeled or where it is not feasible to find the resin label during a sort. Includes plastic cutlery, lids, drinking straws, caps, etc. Includes unlabeled cups and packaging, strapping, small kitchen wares and toys, window blinds, plastic string. Includes PVC piping.

GLASS

16 GLASS BOTTLES & JARS: Includes household glass containers, bottles and jars, including amber, flint, green, mixed and/or crushed glass. Does not include mirrors, window or auto glass, light bulbs, or ceramics.

METAL

17 ALUMINUM BEV.CANS: Consists of household beverage cans made of aluminum; includes clean aluminum food trays.

18 OTHER ALUMINUM: Clean aluminum food trays and aluminum foil

19 STEEL/AEROSOL CANS: Tin, Steel, and Bi-Metal Containers, including those for food, beverage, nonfood, empty paint cans, and aerosol cans made of mixed metal, such as tin and steel.

20 OTHER SCRAP METAL: Large pieces of metal and non-container metals.

OTHER

21 TANGLERS: Hoses, cords, hangers, rope, string, and any other item susceptible to entanglement in MRF screens, conveyors, and other sorting equipment.

22 LOOSE/OTHER (RESIDUAL) WASTES: Includes all other materials not listed above, including food waste, textiles, construction waste, flat/non-recyclable glass, medical waste, organic materials, yard waste, and other loose trash. Includes 2" minus sweepings.

APPENDIX B

Results Tables

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City of Spokane Valley: Single-Stream Recycling Composition for Season 1 - July 2023

Material	Class	Percent	Std. Dev.	+/-
Paper		**52.3%**	**2.3%**	**3.8%**
Corrugated Cardboard	Targeted Fiber	23.8%	2.1%	3.6%
Mixed Paper	Targeted Fiber	7.3%	1.0%	1.6%
Boxboard (chipboard)	Targeted Fiber	11.1%	0.8%	1.3%
Newsprint	Targeted Fiber	4.2%	1.2%	1.9%
Aseptic Boxes & Cartons	Targeted Fiber	0.8%	0.2%	0.3%
Non-recyclable Paper	Contaminant	5.1%	0.7%	1.1%
Plastics		**16.3%**	**1.1%**	**1.8%**
#1 PET Plastics	Targeted Container	8.2%	0.6%	1.0%
#2 HDPE Plastics Natural	Targeted Container	1.5%	0.2%	0.4%
#2 HDPE Plastics Colored	Targeted Container	1.7%	0.2%	0.3%
#3 - #7 Plastic Containers (except #5)	Contaminant	0.4%	0.1%	0.2%
#5 Polypropylene Plastics	Targeted Container	1.2%	0.2%	0.4%
#6 Expanded Polystyrene (Styrofoam)	Contaminant	0.1%	0.0%	0.1%
Bulky Rigid Plastics	Contaminant	0.9%	0.6%	0.9%
Plastic Bags & Film	Contaminant	1.0%	0.2%	0.3%
Remainder/Composite Plastics	Contaminant	1.1%	0.2%	0.4%
Metals		**11.1%**	**1.3%**	**2.2%**
Aluminum Bev.Cans	Targeted Container	4.9%	0.9%	1.4%
Other Aluminum	Targeted Container	0.1%	0.0%	0.1%
Steel/Aerosol Cans	Targeted Container	3.2%	0.5%	0.9%
Other Scrap Metal	Contaminant	2.8%	1.1%	1.7%
Glass		**14.5%**	**1.6%**	**2.7%**
Glass Bottles & Jars	Targeted Container	14.5%	1.6%	2.7%
Other Wastes		**5.9%**	**1.2%**	**2.0%**
Tanglers	Contaminant	0.0%	0.0%	0.1%
Loose/Other (Residual) Wastes	Contaminant	5.8%	1.2%	1.9%
Total		**100.0%**		
Number of Samples		131		
Targeted Fiber		*47.2%*		
Targeted Container		*35.3%*		
Contaminant		*17.5%*		

City of Spokane Valley: Single-Stream Recycling Composition for Season 2 - October 2023

