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TRANSMITTAL LETTER

To: Meagan Gilmore
WA State Department of Ecology
4601 N. Monroe St.
Spokane, WA 99205

Date: 09/25/18
Project: Whitman County Solid Waste Management Plan Update
Project No.: 70-17-025

We are shipping you:

Attached via E-mail , the following items:

COPIES	DATE OR NO.	DESCRIPTION
1	09/18	Whitman County Solid Waste Management Plan (SWMP) - Preliminary Draft Submittal

These items are transmitted as checked below:

- ☐ For Approval
- ☒ As Requested
- ☐ Returned for Corrections
- ☐ For Your Information
- ☒ For Review & Comment
- ☐ _____

REMARKS:

Please disregard the previous submittal from 09/21/18. The following submittal is the most current version. Please officially review the attached Preliminary Draft Whitman County SWMP Submittal which contains the Plan, WUTC Cost Assessment, preliminary SEPA document, and SWAC meeting minutes. Per our conversation on 09/13/18, the Interlocal Agreements will be provided during the preliminary review or with the final plan package.

Cc:

Lexie Yoder, J-U-B Engineers, Inc.
David Nails, Whitman County Solid Waste Division
Mark Storey, Whitman County Public Works

Signed: _____
Layne L. Merritt, P.E.

If enclosures are not as noted, please notify us at 509-458-3727

a 422 W. Riverside, Suite 304, Spokane, WA 99201 *p* 509 458 3727 *f* 509 458 3762 *w* www.jub.com

PRELIMINARY DRAFT SUBMITTAL

FOR REVIEW

Whitman County

Solid Waste Management Plan

For the 2019 – 2024 Planning Period

Prepared for:
Whitman County Public Works
Solid Waste Division

September 2018

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TABLE OF CONTENTS

APPENDICES

FIGURES

TABLES

Glossary

Agricultural waste

The waste on farms resulting from the production of agricultural products including, but not limited to crop residue, manure, animal bedding and carcasses of dead animals weighing each or collectively in excess of fifteen pounds.

Biomedical waste

See medical waste.

Biosolids

Municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process that can be beneficially recycled and meets all applicable requirements of Chapter 173-308 WAC. Biosolids include septic tank sludge, also known as septage.

Cell

Portion or unit of landfill where solid waste is interred.

City

Every incorporated city or town.

Closure

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

Commercial solid waste

All types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential wastes.

Commingled

Commingled (also known as "single stream") recycling refers to a system in which all paper fibers and containers are mixed together in a collection truck, instead of being sorted into separate commodities (newspaper, cardboard, plastic, glass, etc.) by the resident and handled separately throughout the collection process. In single stream, both the collection and processing systems are designed to handle this fully commingled mixture of recyclables, with materials being separated for reuse at a materials recovery facility.

Composting

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

Curbside

See household collection.

Dangerous waste

Those solid wastes designated as dangerous waste by Ecology in Chapter 173-30 WAC.

Demolition waste

Solid waste, largely inert material, resulting from the demolition or razing of buildings, roads, and other man-made structures (WAC 173-351). Demolition waste consists of, but is not limited to, concrete, asphalt, brick, bituminous, concrete, wood, masonry, composition roofing and roofing paper, steel, minor amounts of other metals like copper and plaster (i.e., sheetrock or plaster board).

Disposal site

The location where any final treatment, utilization, processing or deposit of solid waste occur.

DOE

State of Washington Department of Ecology.

Ecology

State of Washington Department of Ecology.

Energy recovery

A process the recovery of energy in a useable form or any other means of using the heat of combustion of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

eWaste

Discarded tube devices and electronic equipment including televisions, stereos, computers, monitors (CRT), keyboards, printers and other peripherals.

Export

The act of transferring solid waste beyond the physical boundaries of the agency responsible for its proper disposal. For the purposes of this plan, the responsible agency is taken to be Whitman County.

Extremely hazardous waste

Those dangerous and mixed wastes designed in Chapter 173-303-100 WAC as extremely hazardous.

Facility

All contiguous land (including buffers and set backs) and structures, appurtenances, and improvements on the land used for the processing and disposal of solid waste handling.

Household collection programs

The pick-up of recyclables from a household, sometimes referred to as curbside collection. This pick-up may be at the curb, end of driveway, or alleyway.

Household hazardous waste

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

local hazardous waste management plan prepared pursuant to chapter 70.105 RCW, Hazardous waste management.

Household waste

Any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households, including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas. This term does not include commercial, industrial, inert and demolition waste, or wood waste.

Incineration

A process of reducing the volume of solid waste by use of an enclosed device using controlled flame combustion to oxidize available hydrocarbons.

Inert waste

Noncombustible, nondangerous solid wastes that are likely to retain their physical and chemical structure under expected conditions of disposal, including resistance to normal biological and chemical processes. Materials include cured concrete and reinforcing steel, asphalt pavement, brick and masonry, ceramics, glass, stainless steel and aluminum.

Industrial solid waste

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

Landfill

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

Legislative authority

The applicable city, designated county commission/council, or special purpose government formed to carry out solid waste planning and management in the planning area.

Local government

A city, town or county.

Low Level Radioactive Waste (LLRW) – Washington State University (WSU)

Waste generated through research laboratory operations containing low level radioactive materials, managed and controlled by the Radiation Safety Office of WSU and regulated by the Washington State Department of Health.

Medical waste

All the infectious and injurious waste originating from a medical, laboratory, veterinary or intermediate care facility. May include biological organisms and/or material contaminated by those organisms.

Mixed Paper

This is a catch-all phrase for a wide variety of commingled paper (office paper, newspaper, phone books, magazines, etc.), generally clean, dry, and free of food, most plastic, wax, and other contamination.

Moderate-risk waste (MRW)

Solid waste that is limited to conditionally exempt small quantity generator (CESQG) waste and household hazardous waste (HHW).

Pathological waste

At WSU, all infectious animal carcasses, infectious animal manure and bedding, and all non-infectious animal carcasses.

Permit

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

Planning area or jurisdiction

Geographical/political area or unit covered by this plan.

Recyclable materials

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

Recycling

Transforming or remanufacturing waste materials into useable or marketable materials for use other than landfill or incineration.

Re-refined oil

Product of a process whereby used oil is processed into a product which is used as a petroleum refinery feedstock.

Rural

Areas designated in the plan which are not urban in nature.

Sewage Sludge or Septage

A semisolid consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from a septic tank system. See Biosolids.

Sludge

See biosolids.

Solid waste

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

Solid waste handling

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

Source separation

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

Tipping fee

The price paid per cubic yard, ton, or other measure to dispose of waste at a transfer station, incinerator, or landfill.

Transfer station

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

Urban

Area which a) Exhibits markedly different service levels, b) Incorporates markedly higher population densities, or c) Meets or exceeds total population specified by recognized surveys and /or public agencies.

Used oil

Oil which through the use, storage, or handling has become unsuitable for its original purpose due to the presence of impurities or the loss of original properties. Used oil may be processed for reuse; see Re-refined Oil.

Volume reduction

Reducing the amount or type of waste after the waste has been generated with techniques such as baling, shredding, compacting, and incinerating.

Waste reduction or waste prevention

Reducing the amount or toxicity of waste generated.

White goods

Used major household appliances such as washers, dryers, and refrigerators.

Wood waste

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

Yard debris

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

1. Introduction

This section introduces the purpose of the plan, discusses the Solid Waste Advisory Committee (SWAC) involvement, names the participants in the plan, names legislative requirements that this plan must meet, presents and discusses previous plan goals, and specifies how future plan revisions will occur.

1.1 Purpose

This document is a necessary component for ensuring that Whitman County's solid waste management program will operate effectively while maximizing safety and efficiency in serving residents in incorporated and other areas of the County. Goals relating to cost-effective waste reduction, handling hazardous wastes, citizen involvement, illegal dumping and improving handling efficiencies have been established in this plan. The plan activities are designed to support and guide to achieve these goals.

1.2 Elements Included in the Plan

This plan includes the following elements:

- An inventory and description of solid waste handling facilities.
- A solid waste management program that meets Chapter 70.95 RCW, Chapter 173-350 WAC, and 173-351 WAC.
- A financing plan for capital and operational expenditures.
- An examination of needs for solid waste facilities in the next twenty years.
- A six-year implementation plan for programs.
- A twenty-year construction and capital acquisition program.

This document will satisfy the full intent of the RCW 70.95 "Solid Waste Management - Reduction and Recycling" (see Appendix G).

1.3 Whitman County Solid Waste Mission Statement

The mission of the Whitman County Public Works Solid Waste Division is to protect the public and the environment in Whitman County by providing and ensuring solid waste transfer, recycling and landfilling activities in a safe, efficient, economical, and environmentally responsible manner.

1.4 Plan Goals and Objectives

The Whitman County SWAC, which is responsible for citizen oversight of this plan, has formulated goals for solid waste planning as shown in Table 1-1.

It must be noted that several of the programs evaluated for use in this plan were in their initial stages; this suggests that as the programs mature, a higher success rate may occur. Programs which will increase or accelerate achievement of these goals will be continually evaluated throughout the planning period.

Table 1-1: SWAC Solid Waste Planning Goals.

1. Emphasize and encourage effective solid waste reduction activities throughout the county and its towns/cities, tailored around the State Beyond Waste plan.
2. Emphasize and encourage the recovery, reuse, and sale of materials diverted from the waste stream to offset the cost of countywide waste handling.
3. Emphasize and encourage the safe collection and disposal of moderate risk wastes such as chemicals, pesticides, and herbicides.
4. Provide educational opportunities to students and the public at large about types of waste, where it ends up, and ways to recycle, reuse and reduce solid waste in the community and encourage policies and practices to minimize waste.
5. Develop and implement a plan to reduce illegal dumping and litter activities countywide.
6. Develop and implement a long range plan for the effective operation of solid waste and recycling activities in Whitman County, including developing Whitman County's own landfill and utilizing technology to continuously improve efficiencies in solid waste handling and disposal.

1.5 Revision and Amendment Procedure

RCW 70.95.110 requires that plans be reviewed every five years and includes a recycling element. Whitman County has chosen to prepare this update to previous plans for adoption in 2005. This plan will then be revised on a five year cycle (in 2010, 2015, etc.) unless circumstances dictate differently.

Occasional Plan amendments between the specified revisions may be required to keep the Plan current so it will continue to meet the needs of the County. Amendments will defer from revisions in that an amendment will only concentrate on a particular program area or project. Such amendments may be proposed to the County staff and then reviewed by the SWAC and the Washington Department of Ecology (DOE). With the concurrence of County

staff, the SWAC, and DOE, the proposed amendment will be prepared and made available to the public for comment for a one month period, which will be advertised in the official county paper. Written comments made during this period will be incorporated in the amendment. The proposed amendment will then be submitted to the Board of Commissioners, who will hold a public hearing prior to approval. The time and place of the hearing will be published twice during a two-week period before it occurs. Amendments will be incorporated into the Plan as an appendix until the Plan is revised and can be adopted into the main body.

Residents of incorporated communities can comment on the proposed amendments at the SWAC meetings and at the public hearing before the County Commissioners, or submit written comments prior to submittal to the Commissioners.

Revisions of the Solid Waste Management Plan (SWMP or "the Plan") besides being more comprehensive will follow a procedure similar to that outlined above, with the additional requirement that incorporated communities must officially adopt the revised plan.

1.6 Local Government Participation

As lead agency, Whitman County is responsible for developing the five key components listed below for the overall solid waste management effort:

1. Solid Waste Management Plan,
2. Coordination with participating local governments and agencies,
3. Conduct public participation and information programs,
4. Prepare implementation schedules for Plan recommendations,
5. Develop funding mechanisms to support solid waste management activities.

The SWAC and the County staff in the Public Works and Health Departments advise and support the County Board of Commissioners, where final authority rests.

According to RCW 70.95.080, each Washington County shall prepare a coordinated, comprehensive solid waste management plan. Each incorporated city in the State shall prepare its own plan, jointly participate in a city-county plan, or be included in the comprehensive county Plan. Historically, the communities in Whitman County have elected to participate in a joint plan.

To participate in this Plan, each of the sixteen incorporated communities have adopted resolutions of concurrence stating their intended participation with or adoption of the Plan.

1.6.1 Government Units Included in this Plan

The Plan embodies municipal solid waste (MSW) handling and disposal practices within the geographic and political boundaries of Whitman County. Rural communities and rural citizens are represented by Whitman County SWAC. Local governments and institutions included in the plan are shown in Table 1-2.

Table 1-2: Participants in this Plan.

Town of Albion	City of Colfax	Town of Colton	Town of Endicott
Town of Farmington	Town of Garfield	Town of Lacrosse	Town of Lamont
Town of Malden	Town of Oakesdale	City of Palouse	City of Pullman
Town of Rosalia	Town of St. John	City of Tekoa	Town of Uniontown
Whitman County		Washington State University	
Pullman Disposal		Empire Disposal	
Republic Services			

1.6.2 SWAC'S Ongoing Involvement in Implementation of the Plan

In accordance with RCW 70.95.165 (3), each County is to establish a local SWAC. Generally, SWAC's membership is made up of and is represented by concerned citizens, the waste management industry and public interest groups. Members are appointed by county legislative authority.

The Whitman County SWAC committee is comprised of members from each participating community, Washington State University (WSU), private solid waste companies, the County and other interested citizens. The SWAC meets quarterly, or more, and forms subcommittees as needed to evaluate special areas or collect outside information. The primary role of SWAC is to assist in the development of programs, policies and as related to solid waste handling. SWAC members participated in this plan by providing responses in a formalized input format requesting comments on solid waste planning goals, current status of community solid waste projects, waste collection, and waste reduction techniques. The information from each of the participants has been incorporated into this report.

Appreciation is expressed to each of the SWAC members for their contribution to this plan:

Name	Organization
Aaron Lawhead	Empire Disposal/Waste Connections
Devon Felsted	Pullman Disposal
Matthew Pederson	Republic Services/Roosevelt Regional Landfill
Rick Finch	Washington State University
Dorothy (Dot) Sharp	Town of Colton
Robert Curry	Town of Endicott
David Hansel	Town of Albion
Eileen Macoll	City of Pullman
Chris Skidmore	Whitman County Environmental Health
Jeff Wilmoth	Whitman County Environmental Health

When any element of the solid waste system has been evaluated, it has been evaluated using the goals listed, with elimination of waste as the most important, followed by movement of responsibility, then inclusion of county citizens in the planning process, etc. This is in agreement with the State goal structure, and is the basis of methodology employed by the Whitman County SWAC in evaluating alternatives named in this plan.

1.7 Relation of the Solid Waste Management Plan to Other Plans

Two plans adopted by the County impact the solid waste planning process; the County Comprehensive Land Use Plan and the County Moderate Risk Waste Management Plan:

The Whitman County Comprehensive Land Use Plan does not specifically address the Whitman County solid waste system and facilities; the comprehensive plan does address "local public facilities" under the Public Facilities Land Use Section. The planning guidelines for these facilities are:

> LOCAL PUBLIC FACILITIES defined: as those facilities constructed by local government, or public utilities normally serving this County, which are needed to maintain the quality and supply of public services. Such facilities include static transformers, storage facilities, and other components of local distribution systems for gas and electrical power.

The design of facilities proposed near residential land use should incorporate measures to minimize visual, noise, light and traffic impacts.

Facilities proposed next to agricultural croplands should incorporate measures to minimize impacts on farm access and farm practices.

Sites proposed for facilities should represent the best feasible alternative location to minimize impacts on other land use, given constraints of land availability and cost.

1.8 History of Solid Waste Planning in Whitman County

Whitman County's SWMP was completed in September 1971, making it one of the first in the State to be completed, submitted, and accepted by the newly formed DOE. That document set forth a six-year plan, which stated:

"The six-year plan is programmed for the closing of fourteen existing town disposal sites and 57 promiscuous sites, substituting four transfer stations, and the transportation of the solid wastes from these four transfer stations to one major sanitary landfill to be located in the southeast part of the County."

By 1974, the transfer station concept had been rejected because its need could not be demonstrated. In its place, the Public Works Department was developing a "green box" proposal. This was a rural adoption of the transfer site concept that was more efficient with low volumes of solid waste and more convenient for County residents. The Green Box program has since been discontinued due to legal reasons, although the County retains ownership of the sites. Construction of a sanitary landfill on County owned land along Carothers Road between Colfax and Pullman began in 1974, as the solid waste plan had recommended, and was completed in August of 1975.

The administration of solid waste management has grown as the complexity of this issue continues to grow. A scale house was added to the Carothers Road site in 1978, landfill accounts were computerized in 1987, and a closure fund was established in 1988. The landfill was closed and export of MSW to a regional solid waste disposal site began in 1993. This was accomplished by constructing a transfer building on the Carothers Road site to receive and load refuse for transport to a regional facility. A recycling operation with a drop-off center for recyclables was also included. In 1995, a center to receive and process disposal of household hazardous waste was added to the Whitman County Carothers Road Solid Waste Facility (CRSWF).

When the MSW landfill was being closed, the need to retain a local disposal for construction and demolition waste was identified. A cell was constructed adjacent to the closed MSW cells. Since 1993, concrete, asphalt, wood and

other demolition waste has been landfilled. Yard wastes are also accepted at the Whitman County CRSWF. This material is ground and used for mulch.

An aggressive program for increasing waste reduction and recycling activities was launched on the mid 1990's. The goal was to increase the then current recycled/reduction rate of 24% to a 35% level within five years. Facilities and Programs implemented to foster a greater awareness and action included: public education through schools, businesses, and community groups; drop-off facilities; school and office recycling programs; and grants to assist with funding the efforts. Curbside recycling routes have been established in the larger communities.

In February of 2009, CH2MHILL completed a study of the solid waste disposal options for the County. The study reviewed the solid waste system operations, fees and practices for the disposal of solid waste in the County and developed a framework for evaluating future solid waste management alternatives for the next 15 to 20 years. The results of this study concluded that development of a new landfill cell(s) at the existing CRSWF is the most feasible and viable option for the County with the potential to reduce overall disposal costs. A subsequent study by CH2MHILL, completed in February 2010, provided an overview of the engineering concepts that were prepared for the possible development of a new MSW landfill cell (South Landfill Cell) at the existing CRSWF. This study identified the technical system and processes of permitting, engineering design, and construction activities that will be required to open a new landfill cell and provided economic evaluations and schedules at a conceptual level for the County's planning purposes.

In 2018, the County worked with Great West Engineering on developing a Capital Facilities Plan (CFP) that reviewed the facilities and infrastructure needed at the CRSWF for the next 20 years. A Capital Financial Plan will also be prepared separate from the CFP.

1.8.1 Previous Goals of Solid Waste Management Plan

Goals of the previous SWMP are reproduced below and discussion of these goals follows. Goals and their elements have been identified by number for reference.

1. Elimination of waste through cost-effective reduction practices wherever possible.
2. Movement of responsibility for the waste stream toward the producer.
3. Inclusion of the citizens of the County through outreach, education, and feedback channels, as part of any plan.
4. Maximization of the role of local private industry, keeping jobs, profits, and economic activity within the County.
5. Reliance on technology to advance solid waste handling efficiencies.

1.8.2 Discussion of Previous Goals

Tasks completed:

- Task 2: The County has chosen to follow the lead of the statewide initiative. The County supports legislation that relates to producer responsibility, like the Secure Drug Take Back Act and recycling of mercury containing bulbs.
- Task 3: The County attends community events to share solid waste literature, provides recycling bins for local events, and contracts with Palouse Clearwater Environmental Institute (PCEI) for solid waste education and outreach.
- Task 4: The County continues to encourage and cooperate with haulers in their efforts to stay economically feasible. Also, the County employs residents at the Transfer Station, rather than privatizing.

Tasks currently being pursued:

- Task 1: The County transitioned to single stream recycling so recycling could be performed in a more efficient manner. The County is continuing to pursue and evaluate cost-effective reduction practices; the County recently commissioned a CFP study to evaluate such practices.
- Task 5: The County constructed a new transfer station that has efficiencies and improvements built into the facility. Also, the County is evaluating using the old transfer station as a mini material recover facility (MRF).

1.9 Physical, Environmental, and Socio-Economic Conditions

Whitman County is located in southeastern Washington. Figure 1-1 shows a map of the County, including the incorporated communities and the associated highway system. The County supports an agricultural economy, which is augmented by employment at WSU and associated support services. Tenth largest of the state's 39 counties, Whitman County has an area of 2,178 square miles and maintains 2,000 miles of roadway. The terrain is dominated by rolling hills deeply incised by 2nd and 3rd order streams. The largest community in the County is Pullman, which had an estimated 27,920 residents in 2010, including an estimated 18,232 students at WSU. Based on the Office of Financial Management estimates for 2015, the population of Pullman was 32,110 residents, including 26,416 students and faculty at WSU. The majority of these residents are temporary, leaving the community when school is not in session. This seasonal fluctuation has a substantial impact on the County's solid waste management.

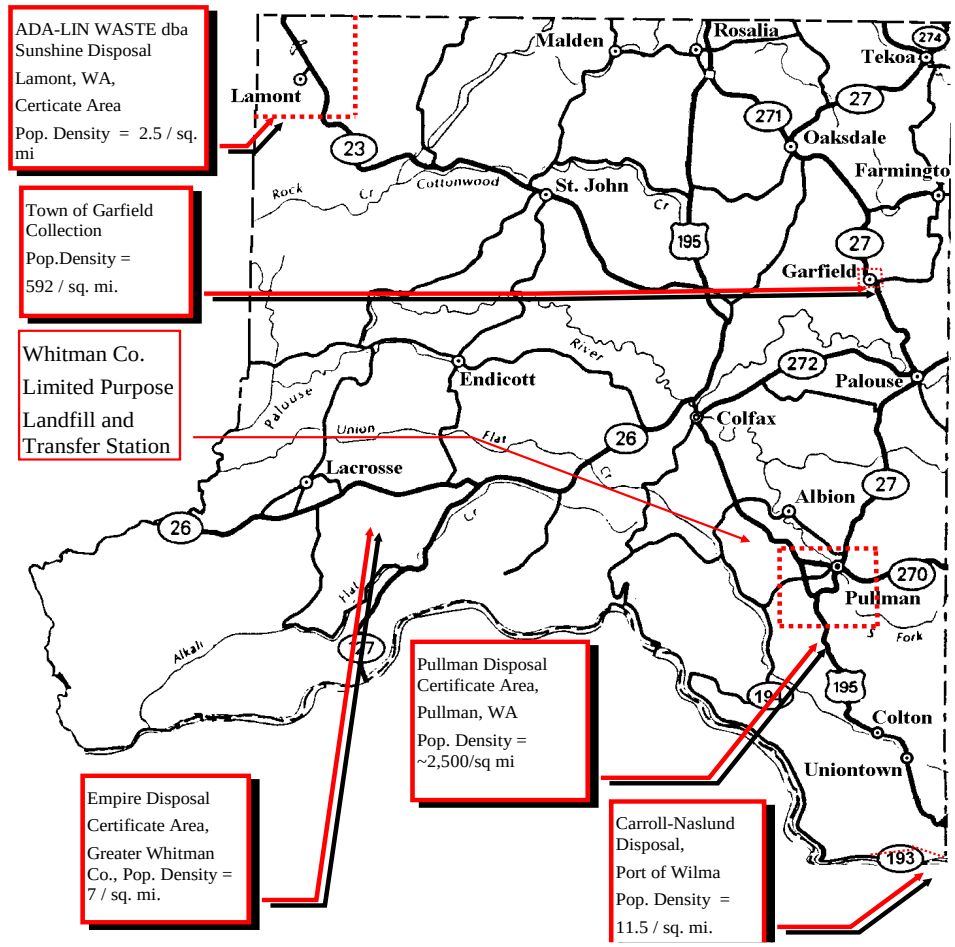

Figure 1-1: Map of Whitman County showing the incorporated communities, major haul routes and Washington Utilities and Transportation certificate areas by hauler and population density.