Material	Class	Percent	Std. Dev.	+/-
Paper		**50.6%**	**2.7%**	**4.5%**
Corrugated Cardboard	Targeted Fiber	21.3%	1.7%	2.8%
Mixed Paper	Targeted Fiber	10.2%	1.2%	1.9%
Boxboard (chipboard)	Targeted Fiber	12.1%	1.3%	2.1%
Newsprint	Targeted Fiber	4.4%	0.8%	1.3%
Aseptic Boxes & Cartons	Targeted Fiber	0.7%	0.2%	0.3%
Non-recyclable Paper	Contaminant	2.0%	0.3%	0.4%
Plastics		**17.1%**	**1.5%**	**2.5%**
#1 PET Plastics	Targeted Container	7.6%	0.7%	1.1%
#2 HDPE Plastics Natural	Targeted Container	2.1%	0.3%	0.4%
#2 HDPE Plastics Colored	Targeted Container	1.6%	0.2%	0.4%
#3 - #7 Plastic Containers (except #5)	Contaminant	0.4%	0.2%	0.4%
#5 Polypropylene Plastics	Targeted Container	1.9%	1.0%	1.6%
#6 Expanded Polystyrene (Styrofoam)	Contaminant	0.4%	0.1%	0.2%
Bulky Rigid Plastics	Contaminant	0.7%	0.3%	0.4%
Plastic Bags & Film	Contaminant	1.2%	0.2%	0.4%
Remainder/Composite Plastics	Contaminant	1.1%	0.3%	0.5%
Metals		**7.0%**	**0.7%**	**1.2%**
Aluminum Bev.Cans	Targeted Container	3.4%	0.5%	0.8%
Other Aluminum	Targeted Container	0.3%	0.1%	0.2%
Steel/Aerosol Cans	Targeted Container	2.6%	0.3%	0.6%
Other Scrap Metal	Contaminant	0.8%	0.4%	0.7%
Glass		**18.8%**	**2.4%**	**4.0%**
Glass Bottles & Jars	Targeted Container	18.8%	2.4%	4.0%
Other Wastes		**6.6%**	**3.5%**	**5.7%**
Tanglers	Contaminant	0.2%	0.2%	0.3%
Loose/Other (Residual) Wastes	Contaminant	6.3%	3.5%	5.7%
Total		**100.0%**		
Number of Samples		140		
Targeted Fiber		*48.5%*		
Targeted Container		*38.2%*		
Contaminant		*13.3%*		

City of Spokane Valley: Single-Stream Recycling Composition for Combined Seasons

Material	Class	Percent	Std. Dev.	+/-
Paper		**51.3%**	**1.8%**	**3.0%**
Corrugated Cardboard	Targeted Fiber	22.3%	1.3%	2.2%
Mixed Paper	Targeted Fiber	8.9%	0.8%	1.3%
Boxboard (chipboard)	Targeted Fiber	11.7%	0.8%	1.3%
Newsprint	Targeted Fiber	4.3%	0.7%	1.1%
Aseptic Boxes & Cartons	Targeted Fiber	0.7%	0.1%	0.2%
Non-recyclable Paper	Contaminant	3.3%	0.4%	0.6%
Plastics		**16.8%**	**1.0%**	**1.6%**
#1 PET Plastics	Targeted Container	7.8%	0.5%	0.8%
#2 HDPE Plastics Natural	Targeted Container	1.9%	0.2%	0.3%
#2 HDPE Plastics Colored	Targeted Container	1.6%	0.2%	0.3%
#3 - #7 Plastic Containers (except #5)	Contaminant	0.4%	0.1%	0.2%
#5 Polypropylene Plastics	Targeted Container	1.6%	0.6%	0.9%
#6 Expanded Polystyrene (Styrofoam)	Contaminant	0.3%	0.1%	0.1%
Bulky Rigid Plastics	Contaminant	0.8%	0.3%	0.5%
Plastic Bags & Film	Contaminant	1.2%	0.1%	0.2%
Remainder/Composite Plastics	Contaminant	1.1%	0.2%	0.3%
Metals		**8.8%**	**0.7%**	**1.2%**
Aluminum Bev.Cans	Targeted Container	4.0%	0.5%	0.8%
Other Aluminum	Targeted Container	0.2%	0.1%	0.1%
Steel/Aerosol Cans	Targeted Container	2.8%	0.3%	0.5%
Other Scrap Metal	Contaminant	1.7%	0.5%	0.8%
Glass		**16.9%**	**1.6%**	**2.6%**
Glass Bottles & Jars	Targeted Container	16.9%	1.6%	2.6%
Other Wastes		**6.3%**	**2.1%**	**3.4%**
Tanglers	Contaminant	0.2%	0.1%	0.1%
Loose/Other (Residual) Wastes	Contaminant	6.1%	2.1%	3.4%
Total		**100.0%**		
Number of Samples		271		
Targeted Fiber		*47.9%*		
Targeted Container		*37.0%*		
Contaminant		*15.1%*		

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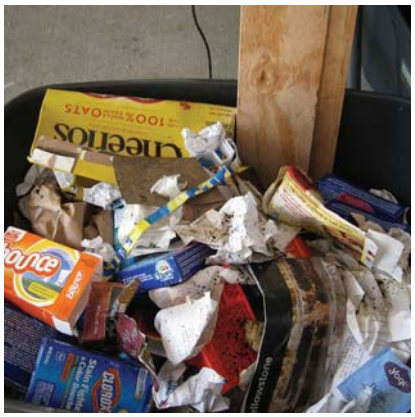
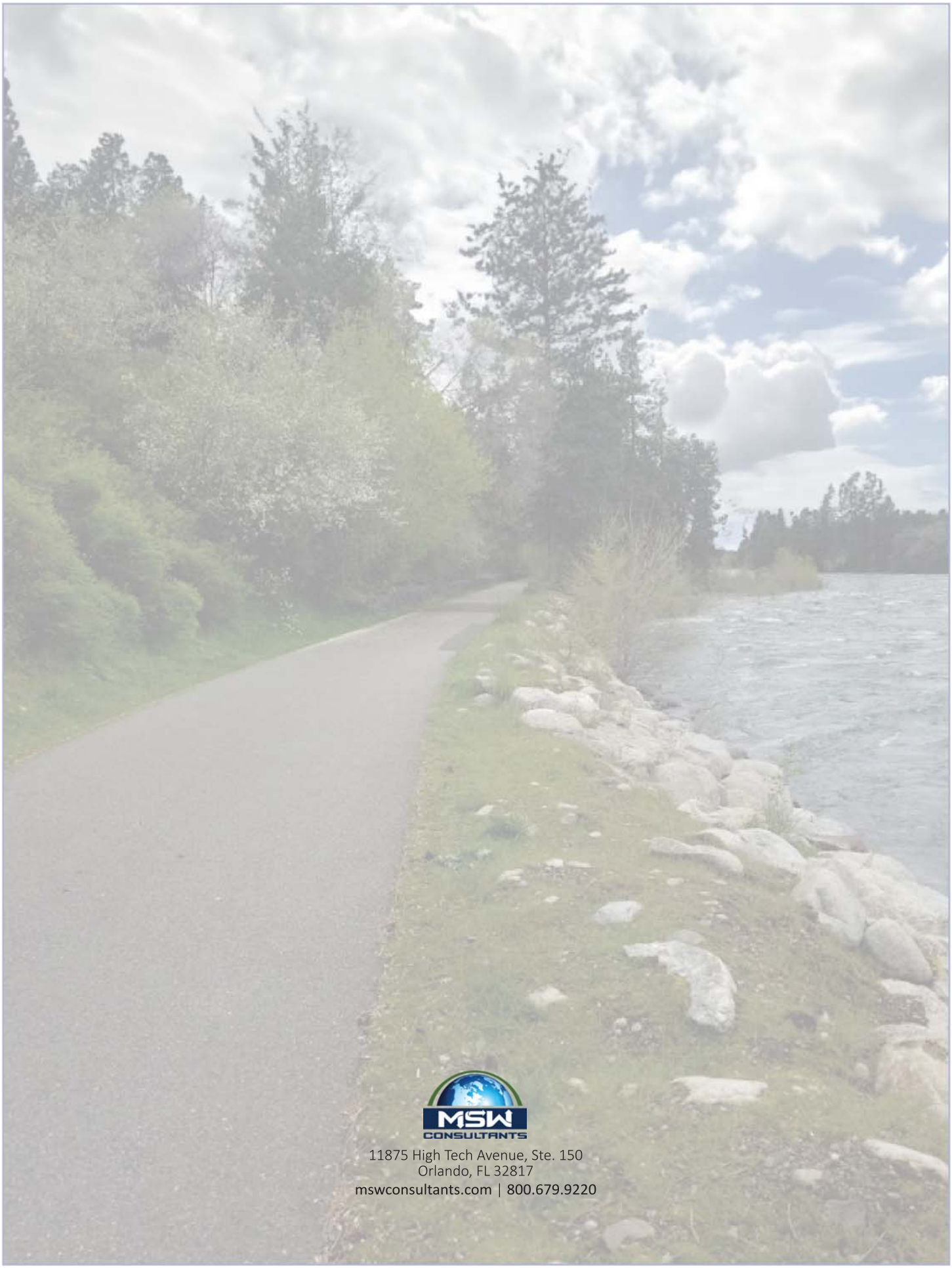

Cheerios
100% WHOLE GRAIN OATS
Bounce


WE



MSW CONSULTANTS
11875 High Tech Avenue, Ste. 150
Orlando, FL 32817
mswconsultants.com | 800.679.9220