1.9.1 Geology

Whitman County's main geologic features include two subsurface and two surface geologic formations. Granite, a holo-crystalline-granular plutonic igneous rock consisting of quartz, orthoclase and members of the amphibole group and schist, a metamorphic crystalline rock with a closely foliated structure consisting of quartz, mica and some feldspar, provide the base of the subsurface strata. Buttes such as Kamiak and Steptoe are examples of where these strata appear in surface features. Basalt, an igneous rock consisting of plagioclase, augite and some magnetite underlie much of the Palouse country. This basalt is a result of volcanic rift activity from eastern Washington and Oregon, and it overlays igneous/metamorphic formations from the mountain ranges of Idaho west to the Cascades. The basalt layers provide an aquifer medium for supplying wells within the County. The basalt flows underlie the windblown, or loess soils which form the major surface characteristic within Whitman County.

The loess depth can exceed 100 feet, although other areas may have minimal thicknesses. Loess has combined with local organic material to form highly productive farmland soil. Along river channels and valley floors are water-borne deposits, that, when properly managed, can also produce a high crop yield.

1.9.2 Physiography

The physiography of Whitman County is typical of the Palouse region, with treeless hills and valleys supporting dry land farming and grazing. Dune-like hills were formed by wind-blown deposits of soil eroded by rain and snowmelt runoff. Topography varies, with slopes ranging from 0 to 50 percent. The terrain ranges from the rolling Palouse hills in the eastern part of the County to the flat "scablands" area of the west and from the mountains of the northeast to the Snake River Gorge along the southern boundary. The County is drained by many small creeks, which join to form three larger streams: Pine Creek, Rock Creek, and Union Flat Creek. These streams are tributaries to the Palouse River, which flows through the County to merge with the Snake River in the southwest corner of the County. Drainage in the northeast corner of the County is part of the Spokane River drainage basin. Most of the land in the County is at elevations between 1,200 and 2,900 feet above sea level.

1.9.3 Hydrology

Groundwater is the major source of potable water in Whitman County. Underlying basalt beds generally contain ample water to satisfy farm and household needs, although groundwater levels in deep wells fluctuate according to the amount of recharge.

The movement of groundwater occurs in two regimes, the loess and the basalt. Permeability's of the loess generally are between 10^{-4} to 10^{-6} cm/sec, while the permeability of the basalt ranges from 10^{-4} to 10^{4} cm/sec, depending on the strata and location.

The majority of surface water in Whitman County is carried through first-, second, and third-order streams. Ponds and lakes are not commonplace within the County. Soils are well drained except those in bottom lands and valley floors.

1.9.4 Soils

The highly productive soils of Whitman County, characteristic of the Palouse region, were brought about by long interaction of parent material, climate, topography, and living organisms. Generally, the depth of the soil is related to its position on the slope, with deeper topsoil on the slopes. Snow melts rapidly on agricultural land, causing severe erosion if bare. Soils are typically classified as silts, silty sands, and silty loams.

1.9.5 Climate

Whitman County's climate is transitional between sheltered woodland and grassland climates in the east and the grassland climate in the west. The County generally has summers that are hot and dry and winters that are cold and moist. The average annual temperature is 49.7 degrees Fahrenheit in the eastern portion (Pullman). The coldest month is usually January and the warmest is usually July.

Average annual precipitation ranges from 14.05 inches in Lacrosse to 20.49 inches in Pullman. Precipitation increases from west to east as elevation increases. The 1979 Whitman County Soil Survey, prepared by the Soil Conservation Service, presented detailed temperature and precipitation data for various locations in Whitman County. The following tables were updated with current precipitation and temperature data.

Table 1-3: Average Annual Precipitation (Inches).

Month	Lacrosse	Pullman
January	1.97	2.55
February	1.27	1.68
March	2.18	2.65
April	1.29	1.66
May	1.15	1.75
June	0.96	1.22
July	0.31	0.29
August	0.30	0.46
September	0.55	0.68
October	1.24	1.76
November	1.80	2.53
December	2.49	2.58
Total	**14.64**	**19.71**

Table 1-4: Average Daily Temperature in Pullman (0° F).

Month	Maximum	Minimum
January	36.8	25.7
February	41.2	27.2
March	49.1	31.7
April	56.6	35.6
May	65.0	41.7
June	71.7	46.5
July	82.4	50.2
August	83.6	50.2
September	74.2	43.8
October	60.2	36.2
November	44.1	30.7
December	35.2	24.1
Average	**58.3**	**36.9**

Note: Data was obtained from the National Weather Service (NWS).

1.9.6 Population Data

Whitman County's population has slowly increased to the 2015 population of 47,250 (see Table 1-5). This was a 21.2% increase over the 1970 census figure of 39,000 which is an average of 0.47% increase each year. Long-range economic forecast indicates no significant change in the population trend as no major industries are expected to reside within the County in the near future. Population has slowly grown and shifted from rural areas to the incorporated communities as shown in Table 1-5. (Based on information from the Washington State Office of Financial Management.)

Table 1-5: Whitman County Population Distribution.								
Year	**1995**		**2000**		**2010**		**2015**	
Element	**Total Pop.**	**% of Total**	**Total Pop.**	**% of Total**	**Total Pop.**	**% of Total**	**Total Pop.**	**% of Total**
Whitman Co.	40,500	100.0%	40,740	100.0%	43,600	100.0%	47,250	100.0%
Unincorporated	6,704	16.6%	6,298	15.5%	6,246	14.3%	6,084	12.9%
Incorporated	33,796	83.4%	34,442	84.5%	37,354	85.7%	41,166	87.1%
Albion	670	1.7%	616	1.5%	620	1.4%	555	1.2%
Colfax	2,820	7.0%	2,844	7.0%	2,915	6.7%	2,790	5.9%
Colton	360	0.9%	386	0.9%	425	1.0%	420	0.9%
Endicott	345	0.9%	355	0.9%	305	0.7%	296	0.6%
Farmington	130	0.3%	153	0.4%	135	0.3%	150	0.3%
Garfield	619	1.5%	641	1.6%	630	1.4%	595	1.3%
Lacrosse	407	1.0%	380	0.9%	345	0.8%	320	0.7%
Lamont	93	0.2%	106	0.3%	81	0.2%	80	0.2%
Malden	225	0.5%	215	0.5%	205	0.5%	200	0.4%
Oakesdale	435	1.1%	420	1.0%	420	1.0%	430	0.9%
Palouse	975	2.4%	1,011	2.5%	1,015	2.3%	1,030	2.2%
Pullman	24,360	60.0%	24,948	61.2%	27,920	64.0%	32,110	67.9%
Rosalia	643	1.6%	648	1.6%	640	1.5%	560	1.2%
St. John	529	1.3%	548	1.3%	543	1.2%	510	1.1%
Tekoa	880	2.2%	826	2.0%	815	1.9%	785	1.7%
Uniontown	305	0.8%	345	0.8%	340	0.8%	335	0.7%

2015 population data shows that nearly 68% (32,110) of the County's population resides in Pullman. Pullman is also the site of WSU. The 2015 enrollment for the Pullman campus was 20,043 students. The large share of students and staff members in Pullman's population is directly related to the volume of the County's waste stream, and creates seasonal fluctuations in the waste stream, both in quantity and character. The pattern of dwindling rural population and increasing urban numbers is expected to continue.

Whitman County is approximately 1,393,920 acres, or 2,178 square miles in size, which correlates to a population density of 0.03 people per acre, or 18.6 people per square mile. Compared to Spokane County, which has approximately 267.2 people per square mile, Whitman County can be considered rural. Even in Pullman, Whitman County's urban center, the population density (2,465.6 people per square mile) emphasizes the rural nature of the County. These densities emphasize the rural nature of Whitman County, which pose a significant

obstacle for solid waste management and planning in Whitman County. For instance, such low population densities increase effort and costs for any programs sponsored outside of the urban center and other incorporated areas.

2. Waste Stream Description

This section discusses the sources of waste in the County, where they come from, where they go, and in what quantities.

Solid waste is generated by sources on a continual basis. Population density and commercial generators influence waste generation. Solid waste is collected in "on site" containers for both residential and commercial customers. Containers are routinely collected and the waste is transported to the Whitman County CRSWF for recovery and/or transfer to a regional landfill for disposal. The routes by which collection is made is often determined by social, geographical, and political conditions. In 2012, Whitman County established a Flow Control Ordinance (Ord. No 73385, 9-17-2012) to regulate the flow of solid waste in Whitman County. This ordinance is incorporated into the Whitman County Code (Chapter 8.15.030) and states that "it is unlawful for any collecting agency or other person to deliver or deposit any solid waste generated and collected within the county outside the borders of Whitman County, or within the county except at a 'designated facility'" (see Appendix F).

Starting in 2016, the Whitman County Solid Waste Facility began single stream recycling. There are many benefits to single stream recycling, such as streamlining the recycling process for citizens and haulers. However, several challenges associated with single stream recycling also exist, mainly contamination. Individual sources usually generate distinctively different waste, and as the individual sources are collected together, material characteristics become less distinctive, and intermingling of wastes leads to degradation of their original character. This is one reason why separation of waste at the source is preferred, as it allows maximum reuse and recovery of material before it is contaminated, or becomes difficult to locate in the larger flows. However, because the haulers and transfer station have adapted their infrastructure to accommodate single stream recycling, it is not likely that they will invest in new equipment to go back to source separated recycling.

As Whitman County updates its solid waste management plan and evaluates needs and defines programs for the future, it is important to recognize the changing composition of the waste stream and the existence of hard-to-recycle materials in that stream. At the time of developing the 2012 SWMP, discarded electronics or "eWaste" (i.e. old televisions, stereos, computers, monitors (CRT), keyboards, printers and other peripherals), lightbulbs, rechargeable batteries, and prescription medications posed an ever increasing challenge to recycling. The following paragraphs describe how Whitman County manages the recycling of these challenging materials, as well as "hard-to-recycle" materials that will need to be addressed in the future.

eWaste

With the rapid rate of new innovation, there is an ever shortening product life cycle and an increased penetration of new electronic equipment into homes and businesses to replace old obsolete units. This trend has created an electronic waste stream that likely be a significant source of waste for years to come. The current E-Cycle Washington program allows for recycling of electronic waste through the services of a contractor paid by the state and through cooperative agreements with businesses (i.e. Goodwill Industries) to act as collection points for these items. Whitman County currently manages eWaste through the drop-off location offered by Pullman Disposal.

Light Bulbs

Ultimately, Whitman County disposes of mercury containing light bulbs (i.e. fluorescent light bulbs and compact fluorescent lamp (CFL) bulbs) through LightRecycle Washington, who provide Whitman County with boxes to package and send the bulbs for disposal.