Appendix I

Recycling Characterization Study Commodities

Appendix I

Recycling Characterization Study Commodities

I.1 Single Stream Composition & Contamination Audit Material Categories

Material	Divertibility Class
Paper	
Corrugated Cardboard	Targeted Fiber
Mixed Paper	Targeted Fiber
Boxboard (Chipboard)	Targeted Fiber
Newsprint	Targeted Fiber
Aseptic Boxes & Cartons	Targeted Fiber
Non-Recyclable Paper	Contaminant
Metals	
Aluminum Beverage Cans	Targeted Container
Other Aluminum	Targeted Container
Steel/Aerosol Cans	Targeted Container
Other Scrap Metal	Contaminant
Glass	
Glass Bottles 7 Jars	Targeted Container
Plastics	
#1 PET Plastics	Targeted Container
#2 HDPE Plastics Natural	Targeted Container
#2 HDPE Plastics Colored	Targeted Container
#3-#7 Plastic Containers (Excluding #5)	Contaminant
#5 Polypropylene Plastics	Targeted Container
#6 Expanded Polystyrene	Contaminant
Bulky Rigid Plastics	Contaminant
Plastic Bags & Film	Contaminant
Remainder/Composite Plastics	Contaminant
Other Wastes	
Tanglers	Contaminant
Loose/Other (Residual) Wastes	Contaminant

Appendix J

Recycling Commodity Score Card

Appendix J

Recycling Commodity Score Card

	Regulations	Political Influence	Service Contracts	Community Desires	Cost to Customers	Local Facility Infrastructure	Difficulty of Collection	Contamination Potentail	Sorting Difficulty	Environmental Impact of Disposal	End Market Availability	Value of Commodity	Total Score
Weighting Factor	10	9	8	8	8	7	6	6	6	5	4	2	
Clean Paper	5	3	5	5	5	5	5	5	5	3	5	5	367
Cardboard	5	5	5	5	5	5	5	5	5	3	5	5	340
Aluminum Cans	1	5	5	5	5	5	5	5	5	5	3	5	312
Steel "Tin" Cans	1	5	5	5	5	5	5	5	5	5	5	5	320
Type 1 Plastic (Soda Bottles)	1	3	5	5	5	5	5	5	5	5	3	5	302
Type 2 Plastic Bottles	1	3	5	5	5	5	5	5	5	5	3	5	296
Mixed Paper	5	3	5	5	5	5	5	3	5	5	5	3	328
Aluminum Food Containers	1	1	1	3	3	5	3	3	3	3	3	3	188
Paper Board (Cereal Boxes)	5	3	1	3	3	5	5	5	3	3	5	3	256
Empty Aerosol Cans	1	1	1	3	3	5	3	3	3	5	3	1	190
Appliances	3	3	1	1	1	3	1	3	1	3	5	3	142
Scrap Metal	1	3	1	3	3	3	3	3	3	5	5	5	198
Glass	1	5	5	3	3	3	3	3	1	5	1	3	176
Mixed Plastics	1	1	1	3	3	3	3	3	3	5	1	1	174
Clothing/Textiles	1	1	1	1	1	1	3	1	3	5	1	1	108
Antifreeze	5	1	1	1	1	3	1	1	1	1	3	1	126
Oil/Oil filters	5	1	1	1	1	3	1	1	1	1	3	1	126
Reusable Building Materials	1	3	1	3	3	1	1	1	1	3	5	1	124
Plastic Bags	1	3	1	1	1	1	1	1	1	5	3	1	100
Electronics (E-Waste)	3	3	1	1	1	1	1	1	1	1	1	3	96
Batteries (All Types)	3	3	1	1	1	1	1	1	1	1	1	3	96

Appendix K

Acronyms

Appendix K

Acronyms

K.1 Acronyms

AI	Auto Intelligence
ASP	Aerated Static Pile
BMPs	Best Management Practices
CESQGs	Conditionally Exempt Small Quantity Generators
CFL	Compact Fluorescent Lamps
CPO	Compost Procurement Ordinance
CROP	Contamination Reduction and Outreach Plan
EPA	Environmental Protection Agency
EPR	Extended Producer Responsibility
EPS	Expanded Polystyrene
EV	Electric Vehicle
FAQ	Frequently Asked Questions
GMA	Growth Management Act
HDPE	High-Density Polyethylene
HHW	Household Hazardous Waste
HID	High Density Discharge
LCB	Liquor and Cannabis Board
LSWFA	Local Solid Waste Financial Assistance
MRF	Material Recovery Facility
MRW	Moderate Risk Waste
MSA	Metropolitan Statistical Area
MSW	Municipal Solid Waste
OFM	Office of Financial Management
ORCA	Organics Recycling Collection Areas
PET/PETE	Polyethylene Terephthalate
PNW	Pacific Northwest
PRO	Producer Responsibility Organization
PV	Photovoltaic
RCW	Revised Code of Washington
SMaRT	Spokane Materials and Recycling Technology
SRCAA	Spokane Regional Clean Air Agency
SRHD	Spokane Regional Health District
SRSWS	Spokane County Regional Solid Waste System
SVCP	Spokane Valley Comprehensive Plan
SWMP	Solid Waste Management Plan
TAC	Technical Advisory Committee
TPY	Tons Per Year
UTS	University Transfer Station
WM	Waste Management
WSDA	Washington State Department of Agriculture
WSDOT	Washington State Department of Transportation
WTE	Waste to Energy
WUTC	Washington Utility and Transportation Commission

Appendix L

References

Appendix L

References

[1] This figure includes only those small-quantity generators that have chosen at their option to get an EPA identification number, and the actual number of small-quantity generators is assumed to be higher.

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Appendix M

Glossary

Appendix M

Glossary

The following definitions are provided for various terms used in the Spokane Valley Solid Waste and Moderate Risk Waste Management Plan:

Acceptable Waste: All Solid Waste excluding recyclables, organics, C&D waste, and unacceptable waste.

Aerated Static Pile (ASP): a method of composting that uses controlled airflow through perforated pipes to supply oxygen to composting materials, speeding up decomposition without the need for turning. It is commonly used in large-scale operations due to its efficiency in processing high volumes of organic waste while minimizing odors and labor.

Biodegradable: refers to a substance or material that can be broken down naturally by microorganisms, such as bacteria or fungi, into water, carbon dioxide, and organic matter. This process helps reduce environmental impact by allowing waste to decompose safely over time.

Biomedical Waste: infectious and injurious waste originating from a medical, veterinary, or intermediate care facility, or from home use.

Best Management Practices (BMPs): proven, effective methods or techniques used in business, agriculture, or environmental management to achieve desired outcomes efficiently while minimizing negative impacts

Business Days: Monday through Friday, excluding designated holidays.

Buy-back Recycling Center: a facility that pays people for recyclable materials.

Commercial Solid Waste: solid waste generated by non-industrial businesses. This includes waste from business activities such as construction; transportation, communications and utilities; wholesale trades; retail trades; finance, insurance and real estate; other services; and government. This term is also used to refer to all waste except residential, or is used by waste collectors to refer to all waste that is collected using dumpsters.

Commingled: recyclable materials that have been collected separately from garbage by the generator, but the recyclable materials have been mixed together in the same container (see also single stream).

Composting: the controlled biological decomposition of organic wastes to produce a humus-like final product that can be used as a soil amendment. In this Plan, backyard composting means a small-scale activity performed by homeowners on their own property, using yard debris that they generate.

Conditionally Exempt Small Quantity Generators (CESQGs): Businesses that produce hazardous waste at rates less than 220 pounds per month or per batch (or 2.2 pounds per month or per batch of extremely hazardous waste) and accumulate less than 2,200 pounds of hazardous waste on-site (or 22 pounds of extremely hazardous waste).

Construction & Demolition (C&D) Waste: Waste generated in the course of construction, demolition and remodeling, including, but not limited to concrete, brick, masonry, bituminous concrete, plastic (PVC), reinforcing steel, dimensional wood, plaster (sheet rock), fiberglass insulation, composition roofing, roofing paper, metal roofing, metal fencing, copper, white goods and appliances (without CFC and Freon), and similar non-hazardous construction, non-paper or textile materials.

Consumer Price Index (CPI): Is a measure of inflation and deflation that uses a weighted average of good and services that represents consumer spending.

Contamination Reduction and Outreach Plan (CROP): a strategic framework developed by Ecology in 2019 to reduce contamination in recycling streams through education, outreach, and best management practices. It includes actions to inform the public, improve recycling quality, and support local governments in minimized non-recyclable materials in recycling systems.

Coordinated Prevention Grants (CPG): A grant program administered by the Washington State Department of Ecology.

Curbside Recycling: the act of collecting recyclable materials directly from residential generators, usually after the recyclable materials have been placed at the curb (or at the side of the street if no curb exists in the area) by the residents.

Customer Service Plan: Means the plan established by the contractor to direct customer service standards, goals, and plans for implementing new procedures in response to customer service issues and complaints.

Degradable: refers to a material's ability to break down into smaller components through natural processes, such as exposure to light, heat, or moisture. Unlike biodegradable materials, degradable materials may not fully return to natural elements to support environmental health.

Designated Haulers: commercially operated solid waste haulers with which the city has a solid waste contract.

Disposal Facility: Means the facility or facilities to dispose of all acceptable waste, and any disposal facilities, recycling facilities, or composting facilities for disposal, recycling, or composting of recyclables, organics, C&D waste, MRW, and special Waste.

Disposal Services: Services provided by the Contractor under this agreement to finally dispose of, recycle, or compost the acceptable waste, recyclables, organics, C & D Waste, MRW, and Special Waste.

Environmental Protection Agency (EPA): Federal agency of the United States responsible for promulgation and enforcement of federal environmental regulations.