Rechargeable Batteries

Whitman County collects and recycles rechargeable batteries through Call2Recycle, which is administered by the Rechargeable Battery Recycling Corporation (RBRC). Similar to the program offered through LightRecycle for mercury containing bulbs, Call2Recycle provides boxes to package and return the rechargeable batteries for recycling. Currently, Whitman County only collects rechargeable batteries for disposal, not alkaline batteries.

Pharmaceuticals

The implementation of a pharmaceutical take back program was considered on a statewide basis for numerous years. On March 22, 2018, Governor Jay Inslee signed into law the Secure Drug Take Back Act (House Bill 1047). The Secure Drug Take Back Act establishes a statewide, universal take back program for unwanted prescription and nonprescription drugs that will be implemented and funded by drug manufacturers. This Act is the first of its kind in the United States and went into effect on June 7, 2018.

Hard-to-recycle Materials

Food wastes and paint are challenges that will need to be addressed in the near future. Existing opportunities to compost are present at WSU; other than this facility, Whitman County does not have the infrastructure to offer food waste composting. Whitman County will continue to encourage home composting, until building a composting facility in Whitman County is a viable option.

Despite attempts to pass paint stewardship legislation, no bills have been passed to address this issue. In Whitman County, latex paint is considered a household

hazardous waste (HHW), and disposal consists of solidifying the latex paint and sending it to the landfill. Currently, Whitman County bulks oil-based paint in 55-gallon drums, which are picked up by Clean Harbors. It is likely that the disposal of paint will continue to be considered on a statewide basis.

2.1 Sources and Distribution

A schematic of Whitman County's solid waste system is shown in Figure 2-1. The schematic graphically traces the waste stream system of Whitman County and shows the distribution and sources of solid waste for 2009. The diversion of material into recycled, hazardous, and other non-MSW streams is also shown. Note that the recycled quantities stated in the schematic are compiled only for those diversions for which information has been made available at the County's request.

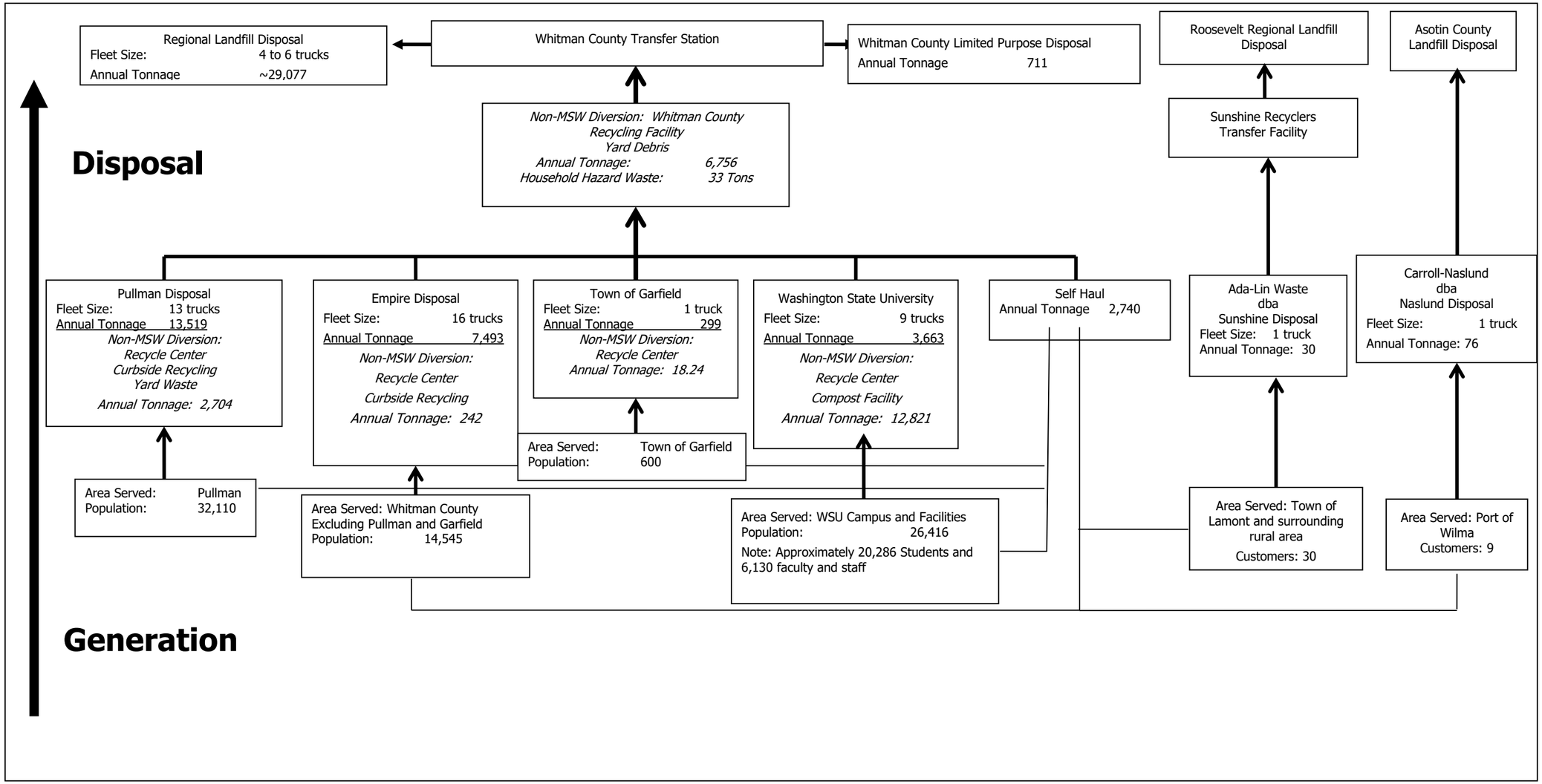

Figure 2-1: Existing Solid Waste System Flow Schematic.

2.2 Waste Stream Quantities and Composition

Figure 2-2 summarizes the annual waste stream flow which has historically passed through the County Solid Waste facility in the past 20 years. The landfill began weighing and recording waste in 1976.

The waste stream quantity has varied over the years. Analysis of the available data in the period prior to that shown in Figure 2-2 suggested that closure of the local area dumps in the 1980's caused a sudden increase in flow around 1984.

For the period 1996 to 2017, the data reveals tonnage to be relatively constant with fluctuations within typical bounds. The waste accepted is generally in the range of 24,000 to 30,000 tons per year (averaging about 26,000 tons per year in the past 10 years), not including recyclables.

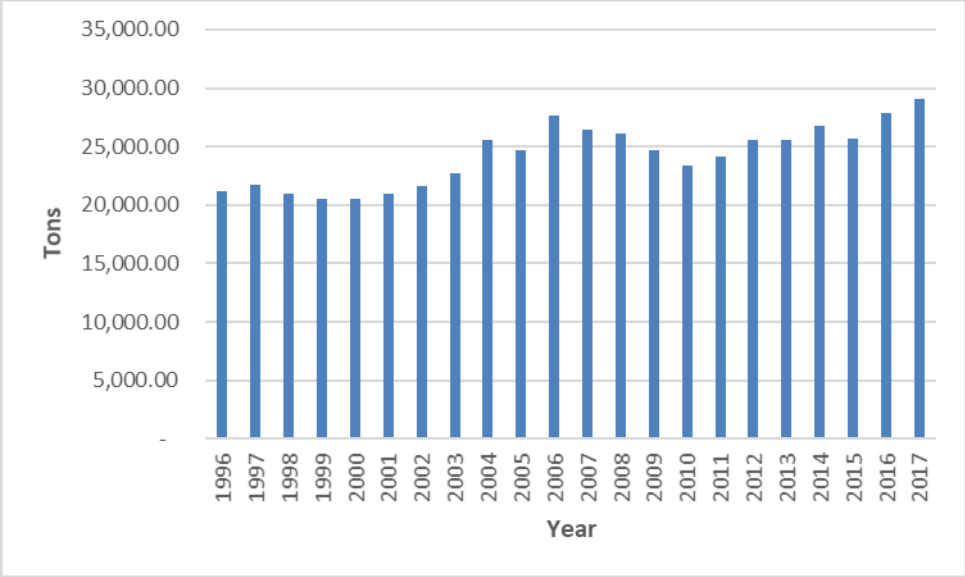

Figure 2-2: Annual tonnage accepted at the Whitman County Carothers Road Solid Waste Facility.

Whitman County participated in a waste-stream analysis as part of a best-management-practices study conducted in 1988 by the DOE. The results were combined with analyses done in other southeastern Washington counties. Another study performed by DOE in 1992 purported to revisit the waste stream analysis. Whitman County completed its own analysis during the 1994-1995 period. In the absence of a Whitman County Waste Composition Study, DOE utilizes prior County studies and results of other recent analysis in the State, to develop a current composition for Whitman County that may be used for planning purposes. Subsequent Ecology waste composition studies were

completed in 2003, 2009, and 2015. Table 2-1 summarizes the various waste stream compositions.

Table 2-1: Waste Composition as Determined by Department of Ecology.

Categories	**Percentage Composition by Year**		
	2003	2009	2015
Paper	23.7%	21.9%	14.9%
Plastic	11.6%	10.7%	10.2%
Glass	4.0%	2.2%	2.3%
Ferrous Metals	6.5%	6.0%	5.8%
Non-Ferrous Metals	1.0%	0.9%	
Consumer Products	7.6%	6.6%	7.3%
Organics	25.1%	25.1%	28.5%
Wood	8.6%	9.2%	12.3%
Construction Debris	4.9%	8.5%	12.2%
Residuals	6.1%	5.3%	5.5%
Other Wastes	0.0%	0.0%	0.0%
Hazardous/Special Waste	0.9%	3.6%	1.1%
Other	0%	0%	0.0%
Total Waste Stream	100%	100%	100%

The waste composition estimates above are considered by Ecology to be representative of the region of the state including Whitman County. The 2015 data listed in Table 2-1 is from the DOE 2015-2016 "Washington Statewide Waste Characterization Study". Increases in construction debris are assumed to be the result of increased building activity in a particular year. Decreases in paper waste are assumed to result from increased public awareness and corresponding use of recycling facilities by the public.

3. Description of Existing Solid Waste Programs, Facilities and Systems

This section inventories and describes existing solid waste funding, practices, programs, and facilities.

3.1 Existing Funding

Funding for existing programs come from private and public sources. In brief they are:

I. Private and public collection programs, which include collection and/or private recycling facilities, are usually funded in two ways:

- By revenue generated through the private operator handling the material; and,
- Through a surcharge levied on the generators.

Collection companies are regulated by the Washington Utilities and Transportation Commission (WUTC) or by municipal contract and/or ordinance, including residential curbside recycling where a fee is charged to the customer for the collection in conjunction with the regular waste collection process. Recycling firms, which collect materials without charge to the owner, are not currently regulated.

II. WSU programs are supported in two ways:

- By reallocating some revenue from state funding saved through diversion of solid waste away from collection and into other programs; and,
- By state funding sources.

III. County programs are funded in two ways:

- By collection of a tipping fee at the Whitman County CRSWF; and,
- By grants made available by the State through the DOE and Washington State Department of Transportation (WSDOT) (tire collection/recycling). However, it should be noted that these funds are becoming scarcer due to reductions by legislators.

- The County maintains a solid waste fund, which is used for all County solid waste and recycling activities. The fund is defined as an Enterprise Fund. The Enterprise Fund is simply a fund where the costs of providing solid waste services to the public are recovered through user charges and grants. The fund is self-supporting and continues

indefinitely. This differs from other funds in Whitman County because revenues from the Enterprise Fund carry over from the previous year, allowing accumulation of funds for capitalizing solid waste projects. Because solid waste projects can be funded through this accumulated revenue, the Board of County Commissioners has directed that solid waste activities are not to be funded from any other county fund.