Expanded Polystyrene (EPS): a lightweight, rigid foam material made from polystyrene resin, commonly used for packaging, insulation, and disposable food containers. It is valued or its cushioning properties and thermal insulation but it challenging to recycle.

Extended Producer Responsibility (EPR) Program: requires producers of packaging and paper products to fund and manage the collection, recycling, and disposal of their materials. The program aims

to improve recycling rates, reduce environmental impact, and shift waste management costs from taxpayers to producers.

Ferrous Metals: materials that are predominantly (over 75% by weight) made of iron. Includes cans and various iron and steel alloys that contain enough iron such that magnets adhere to them, but for recycling this generally does not include paint cans or other containers that may contain hazardous residues.

Food Scraps: All compostable pre- and post-consumer food waste, such as whole or partial pieces of produce, meats, bones, cheese, bread, cereals, coffee grounds, eggshells, and food-soiled paper, such as paper napkins, paper towels, paper plates, coffee filters, paper take-out boxes, paper take-out boxes, pizza boxes, or other paper products accepted by the contractors selected composting site. Food Scraps

Green Waste: biodegradable organic waste from gardens and yards, such as grass clippings, leaves, branches, and plant trimmings.

Greenwashing: a deceptive marketing practice where a company exaggerates or falsely claims its products, policies, or practices are environmentally friendly. It misleads consumers into believing they are making sustainable choices.

Groundwater: water present in subsurface geological deposits (aquifers).

Growth Management Act (GMA): a state law enacted in 1990 that required fast-growing cities and counties to develop comprehensive plans to manage population growth, protect natural resources, and guide sustainable development.

High-density Polyethylene (HDPE): A type of plastic commonly used in milk, detergent, bleach bottles and other containers. Also used for products that line and cap landfills.

Hog Fuel: a type of coarse wood waste – such as bark, sawdust, wood chips, and shavings – used primarily as biomass fuel for boilers and industrial energy production.

House Bill: a proposed law introduced in the State House of Representatives. It is designated by the prefix “HB” followed by a number and requires approval by both chambers of the state legislature (House of Representatives and Senate) and the governor’s signature to become law.

Household Hazardous Waste (HHW): wastes that would be classified as hazardous due to their nature or characteristics, except that the amount is too small to be regulated and the wastes are generated by households (which are exempt). Includes aerosol cans, solvents, some paints, cleaners, pesticides, herbicides, compressed gases, oil, other petroleum products, car batteries and other materials.

Industrial Waste: solid waste generated by various manufacturing companies. Includes waste generated by businesses that manufacture the following products: food, textile mill products, apparel, lumber, paper, printing, chemicals, stone, clay, glass, fabricated metals, equipment, and miscellaneous other products. Does not include hazardous wastes generated by these industries.

Inert Wastes: includes wastes that are inert in nature, such as glass, concrete, rocks, gravel, and bricks.

Local Solid Waste Financial Assistance (LSWFA) Program: part of a statewide initiative by Ecology. It provides funding to local governments to support planning and implementation of solid and hazardous waste programs, as well as enforcement of solid waste handling laws and regulations.

Low-Density Polyethylene (LDPE): a soft, flexible, plastic commonly used in packaging materials like plastic bags, film wrap, and squeeze bottles. It is known for its durability and resistance to moisture.

Materials Recovery Facility (MRF): a specialized plant where recyclable materials are sorted, cleaned, and processed for reuse or sale to manufacturers.

MED-Project: a nonprofit organization that provides safe and accessible ways for people to dispose of unused or expired medications, helping to protect communities and the environment. It operates under laws requiring pharmaceutical companies to fund these disposal programs.

Metropolitan Statistical Area (MSA): a geographic region defined by the U.S. Office of Management and Budget that consists of a core urban area with a population of 50,000 or more, along with surrounding communities that have strong economic and social ties to the urban center.

Mixed Paper: all other types of recyclable paper not included in newspaper, cardboard or high-grade papers. Includes materials such as “junk mail,” magazines, books, and white and colored printing and writing papers.

Moderate-risk Wastes (MRW): includes household hazardous waste (see definition above) and wastes produced by businesses that potentially meet the definition of a hazardous waste except the amount of waste produced falls below regulatory limits.

Mulching: includes 1) leaving grass clippings on the lawn when mowing; 2) placing yard debris, compost, wood chips or other materials on the ground in gardens or around trees and shrubs to discourage weeds and retain moisture.

Municipal Solid Waste (MSW): Non-hazardous waste generated by households, businesses, institutions, and other non-industrial sources, managed by municipalities. Commonly known as trash or garbage (see also “solid waste”).

Non-ferrous Metals: materials predominantly made of copper, lead, brass, tin, aluminum, and other metals except iron.

Organics: all source-separated yard waste and food scraps separately or combined.