Whitman County currently receives Coordinated Prevention Grant (CPG) funding through the DOE. In the period since the last revision of this plan, grant funding has decreased and is expected to continue to decrease. Given the current shortfall in state budgets, a portion of the funds previously designated for CPG will likely be diverted for other uses. As CPG funds have been reduced, the Board of County Commissioners has directed staff to, wherever possible, use grant funding for capitalization of projects (with a large investment) rather than operation of ongoing programs. The CPG has historically funded 75% of eligible costs, with the County required to fund the remaining 25%. The administration guidelines for the CPG program continue to change as program reductions occur. Current grant funding levels are becoming doubtful due to the challenges in state funding.

An alternative funding mechanism is to use grants and local match as described above. This funding mechanism could use all county derived sources of funds to finance solid waste programs. The balance due to the elimination of grant funds could be met with additional enterprise fund withdrawals from past accumulation or through an increase in tipping fees. The County continues to make regular budget adjustments to compensate for the reduction of grant funds. Further reduction in grant funding could result in staffing reductions by the County. An evaluation of the solid waste budget was completed in the Whitman County Solid Waste Disposal Strategic Analysis Plan and Financial Study (CH2MHILL, February 2009). Based on the results of that study, the disposal (tipping) fee of $99 was established. This fee was shown to be sufficient to meet operating costs as long as the interest on the Enterprise Fund is allowed to remain in that fund. The fees are projected to increase every two years in order to meet expenditures.

On November 13, 2006, the Whitman County Board of Commissioners adopted a resolution (Resolution #066100) to apply a 2% inflation factor per year on tipping fees that is implemented every other year (i.e. 4% increase every other year). In 2013, Whitman County was able to reduce the tipping fee from $103 to $98, due to a new Transportation and Disposal contract. Effective January 1, 2017, the tipping fee at the Whitman County Transfer Station is $106 per ton. This fee takes into account the Resolution adopted by the Commissioners and the 2013 reduction associated with the Transportation and Disposal contract.

3.2 Waste Reduction

The following waste reduction programs and systems currently exist in Whitman County.

3.2.1 Private and Public Composting Facilities

There are a number of private or municipal composting facilities currently operating in Whitman County. The City of Palouse operates a composting facility which accepts leaves, grass, and soft vegetation only. Permits are required and available to residents within the Palouse city limits for an annual fee of $15.00. The communities of Oakesdale and Colton/Uniontown also operate composting facilities. WSU also operates a facility. This facility is described in further detail below. The Town of Malden and the Town of Garfield used to operate composting facilities for its citizens, however, these facilities are no longer operating.

Although composting is not economical for Whitman County on a county wide basis, Whitman County strongly encourages citizens to compost. The County does offer boxes for yard waste disposal. Residents are charged for labor and fuel associated with the delivery and pickup of the box, though there is no fee for the truck because it was purchased with grant funds. Also, the Whitman County Solid Waste Facility provides a yard debris program. Residents may drop off their yard trimmings at no cost, and the yard debris gets processed for cogeneration hog fuel. Commercial haulers are currently allowed to drop off yard waste free of charge. The County is considering charging a small fee to commercial haulers to drop off yard waste at the County facility.

3.2.2 Home Composting

The County does not operate a licensed compost facility. The only licensed compost facility is operated by WSU. WSU does not accept feedstocks from off-campus, but does sell finished compost on a limited basis to plant nurseries.

The Whitman County Public Works Solid Waste Division strongly encourages home composting as a means of waste reduction and continues to offer trainings. In line with this commitment, Whitman County has a contract with the PCEI to provide various educational programs, including those related to home composting. The County, in conjunction with the local Master Gardener's Group, provides training for residents to become "Master Composters."

Home composting education is also available for residents at WSU's Earth Day celebration and the Koppel Farm Spring Plant Fairs. These events help the County inform hundreds about composting through the distribution of brochures, flyers, and give-a-ways about home composting, building a compost bins, the County's yard trimmings program, and vermin-composting.

Throughout the year, the Solid Waste and Recycling Director provides various informational handouts, free composting give-a-ways, and hosts many contests to encourage recycling and composting of appropriate material. The County also runs a year-round recycling program and promotes this to residents. (For more information regarding the debris waste program, see later section in this chapter.)

3.2.3 Waste Reduction/Prevention Programs

A 'Recycled Art Competition' is held at the Palouse Empire Fair each year, which promotes the reuse of old household items (buttons, beads, plastics, aluminum cans, etc.) into a new useable item. This contest has received good support from the community, local libraries, and teachers. This event also includes workshops on reuse (upcycling). Whitman County will continue to hold this event, with the assistance of PCEI.

3.3 Recycling

3.3.1 Community Recycling Education and Outreach

Currently, the Whitman County Solid Waste Division has an informational booth at community events (e.g. Lentil Festival in Pullman and the Home and Garden Show in Beasley Coliseum) to pass out recycling, composting, and other educational solid waste literature. As a service to the community, the Whitman County Solid Waste Division offers blue recycling bins that can be checked out for use at community events.

There are several community recycling outreach programs which teach the concepts of recycling, while also providing a service to the community. An annual Christmas Tree Recycling Event is promoted through the Whitman County Recycling Department and a local Boy Scout Troop—in collaboration with Pullman Disposal—who collects the trees and transports them to the County's Yard debris operation at the Whitman County CRSWF. This collection is offered to Pullman residents, but the Town of Albion has also coordinated a Christmas Tree Recycling collection run by volunteers.

A clean-up event is held twice a year. The Spring clean-up and the Fall clean-up programs tipping fee rate at the Whitman County Solid Waste Facility is reduced from $106.00 per ton to $35.00 per ton. Many communities and residents take advantage of this reduced rate and organize their own community clean-up projects. This event is always well-received by the community and also educates a large volume of residents at one time about the location of the Whitman County CRSWF. The public can also learn about other services at the Solid Waste Facility, including the recycling drop-off, HHW facility, yard debris/mulching program and the limited purpose material disposal. Information about recycling

programs is constantly made available during various year-round community events, contests, and prizes.

A recycling collection program was coordinated at the Lentil Festival in Pullman in 2003. The Whitman County Recycling Department worked with a local hauler and the Pullman Chamber of Commerce to coordinate bins, staffing and transportation of recyclables. The Recycling Department also hosted a booth with recycling information and upcycling art. This program has become an integral part of the Festival.

Each year at the Palouse Empire Fair, a recycled art contest is held. Typically, numerous entries are received.

Outreach programs are also offered to Rotary, Kiwanis, Chamber of Commerce groups and at the Green Fair and the County Fair. Community workshops and town council meeting presentations are also offered. The County is extending events and workshops to more of the rural areas in the County. PCEI may contract with the Whitman County Solid Waste Division to hold education and outreach events in the future.

3.3.2 School Recycling and Curricula Programs

Education of children is an important part of educating the public in regards to MSW reduction, reuse, and recycle issues. Whitman County contracts with PCEI to assist schools with the following services and materials:

- Grant funding (if available)
- Collection and containers
- Environmental lesson plans
- Informational materials/handouts
- Interactive workshops/presentations

3.3.2.1 School Recycling Collection Program

The CPG offset grant that set up school recycling within Whitman County ended in 2008. That program provided paper bins for collection and storage buildings for storage to rural county schools along with transport to the Whitman County Landfill/Transfer collection center from county road personnel and Pullman Disposal Service.

The project met its goal of providing paper collection for schools located within Whitman County where the distance to area markets makes it financially difficult for schools to collect paper for recycling.

In order to sustain the school programs, funding from the regular CPG grant has had to be used to pay for services provided to Pullman Schools, Colfax Schools

and Colton/Uniontown Schools by Pullman Disposal. The other outlying schools are provided a large blue recycling bin (CPG funded) to collect the rural area schools' paper. These blue bins are shared by the towns/cities. Rolloff trucks pick up the 30-cubic yard bins. A full-time position will be added for this task. Currently, labor and fuel are charged to the CPG grant.

3.3.2.2 School Educational Programs

Washington Green Schools launched August 2009, where both public and private K-12 schools across Washington State can sign up to participate in the Green Schools Program. This voluntary program provides on-line resources and tools for teachers and students, and staff to assess and take actions to "green up" school campuses and operations. Through achievement at five different program levels, schools gain certification and awards such as a flag and public recognition. All of the schools in Whitman County were notified for the free training sessions. The Recycling Director encourages schools to adopt this partnership. Washington Green Schools is a collaborative partnership of agencies and organizations, grant-funded by the DOE web site is: http://www.wagreenschools.org/about-us/. PCEI contracts with Whitman County to hold various educational programs. Due to lack of funding, Whitman County has suspended two programs previously used in schools, including "The Magic of Recycling" program and support for the "Nike Re-use a Shoe" program. The County continues to encourage schools to continue their recycling efforts.

3.3.2.3 Printed Resources and Materials

There was a program that provided Waste Reduction, Recycling, Public Information and Education brochures, campaign materials for HHW, composting, recycling, and waste reduction. These materials were then passed on to the schools. This program ended in 1997. Printed materials and campaign materials are now designed and processed through Recycling Director at Whitman County. Any materials printed can be funded through the regular CPG grant with proper documentation.

3.3.2.4 Interactive Presentations

The main discovery of recent waste prevention research is that waste prevention programs are most effective when an outside motivator, such as cost and sustainability, is combined with well-funded intensive education. To take advantage of opportunities, Whitman County's Recycling Director utilizes the outside motivators, together with a well-designed education campaign.

Educational programs are directed to target audiences that are based either on generator categories or the type of waste stream. Examples of programs within the County are:

Homeowners, parents, college, youth, area visitors (via hotels and motels), neighborhood associations, self-haulers, office environments, construction, School Dumpster Diving.

In the past, several interactive programs were supported by Whitman County, such as composter programs, Tire Amnesty Day, upcycling/less stuff campaign, get off the bottle, Earth Day, and America Recycles. "A Greener Palouse" helped Whitman County coordinate with Latah County and other local, regional, and state campaigns to ensure a uniform message and maximize resources.

Currently, PCEI is helping Whitman County implement the aforementioned interactive programs, excluding Tire Amnesty Day, which is no longer being held because of the reduction in funding sources. Due to funding constraints, educational programs sponsored by the County and put on by PCEI are only targeted at schools and youth, but these programs may be expanded in the future. Management continues to check for grants that can be used to reinstate Tire Amnesty Day and expand the existing interactive programs to more demographics.

3.3.2.5 Earth Day and America Recycles Programs

Earth Day is celebrated in April and America Recycles Day is celebrated in November each year. PCEI, under contract with the County Recycling Division, works with the schools to plan and conduct a program in the schools for these events. Previously for America Recycles Day, the County worked with the schools to hold an Art Competition. 200 America Recycles Day Calendars were produced using the winning art entries and distributed to the winners and many County businesses. Due to reductions in funding, this program has been suspended in recent years.

3.3.3 Pharmaceutical Drug Drop Off

Historic drug take back legislation was passed in Washington State on March 22, 2018, and will go into effect on June 7, 2018. The Secure Drug Take Back Act requires manufacturers and producers of prescription and non-prescription medications to take back unwanted drugs. Prior to the recently passed legislation, unwanted medications could be dropped off in the foyers of the Pullman Police Department and Whitman County Sheriff's Office. Surplus or outdated medications can be dropped off with no questions asked. These drop off locations will remain even once the Secure Drug Take Back Act becomes effective.

3.3.4 Whitman County Business Recycling

Business recycling is encouraged through a combination of incentives and education. Awards and public recognition have been used to increase motivation to reduce waste at the source. Awards honor individuals, neighborhoods, organizations, and institutions and businesses that have contributed significantly in waste reduction in Whitman County. In the past, a program called Green Star promoted the more efficient use of paper, energy, water, and other sustainable practices. Reductions in funding have limited the County incentives and promotional programs in business waste reduction.

Waste audits are offered to businesses by Whitman County through the County Recycling Director upon request by the business, though no audits are currently being conducted. The audits include a walk-through and inventory of product usage and energy usage to identify sustainable practices that would reduce cost and waste for the business. While Waste Audits for businesses are available, the options for diversion are limited due to the hauling practices of Empire Disposal and Pullman Disposal. Businesses tend to be more responsive to solid and hazardous waste management information and assistance delivered by a non-governmental agency. Businesses in the area of collection for Pullman Disposal offer collection of newspaper, cardboard, magazines, office/mixed paper, glass, tin, #1 PETE, and #2 milk jugs. Empire Disposal will collect corrugated cardboard. All of these are at a cost to businesses. Businesses still have the option of their own collection and dropping off at any of the area community collection sites (Pullman Disposal, Empire Disposal, and the landfill/transfer station). Discussion is being initiated for more collection within the Empire Disposal area.

3.3.5 Whitman County In-house Recycling

The Department of Public Works began a pilot recycling program in 1993. Since then, many changes have been made and the program has gained participants. The "in-office" programs are now collecting mixed paper (newspaper, magazines, hardcover books, mail, catalogs, all colors of paper and paperboard (no need to remove staples or clips). Cardboard collection is provided by Empire Disposal. Most departments within the Court House and the Public Safety Building collect aluminum and plastic bottles. Messages for waste reduction and campaigns are posted in different halls throughout the Court House. Recycling bins are placed in corridors where vending machines are located. Phone books are collected through a separate collection system yearly. Employees choosing to participate are given a desk-side collection bin and are responsible for emptying it to centralized collection areas in their department. The recyclables are placed in rollcarts and picked up for disposal using a tommy lift. This recycling effort is funded by CPG grant funds. Recyclables collected through the in-house program and quantities are weighed and included in the year-end reports. In 2017, the County offices recycled 1.53 tons of recycled paper and 2.33 tons in aluminum cans.

3.3.6 Recycled Product Purchasing

Environmentally preferable purchasing (EPP), also known as green or responsible purchasing, is the procurement of goods and services that cause less harm to the environment than competing goods and services that serve the same purpose. This comparison process may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service.

With each purchasing decision, state agencies, local jurisdictions, colleges and universities, and nonprofit organizations can take action to improve the quality of life in Washington. By choosing responsibly, citizens can make a difference on issues like climate change, toxics in the environment, and solid waste reduction. Whitman County tries to adhere to the state recycling purchasing guidelines whenever it is economically viable.

3.3.7 Household Hazardous Waste Exchange

The County Household Hazardous Waste Facility Operations Plan provides for a waste exchange. Household residents of Whitman County are encouraged to submit product requests that they pick up while dropping off their hazardous waste at the facility. The facility attendant retrieves and hands out any products that have been collected. Residents are not permitted to browse for products and are required to sign a liability waver prior to receiving products. Diversion estimates have not been determined. The Town of Garfield provides a drop-off location for collection of used oil.

3.3.8 Disposal Bans

Electronic equipment, such as monitors, computers, televisions, and laptops, and CFL and fluorescent bulbs are the only disposal ban in the County at this time (effective January 1, 2010). Current disposal contract requirements do name tires, pathological and medical waste as unacceptable waste. Alternative disposal/recycle methods have been established for these materials.

3.3.9 Private Recycling Centers

Both private haulers (i.e. Empire Disposal and Pullman Disposal) within Whitman County operate recycling centers. The centers accept selected recyclable materials from the public for no charge. The material is then marketed and the resulting revenue is used to defray the operational cost of the recycling center. WSU, Colton, and Uniontown also have their own recycling centers. Table 3-1 shows the categories and that approximately 360 tons of material was handled by the centers in 2017.

3.3.10 Curbside Collection and Recycling

With assistance from the County, two solid waste collection companies have curbside service in Pullman and Colfax. A third curbside recycling program is operated by the Town of Garfield but is strictly a city-wide program for Garfield residents.

3.3.10.1 Pullman Single Family Curbside Recycling

In late 1993, the City of Pullman, pursuant to the state's 1989 Waste Not Washington Act, passed ordinance 93-18. The ordinance, which mandated curbside recycling for residents in low density housing, was implemented through Pullman Disposal Service pursuant to their WUTC certificate. Those customers included in the program were all single family homes and most duplexes and triplexes. The curbside recycling program began collections in June of 1994. Initially, the program collected six commodities: aluminum cans, glass jars and bottles, #1 plastic bottles, milk jugs (#2 plastic), newsprint (ONP), and tin cans. Corrugated cardboard (OCC) was added to the items collected in 1996. In July of 2013, recyclables were taken as part of a single stream mix. These items included all items taking in the original curbside program, plus mixed plastic and mixed paper. Collections are made once every two weeks. Each customer is given a dark crimson recycling rollcart (available in 32 gallon, 65 gallon, and 95 gallon sizes) with a sticker indicating which items are to be recycled and how those items are to be prepared.

Table 3-1: Commodities and Quantities Recycled At Private Recycling Centers in 2017.		
Commodity	**Empire Disposal**	**Pullman Disposal**
White, Copy & Ledger Paper		x
Computer Paper		
Newspaper	x	x
Magazines & Phone Books		
Mixed Paper	x	x
Groundwood		
Corrugated Cardboard	x	x
Glass Bottles	x	x
Aluminum	x	x
Tin/steel cans	x	x
Brass		x
Copper		x
Iron & Steel		x
#1 PETE 2-liter Pop Bottles	x	x
#2 HDPE Milk Jugs	x	x
Carpet Underpadding		x
Auto Batteries		x
Tons recycled (not including curbside collection)	**224 tons recycled**	**136 tons recycled**

Participation in the program has been high. For the last several years, the participation rate has been estimated at 96.5% of eligible customers. As customers must pay the $5.31 monthly curbside recycling fee whether they recycle or not, there is no economic disincentive to recycle. In fact, customers will save money by recycling if they can reduce the size or number of garbage cans for which they subscribe. At the end of 2017, there were 6,062 households on the residential curbside recycling program. The numbers have been fairly steady for the last several years. Residents in apartment buildings using dumpsters for their trash collection are not included in the residential curbside recycling program. They recycle using the Apartment Recycling program, also referred to as the multi-family recycling program.

3.3.10.2 Pullman Multi-Family Curbside Recycling

On October 31, 1995 the Pullman City Council unanimously voted to adopt an amendment to ordinance no. 93-18 (the Single Family Ordinance) for a mandatory, multifamily, source separated, curbside recycling program. This amendment for a Multi-Family Recycling Program is Ordinance 95-21. Any residential building that did not receive recycling services under the original Curbside Recycling Program received them under the multi-family recycling

program. Thus, Pullman's apartment buildings, mobile home parks, condominiums, and University Greek houses began to recycle under the amendment.

Like the residential program, the multi-family recycling program uses plastic roll carts. These roll carts were placed near their dumpsters. Each roll cart bore a sticker describing what recyclable item was to be placed in the roll cart and any preparation necessary (such as the removal of lids from plastic bottles) for that item. The roll carts were delivered to the apartment buildings in early summer of 1996 with collections starting later that summer. The frequency of collection, along with the type and number of collection containers, depended upon the needs of each building. Some apartment buildings needed weekly collection while others needed collection only once every two weeks. The Multi-Family Recycling program switched over to single-stream at the same time the curbside recycling program switched. The old recycling rollcarts were replaced by the new single-stream rollcarts during the summer of 2013. The commodities accepted in single-stream were the same under both programs. Landlords have the right to discontinue (and to resume) the program entirely if they so choose.

Like the Single Family Program, each landlord was required to pay a WUTC approved recycling fee in order to cover the program's cost. Those few landlords that did not want recycling on their premises were not excused from paying the recycling fee. Currently, the recycling fee is 15% of the account's basic garbage collection fee. Thus, if an apartment's trash collection fee, exclusive of dumpster rental, extra charges, and so forth, was $100.00, the recycling fee would be $15.00. In order to encourage tenants to recycle, Pullman Disposal Service runs recycling promotional ads through various radio stations in the area. Notwithstanding these ads, the proper use of the recycling roll carts remains a challenge to the Multi-Family Recycling Program. Often garbage is placed into the recycling roll carts. There are approximately 853 multi-family dwelling accounts that are covered by the multi-family recycling program. During 2017, 1,332.4 tons of recyclable material was recycled through the single-family and multi-family recycling program.

Table 3-2: Single stream recycling (SSR) Collected and Recycled in the Pullman Single and Multi-Family Recycling Program.

Year	Tons
2014	1,305.9
2015	1,290.9
2016	1,291.2
2017	1,332.4

Table 3-3: Pullman Yard Waste Tonnages.

Year	Tons
2014	507.6
2015	481.8
2016	530.3
2017	509.5

3.3.10.3 Pullman Yard Debris Curbside Collection Program

The Yard debris Collection Program (YCP) began collections in August, 1998 with 180 subscribers. The number of subscribers has climbed since then to the current number of approximately 1,800. Subscribers are given a rollcart to place their yard waste in. Subscribers have the option of two sizes of rollcarts. The service using the 95 gallon cart is $5.43 per month. Monthly service for customers using the smaller 68 gallon cart is $4.99 per month. Collections run once every two weeks during the months of March through November. The total tonnage collected has grown, as more people subscribe to and utilize the program. In 2017, approximately 510 tons were collected through the Pullman Yard Waste Program.

3.3.10.4 Pullman Business Recycling

In 1996, Pullman Disposal Service began offering business recycling options to its commercial (and other organizational) customers through the business recycling program. Under the program, the customer is given a great deal of flexibility in determining what items they want to recycle and the frequency of their collection.

Items available for collection include single stream, glass, and cardboard. In addition to those items, mixed paper is also available for collection. A separate collection container is used for each item a customer desires to recycle. Fees are based upon the type of recyclable, the frequency of collection, and in some cases, the size of the collection container and special handling requirements. The rates are not set by the WUTC as the commission does not regulate the collection of recyclables in the commercial environment. The hauler is free to set and/or negotiate rates independent of any governing body. Examples of common prices are as follows: 1) weekly collection of a 2 yd. container of corrugated cardboard will cost the participant $113.00 per year; 2) weekly collection of single stream will cost $15.00 per month; 3) weekly collection of one 32-gallon cart of glass bottles (available to restaurants only) will cost $15.00 per month.

OCC, glass jars and bottles, and mixed paper are the most popular items recycled under the business recycling program. As of the end of 2017, the number of businesses/organizations recycling OCC through the Pullman Disposal Program was 125. Also at the end of 2017, there were 98 customers that recycled a commodity other than OCC through the business recycling program.

3.3.10.5 Pullman Recycling Center

Pullman Disposal Service has operated a recycling center since 1990. Originally located on Benewah Street, it moved to 135 NW Harold Drive in 1997. It is open at all times for drop off of old corrugated cardboard, aluminum cans, and single

stream recycling. Glass is not currently accepted. In addition, aluminum cans are purchased from the public (price dependent upon market conditions) on Wednesday afternoons and Saturdays. Electronic waste is accepted for recycling. Computers, monitors, laptops, and T.V.s are accepted free of charge through the E-Cycle Washington program. Other electronic waste is accepted for $0.50 per pound. Pullman Disposal works in conjunction with Ecolights to provide for their customers Compact Fluorescent Light (CFL) bulb and long fluorescent tubes collection. CFL bulbs and long fluorescent tubes are accepted during office hours, Monday through Friday 8 a.m. to 5 p.m. The CFL bulbs and long fluorescent tubes are sent to a facility where the hazardous mercury in the bulbs is safely removed.