Organics Recycling Collection Areas (ORCAs): designated regions in Washington State where local governments are required to provide curbside collection of food and organic waste to residents and qualifying businesses. This initiative, part of the state’s organics management laws, aims to reduce landfill waste and methane emissions by diverting organic materials to composting or anaerobic digestion facilities.

Oxo-degradable: refers to plastics that contain additives, casing them to break down into smaller fragments when exposed to oxygen, heat, and light. However, these fragments may not fully biodegrade and can contribute to microplastic pollution.

Pacific Northwest (PNW): a region in the northwestern United States that primarily includes the states of Washington, Oregon, and Idaho as well as parts of northern California and British Columbia.

PaintCare: a nonprofit organization that manages pain stewardship programs across the U.S., helping consumers recycle leftover architectural paint safely and conveniently. Funded by paint manufacturers, it aims to reduce waste and environmental impact while easing the burden on local governments.

Photovoltaic: refers to the process of converting sunlight directly into electricity using semiconductor materials, typically through solar panels. Photovoltaic technology is a key component in solar panels.

Polyethylene Terephthalate (PET): A type of plastic. Commonly used to refer to 2-liter beverage bottles, although other containers are also increasingly being made from this material, including containers for liquid and solid materials such as cooking oil, liquor, peanut butter, and many other food and household products.

Producer Responsibility Organization (PRO): an entity formed or contracted by producers to implement and manage their obligations under the state's EPR law. The PRO oversees tasks such as organizing recycling systems, ensuring compliance, and reporting on packaging and paper product waste management.

Public Education: a broad effort to present and distribute informational materials.

Public Information: the development of educational materials for the public, including brochures, videos, and public service announcements.

Recycling: the act of collecting and/or processing source-separated materials in order to return them to a usage similar in nature to their previous use.

Recycling Development Center: a state-established initiative that supports the growth of domestic markets for recyclable materials through research, innovation, and business assistance. Operated by Ecology, and the Department of Commerce, it aims to strengthen recycling systems and promote a circular economy.

Resources Conservation and Recovery Act (RCRA): a U.S. federal law enacted in 1976 that governs the management and disposal of solid and hazardous waste. It sets national standards to protect human health and the environment and promotes waste reduction, recycling, and responsible resource use.

Revised Code of Washington (RCW): This is a compilation of all actively enforced laws in the state of Washington.

Reusable Items: items that may be reused (or easily repaired), including things such as small electronics, household items such as dishes, and furniture.

Roll-Off: large open-topped container, generally 8 to 40 cubic yards in volume, used for collecting and transporting wastes.

Round-up events: a one-day event where the public can drop off special waste that is unacceptable in the waste stream. These include HHW, MRW, etc.

Self-Haul Waste: waste that is brought to a landfill or transfer station by the person or company that created the waste. The former is called residential self-haul and the latter is called either non-residential or commercial self-haul.

Single Stream: refers to the practice of placing all recyclable materials together in one container for curbside collection. This is similar to “commingled” except that glass bottles may or may not be included in a commingled mixture, whereas glass bottles are mixed with the other materials in single stream collection programs.

Solid Waste: solid and semisolid wastes, including but not limited to garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, discarded commodities, wood waste, and various special wastes.

Solid Waste Management Plan (SWMP): strategic document developed by local governments or jurisdictions to outline how they will manage, reduce, and dispose of solid waste over a period of years. SWMPs typically include assessments of current waste systems, set goals for waste reduction, and detail strategies like recycling, composting, and public education to improve sustainability.

Source-separated: means certain recyclables, food, organic and reclaimable materials that are separated from acceptable waste by the generator for recycling, reuse, or composting, including but not limited to recyclables, organics, and other materials.

Special Wastes: wastes that have characteristics such that they present special handling and/or disposal problems.

Spokane County Regional Solid Waste System (SCRSWS): The name of the system that operated the public transfer stations and other aspects of the solid waste system through November 2014. This system was created by Interlocal agreements between Spokane County and the cities in the county and was administered by the City of Spokane.

Spokane Materials and Recycling Technology (SMaRT) Center: a high-tech recycling facility in Spokane, Washington operated by WM. It uses advanced automation, including optical sorters and robotics, to efficiently sort and process recyclables from Eastern and Central Washington and North Idaho. The center supports regional sustainability by increasing recycling capacity and improving material recovery for reuse in new products.

Spokane Regional Clean Air Agency (SRCAA): a local government agency responsible for enforcing air quality regulations in Spokane County, Washington. Established under the Washington Clean Air Act, the SRCAA monitors and controls air pollution from stationary sources, ensures compliance with federal and state air quality standards, and works to protect public health and the environment.