Another service is document destruction. Pullman Disposal uses the services of Lewis Clark Recyclers for document destruction; the shredded paper is recycled. The recycling center is operated in conjunction with the company's curbside recycling, apartment recycling, and business recycling programs.

Contamination of the recyclables (which includes the drop off of trash at the recycling site) is always a concern, as the center is not monitored. Since the beginning, contamination has been a problem, but has remained manageable. Any increase in contamination could possibly threaten the viability of the center. In the future, control measures may be needed to effectively manage contamination.

3.3.10.6 Pullman Events

In honor of Earth Day, the City of Pullman and Pullman Disposal Service held their first Spring Clean-Up event on April 24th, 2004. The Spring Clean-Up event provides an opportunity for Pullman residents to bring recyclables and trash to Pullman Disposal for a token fee. One car load costs $5.00. Trucks and trailers are $8.00. Since 2004, the annual event has grown.

3.3.10.7 Colfax Curbside Recycling

The City of Colfax initiated a curbside recycling program through Empire Disposal on May 1, 1994. At its inception, the program had 200 subscribed residential customers. The curbside residential recycling program was supported by a subscription fee of $3.10 per residence per month which was approved by the WUTC. Those subscribing households were provided with a 65-gallon mobile cart, collected every other week owned by Empire Disposal. The service is currently offered for a fee of $9.98/month and pickup is twice a month. Commodities collected are newspaper, glass bottles, tin cans, aluminum cans, #1 PETE pop bottles, and #2 HDPE milk jugs. The current subscription rate is at 42 households. Most of the previous and potential subscribers elect to deliver their recyclables directly to the Colfax recycling center (discussed below), which provides this service free of charge. The current curbside collection rates are

consequently a small fraction of the total recycled tonnage in Colfax, estimated at approximately 18 tons annually.

3.3.10.8 Empire Recycling Center

Empire Disposal began operating a drop-off recycling center in Colfax in June of 1993, which was open two days per week. The commodities taken were the same as those collected in the Colfax curbside recycling program. In November of 2000, the drop-off center was moved to a central location in Colfax; it is near the Public Schools and is open 24 hours/7 days a week. As described in the section above, this new location caused an unintended decline in the number of households subscribing to curbside recycling, as many residents began to take advantage of the *free* 24 hour drop-off site instead. In 2017, the drop-off center processed over 224 tons of commodities (see Table 3-1, previous section), as compared to 100 tons in 2003.

3.3.10.9 Town of Garfield Curbside Recycling

Town crews and equipment provide mandatory garbage service to residents of the Town of Garfield. In 2017, for $33.99 per month including a $1.80 surcharge and 6% utility tax, customers will get a 65 gallon roller cart plus $6 per additional container or bag. Citizens have access to curbside garbage service, and other special waste services that may have an additional charge. The Washington State Utilities and Transportation Commission does not regulate Garfield's garbage or recycling services. Garfield recycling collects newsprint, colored glass, #1 pop and #2 plastic milk jugs, aluminum, tin cans, cardboard, white goods, athletic shoes, scrap metal and waste oil. In 2017, Garfield recycled 18.24 tons, approximately 10.5 tons less than were recycled in 2010 (28.73 tons).

3.3.10.10 Rural Community Recycling Programs

Approximately 20% of Whitman County's population live in fifteen, incorporated rural towns. A "Rural Community Recycling Program" was established in 1993 to assist incorporated communities interested in developing recycling programs. Through the CPG, the rural recycling program allocates funding to capitalize the structure of recycling centers, drop-off sites, storage containers, transportation equipment, public education and promotion by the news media. In exchange for the grant, communities report tons recycled by commodity and manage their respective recycling centers.

The following towns in Whitman County have received funding through this program:

Table 3-4: Rural Community Recycling.			
Year	**Community**	**Amount**	**Activity**
1992-93	Albion	$2,500	
1992-93	Lacrosse	$2,500	Recycling drop box
1992-93	Palouse	$2,500	
2002	Albion	$4,000	Town recycling collection center
1994-95	Uniontown	$3,500	
1998-99	Garfield	$3,500	Town took over Recycling Center
1998-99	Garfield	$9,000	Public education/ baler purchased
2000-01	Garfield	$6,000	Collection for waste oil
2002	Garfield	$2,500	Waste oil burner for city shop
2003	Garfield	$1,500	Concrete for floor in recycling building
2001	Colton	$11,000	Establishment of a new facility
2003	Rosalia	$13,500	Construct a Community Recycling Drop-off Center Building
2003	Garfield	$1,500	Provide a secure fence around their recycling center
2003	Colton	$11,000	Pay for a new center and new program for recycling
2004	Garfield	$2,430	Purchase forklift for recyclables. Signage and security cameras were purchased and added to compost facility, and a compost thermometer was purchased
2007	Oakesdale	$10,000	Remodel existing structure to create a recycling collection facility. The Recycling Division applied for a supplemental "Air Quality" funding to purchase a commercial chipper that will be available to all cities and towns within Whitman County. This project was funded through December 2009 and included an extra staff person.

Table 3-4: Rural Community Recycling.			
Year	**Community**	**Amount**	**Activity**
2007	Whitman County Schools	$30,667	Provided paper bins and storage buildings to rural county schools with transport to market provided by county road personnel and Pullman Disposal Service Each School will receive 31 central paper collection bins and 15 desk side bins. This project also funded a school kick off for the project with "the Magic of Recycling" presented by Steffan Soule. Project funded through December 31, 2008.
2009	Garfield	$7,125	Expansion of community drop-off program for Mixed Metals
2009	Oakesdale	$19,812	Compost facility
2009	WSU	$6,775	Move Out & Pitch In program for WSU students leaving at end of school year
2009	Palouse	$9,750	Compost expansion project
2017	Whitman County	$55,095.84	Waste Reduction Recycling (i.e. large blue recycling bins for communities, education)

3.3.10.11 Appliance and Metal Recycling Facilities

The only facility permitted by the Whitman County Environmental Health Department that recycles appliances and scrap metal within Whitman County is the Whitman County CRSWF, located between Colfax and Pullman. The County continues to receive appliances at the transfer station and evacuate the refrigerant as required. These and other scrap metal go to Sutton Salvage or Pacific Steel and Recycling. The transfer station also takes cars if the fluids are drained and the title is provided. Sutton Salvage or Pacific Steel pay for these vehicles.

Parker Auto Waste and Metal Recycling Facility, located in Malden, at one time accepted white goods and automobiles. This facility is now closed. A facility called Motley-Motley's Delta site accepted scrap metal in the past, but closed in 2000.

3.3.10.12 Summation of Recyclable Material Diverted in 2017

Previous sections have described various elements of recycling programs and systems. Table 3-5 summarizes 2017 recyclable quantities and expresses them as a percentage of the total waste stream as generated, which is in agreement with the calculation procedure used by the state. The term "as generated" means that the amount of recyclables diverted is added to the amount disposed of to determine the total waste generated.

For example, approximately 29,077 tons of material was disposed of as waste and 19,511 tons were diverted for recycling in 2017. Addition of the two result in 48,588 tons, which is the "as generated," or total amount. The total recycling rate found in the table shows that Whitman County diverted approximately 67% of the waste stream for recycling. Based on historic recycling rates, the recycling rate in Whitman County is projected to grow by 11.8% on average. It should be noted that approximately 66% of the total claimed recycling rate comes from the WSU recycling and composting programs, which Whitman County does not control. Due to the rural nature of the area, Whitman County does not implement programs to monitor commercial and industrial recycling. The City of Pullman would likely be the only area with sufficient density to sustain such a program. The responsibility of implementing such a program would remain with the WUTC-regulated haulers.

Table 3-5: Estimated Recycled Material Quantity Expressed as a Calculated Percentage of the Waste Stream for 2017.		
Program	**Total tons**	**Percent of total waste stream**
Community Recycling Programs	**126.3**	**0.64 %**
Colton/Uniontown Recycling Drop-off	26.18	
Endicott Blue Bin	16.05	
Garfield Blue Bin	18.24	
Lacrosse Blue Bin	12.64	
Rosalia Blue Bin	22.90	
St. John Blue Bin	30.29	
Recycling Centers	**2,356.91**	**12.08 %**
Empire Recycling Center - Colfax	184.31	
Pullman Disposal Recycling Center – Pullman	136.37	
Whitman County Recycling Center – Carothers Road	119.6	
Whitman County Metals Recycling	489.63	
WSU Recycling	1,427	
Curbside Recycling	**1,350.42**	**6.92 %**
Colfax Curbside Recycling	18	
Pullman Curbside Recycling	1,332.42	
School Districts	**9.5**	**0.05 %**
Pullman Public Schools	9.5	
Regional Composting /Yard Debris	**15,155.05**	**77.67 %**
WSU Composting (includes steam plant ash/clinkers)	11,392	
Whitman County Yard Debris	3,387.99	
Whitman County Wood Waste	375.06	
Community Yard Debris Programs	**510**	**2.61 %**
Pullman Yard Debris Collection	510	
Office Recycling	**2.86**	**0.01 %**
Whitman County Office Recycling	2.86	
Total Recycling Rate for 2017	**19,511.04**	**99.95 %***

*Percentages do not add up to 100% due to rounding.

3.4 Special Wastes

Special wastes include materials and wastes that are considered part of the historical MSW stream, or are wastes that have recently been singled out for additional scrutiny and/or treatment. The following sections describe existing special waste programs and systems within Whitman County.

3.4.1 Washington State University

WSU is included in the special waste category, not because the MSW sub stream from campus is markedly different, but because the University administers, evaluates, and adjusts their own programs based on standards and conditions set by University staff and/or state legislative directives. Hence, while the WSU programs may fall under the umbrella of this Plan, the University has historically operated their own programs. In 2012, WSU took over the waste service for all WSU owned residential locations. This change is reflected by the notable increase in waste landfilled, as compared to waste that was landfilled prior to 2012.

3.4.1.1 WSU Recycling Facility

WSU operates a comprehensive Waste Management program which supports waste reduction, reuse and recycling efforts for paper, plastic, metal and surplus equipment for all WSU facilities in Whitman County. Recycling for academic and administrative buildings utilizes comingled collection of most materials; significant quantities of mixed paper and cardboard are collected separately where the quantities justify a separate process. WSU processes most recyclables in-house into market ready bales and direct markets recycled commodities to mills and brokers.

Table 3-6 shows commodities by category and quantity recycled in 2017.

Table 3-6: WSU Recycled Material Composition for 2017.

Commodity	***Tons***	***Commodity***	***Tons***
Old Corrugated Containers (Cardboard)	294	**Wood**	410
Co-mingled Recycling	330	**Computer Scrap**	34
Mixed Grade Paper	161	**Scrap Metal**	198
Light bulbs	7.5	**Batteries**	4.5
eWaste	12		
Total			**1,451**

3.4.1.2 WSU Chemical Recycling Program

WSU Environmental Health and Safety (EH&S) operates a chemical recycling program. Unopened containers of surplus chemicals are only available to WSU faculty, staff, and graduate students for free. An online database (http://www.ehs.wsu.edu/es/) lists the currently available chemicals which are stored in a secure chemical storage room maintained by EH&S.

3.4.1.3 WSU Composting Facility

The WSU Compost Facility opened in 1994 under the WAC 173-304-300 criteria. In 2017, 11,392 tons of material was processed at the facility. The materials composted include animal manure and bedding, food waste from dining centers, yard debris from grounds and lab animal bedding. Table 3-7 shows the types of feedstock and approximate composition of the compost. The finished product is commercially sold to local businesses on a wholesale basis, used as animal bedding or applied to WSU land. WSU only accepts materials from University sources.