Spokane Regional Health District (SRHD): the local public health agency serving Spokane Valley. It works to protect, promote, and improve the health and well-being of the community through evidence-based programs, regulatory enforcement, and partnerships. SRHD provides services such as disease prevention, environmental health oversight, emergency preparedness, ad health education, serving a population of over 550,000 residents.

Spokane Valley Comprehensive Plan (SVCP): the City of Spokane Valley’s official long-term planning document that outlines its vision for future growth and development over a 20-year period. It addresses

key areas such as land use, housing, transportation, economic development, and public services, and is updated periodically to comply with Washington's Grown Management Act (GMA).

State Environmental Policy Act (SEPA): It is intended to identify and analyze environmental impacts associated with governmental decisions. See **Appendix D**.

Stationary Compactor: A compaction unit installed at an apartment building or medium to large-sized business, used for compacting and transporting wastes.

Technical Advisory Committee (TAC): a group of local experts and stakeholders who provide guidance and recommendations to the City of Spokane Valley on the development and implementation of its SWMP. The TAC helps ensure the plan meets regulatory requirements, supports environmental goals, and reflects community needs.

Tipping Fee: The rate charged by transfer and disposal facilities, generally on a per-ton basis.

Transfer Station: an intermediate solid waste disposal facility at which solid waste is temporarily deposited to await transportation to a final disposal site.

Unacceptable Waste: all solid waste not authorized for disposal at the transfer facility and/ or disposal facility by those governmental entities having jurisdiction over such facilities, or any waste, the disposal of which would constitute a violation of any governmental requirements pertaining to the environment, public health, or safety, or which, in the Contractor's reasonable opinion would be considered unacceptable waste and/ or would not be accepted for disposal by the operator of the disposal facility. Unacceptable waste includes any waste that is now or hereafter defined by federal, state or local law or by the disposal jurisdiction as radioactive, dangerous, hazardous, or extremely hazardous waste. Unacceptable waste include solid waste that is or contains any infectious waste, radioactive, volatile, corrosive, flammable, explosive, biomedical, bio-hazardous or toxic material. Unacceptable Waste may also include ashes, asbestos, swill, sewage sludge, other biosolids, and industrial wastes.

University Transfer Station (UTS): a solid waste facility operated by Sunshine Disposal, Inc. under contract with the City of Spokane Valley. It provides residents and the public with a convenient location to drop off household garbage, recyclables, green waste, and certain hazardous materials.

Urban Growth Area (UGA): see Spokane Valley Comprehensive Plan for more details.

Vactor: specialized vacuum trucks equipped with high-suction systems and high-pressure water jets, used for primarily for cleaning and maintaining sewer lines, storm drains, and catch basins. They are essential in industrial and municipal settings for safely removing sludge, debris, and other waste from hard-to-reach areas without manual entry.

Washington Administrative Code (WAC): These are the regulations of executive branch agencies issued by the authority of statutes.

Washington State Department of Agriculture (WSDA): a state agency responsible for supporting the agricultural community, ensuring food safety, and protecting the environment through regulation, inspection, and outreach. It oversees programs related to pest control, organic certification, food processing, and the transport of regulated materials such as MSW from quarantine areas.

Washington State Department of Transportation (WSDOT): a state government agency responsible for planning, building, maintaining, and operating Washington transportation systems. This includes highways, bridges, rail lines, ferries, and airports across the state.

Washington State Office of Financial Management (OFM): a state agency responsible for supporting the governor and legislature by providing budget planning, policy analysis, and data-drive decision-making. It oversees state financial systems, demographic research, and strategic planning to ensure efficient and effective government operations.

Washington Utilities and Transportation Commission (WUTC): A state agency that regulates the rates, services, and practices of investor-owned utility and transportation companies in Washington.

Waste Management (WM): local provider of garbage, recycling, and yard waste collection services. It also operates the SMaRT Center, supporting regional recycling and sustainability efforts.

Waste Reduction or Waste Prevention: reducing the amount or type of solid waste that is generated. Also defined by state rules to include reducing the toxicity of waste.

Waste-To-Energy (WTE): a process that converts non-recyclable waste materials into usable forms of energy, such as electricity or heat, typically through combustion, gasification, or other thermal technologies. It helps reduce landfill use while generating energy.

White Goods: large appliances such as refrigerators.

Yard Waste: Plant and vegetative waste/ debris commonly created in the course of maintaining yards and gardens, and through horticulture, gardening, landscaping, or similar activities that is free from clopyralid or other similar substances that are identified in the future by the disposal facility with advanced written notice provided to the city of such identification by contractor after contractor receives such notice, and which cause the disposal facility not to accept such yard waste for composting. Yard waste includes but is not limited to grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, vegetable garden debris, holiday trees, and tree pruning debris.

Appendix N

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