Table 3-7: Feed Stock Inputs To The Compost Facility 2017 (tons).

Feed Stock Inputs	**Total (in tons)**
Animal Manure and Bedding	9,467
Laboratory Animal Waste	66
Dining Center Food Waste	234
Soil	205
Wood	1,037
Yard Waste/Pruning	293
Animal Tissue (Carcass and Slaughter Offal)	90
Total	**11,392**

Table 3-8 summarizes the use for the finished product from the compost facility.

Table 3-8: Uses For WSU Compost Facility Output 2017 (tons).

Use of Compost Product	Tons	Percent
Land Application	0	0
Bedding	2,910	38.1%
Commercial Sales	2,191	28.7%
Chipped Wood (Hog Fuel)	787	10.3%
Storage	1,750	22.9%
Total	**7,638**	**100%**

3.4.1.4 WSU Medical, Pathological, and Low Level Radioactive Waste (LLRW) Treatment

WSU operates a Medium Size Medical Waste Incinerator for onsite disposal of medical, pathological and low level radioactive wastes. Medical waste is comprised of laboratory waste that may be contaminated with pathogens. Pathological wastes are comprised of animal carcasses, tissues, and animal bedding. LLRW are incinerated in compliance with WSU's Department of Health permit. The facility operates under an Air Operating Permit (07AQ-E211) issued by the Washington State Department of Ecology, which also includes the composting operation mentioned in the following section. In 2017, WSU incinerated 25.2 tons of medical waste, 0.1 tons of LLRW and 43.4 tons of pathological waste. The total volume of Medical, Pathological and LLRW for 2017 is 68.7 tons. From September 2007 through November 2010, WSU initiated a program to ship certain medical and pathological waste for offsite disposal through Stericycle Inc. to reduce the use of onsite incineration. In 2010, WSU shipped 27.3 tons of material through Stericycle. This program has ceased due to the cost of shipping. WSU installed a new piece of equipment that will process a large portion of this waste, starting in 2018.

3.4.1.5 Animal Carcasses

Animal carcasses that are accepted by rendering are picked up and processed by Baker Commodities. Non pathological animal carcasses and offal are composted and pathological or infectious materials are incinerated.

3.4.1.6 WSU Used Oil

WSU collected 14,964 pounds of used motor oil, pump and other oils in 2017 and sent it to an off-campus oil recycling facility.

3.4.1.7 WSU Construction Waste Management

WSU provides recycling of demolition and construction waste resulting from projects on the WSU campus. Material that is not reused is separated and recycled or composted. WSU is currently accepting wood, mixed metals, cardboard and other construction site waste.

3.4.2 Agricultural Waste

Regulations allow waste generated on a private property to be disposed of on that property, providing that it does not create a hazard to human health or the environment. Agricultural waste, except toxics, herbicides and pesticides generated within the county in the practice of crop and animal production is disposed of in this manner. The remaining waste is disposed in the MSW stream, or at WSU all animal carcasses are incinerated or rendered, infectious manure

and animal bedding is incinerated and non-infectious manure and animal bedding is composted. There have been isolated cases of illegal disposal of animal carcasses within county and state highway right of ways, but this has not occurred often enough to be deemed a problem by the local health district. As no specific problems have been identified, quantities of this material have not been estimated, and current disposal practices are deemed adequate.

The Washington State Department of Agriculture's (WSDA's) Waste Pesticide Identification and Disposal Program, in cooperation with the DOE and local agencies, regularly collects unusable agricultural and commercial grade pesticides from residents, farmers, small businesses and public agencies free of charge. Events are held at locations across Washington State where customers can bring their unusable agricultural chemicals for proper disposal. The schedule for the spring events is published in January of each year. The fall schedule is published by July. Potential customers can contact WSDA for more information or to be notified of scheduled events in their area.

The goal of this program is to properly dispose of unused or unusable pesticides to prevent human and animal exposure to old pesticides and to eliminate the potential source of contamination to the environment. Depending on the available funding, WSDA holds eight to twenty regional collections statewide each year. These collections are one or two day-day long events depending on the amount of pesticides expected. In addition to the larger regional events, the Waste Pesticide Identification and Disposal Program will also collect unusable pesticides from a single farm or business location due to chemical hazards, transportation concerns or special situations.

WSDA also sponsors a program of recycling for empty pesticide containers. McGregor's receives empty containers from customers and a company contracted by WSDA picks up the containers and recycles them.

3.4.3 Appliances

See "3.3.11 Appliance and Metal" for description of available services.

3.4.4 Asbestos

The Whitman County CRSWF accepts and disposes of asbestos. Acceptance and disposal follows federal and state regulations. A form, called a manifest, is required of the customer declaring the source, volume, hauler, and contractor for the asbestos. The following tonnages of asbestos contaminated material were accepted and disposed of at the County-operated landfill in the years 2004-2017.

Table 3-9: Asbestos Received at Whitman County Landfill.	
Year	Tons of Asbestos
2004	141.70
2005	53.70
2006	164.29
2007	76.54
2008	168.99
2009	46.03
2010	516.79
2011	101.67
2012	54.98
2013	186.04
2014	159.46
2015	277.21
2016	257.94
2017	256.48

Most of the asbestos accepted at the landfill originates from WSU building projects. The spike in volumes every other year is assumed to be the result of the funding cycles for the WSU building projects. These quantities are included in the MSW annual tonnage reports. Whitman County has one of the few permitted sites in eastern Washington and easily handles the asbestos waste generated within the County. The current disposal practice is deemed adequate.

3.4.5 Auto Salvage

Currently, there are no operating wrecking yards in Whitman County. Needs for processing of vehicles for salvage are being handled by out-of-county businesses, primarily in the Lewiston/Clarkston area.

3.4.6 Biomedical and Pathological Waste

Beginning in 1994, Whitman County ceased co-disposing of biomedical waste with MSW. The hauling companies are required to arrange for separate disposal of biomedical waste by an approved disposal service prior to this waste entering the municipal waste stream. Should biomedical waste be found in the waste stream by transfer station staff, it is removed and returned to the hauler for proper disposal. Disposal quantities are approximately 63 tons annually.

3.4.7 Biosolids

All biosolids currently generated in Whitman County are applied to non-irrigated, cereal grain cropland as a beneficial soil amendment. Although rules and regulations governing the application of biosolids are established at the federal level, Washington State Department of Ecology has been delegated the authority for permitting and enforcement over all biosolids. Chapter 173-308 WAC defines biosolids as a beneficial product that must be permitted separately from the solid waste handling requirements of Chapter 173-350 WAC. Whitman County Health Department works directly with biosolid generators to aid and to ensure that application projects conform with state and federal rules. The only significant producer of biosolids in Whitman County is the City of Pullman which generated approximately 459.56 dry tons of biosolids in 2017and has its own permitted land application site. The communities of Tekoa, Colfax, and Palouse also have their own permitted land application sites for their municipal biosolids.

Whitman County septage is hauled to municipal wastewater treatment facilities for disposal by two permitted septic tank cleaning firms. Septage generation rates vary from 10,000 to 60,000 gallons per week according to the permitted haulers.

3.4.8 eWaste

One relatively recent waste that continues to pose an increasing challenge is discarded electronics or "eWaste" (i.e. old televisions, stereos, computers, monitors (CRT), keyboards, printers and other peripherals). With the rapid rate of new innovation, there is an ever shortening product life cycle and an increased penetration of new electronic equipment into homes and businesses to replace old obsolete units. This trend has created an expanding electronic waste stream which will likely be a significant source of waste for years to come.

Managing this stream poses challenges to disposal given the heavy metals in computers and the lead in glass monitors. At the national and regional level, various initiatives, including involving manufacturers and retailers through product stewardship, have been implemented.

Collection of electronic waste is currently provided in Whitman County by Pullman Disposal and Goodwill Industries. Pullman Disposal started accepting (and began collecting) electronic waste for recycling in July 2004. On July 21st, 2004, the first piece of electronic equipment was delivered to Pullman Disposal Service (the company) for proper handling/recycling. The public may bring their eWaste to the company. The customer is charged by the amount of eWaste material that is delivered. If the customer desires the company will send a driver out to collect the piece of eWaste.

Pullman Disposal receives material qualifying under the state's E-cycle Washington program (TVs, monitors, laptops, CPUs), packages them on pallets and shrink wraps the pallets for transport. Pullman Disposal then contacts the

state E-cycle coordinator and the state sends a contracted hauler to pick up the packaged electronic materials. Pullman Disposal also collects (for a fee) other types of electronic waste, which is taken to Pacific Steel Recycling in Lewiston, Idaho for recycling. The public has responded well to the program. In 2017, Pullman Disposal processed 38.6 tons of eWaste under the E-cycle Washington, and approximately 4.6 tons of non-qualifying eWaste.

CFL and fluorescent bulbs are another growing concern, in a similar category to the electronic waste discussed above. Fluorescent bulbs collected at the Whitman County Landfill are shipped to LightRecycle for proper disposal. Additionally, rechargeable batteries are collected and turned over to a state contractor (RBRC) for recycling.

Whitman County continues to educate the public about the availability of eWaste drop locations. Over the next several years, it is anticipated that Whitman County will continue to follow the lead of the State of Washington in the development of policies and recycling programs to handle this waste stream. The County will also be exploring possibilities for a more convenient drop location for the northwest corner of the county.

3.4.9 Used Tires

Used tires are separated from the MSW stream at the transfer station. Whitman County and Waste Management coordinate the hauling of the tires and alternate responsibility of transport depending upon their respective schedules. The tires are currently being hauled and landfilled at the Graham Road facility in Airway Heights. In 2017, approximately 79 tons of tires were shipped from the transfer station. Most of the major local tire stores arrange for their own tire disposal for recycling. The County began a tire collection/recycling event in the summer of 2003, in which residents brought tires to the Whitman County CRSWF for free disposal, and all tires collected were then transported to a tire recycling company. The program called "Tire Amnesty Day" was well received, collecting over 40 tons of tires in the first year. Once an annual event, this event has since ceased due to lack of available funding. However, the County continues to check for grant funds related to tire disposal.

3.4.10 Yard Debris and Clean Wood Disposal

Whitman County accepts yard debris free of charge from County residents. Yard and garden wastes, clean brush and tree trimmings are accepted. The yard debris is temporarily stored on site until there is a sufficient amount to grind. The yard waste is then processed with a tub grinder. The yard debris pile is ground several times a year. Whitman County contracts with Cannon Hill to grind the yard waste. The County recently put out a bid for grinding and hauling in 2018, and will continue to do so periodically. In 2003, a total of 59 tons of yard waste was collected at the Whitman County CRSWF. In 2006, 2,106 tons of yard waste was received. In 2009, 2,350 tons of yard waste was received. In 2017,

approximately 3,388 tons of yard waste was received. A portion of this yard debris is delivered from a local hauler, Pullman Disposal, who operates a curbside yard debris collection service during the months of March to November. (For more information on Pullman Disposal's yard debris collection see previous section, this chapter.)

Whitman County also accepts clean wood waste at a reduced rate ($15/ton minimum up to 960 lbs., $25/ton over 960 lbs.) and stores it adjacent to the yard debris pile. The clean wood waste is ground at the same time as the yard waste, thus enhancing the product for its use as fuel. This program accomplishes two things. First, it diverts clean wood waste from being land filled. Second, it minimizes the need for land application of yard debris.

Whitman County has access to a wood chipper to smaller-volume chipping programs. The chipper was funded by Ecology and is on loan to Whitman County. Originally, the County received funding through Ecology for a community chipping program. All of the communities participated in the program when there was no cost to the community. When the funding from Ecology became unavailable, it became necessary for the County to charge for the staff member, vehicle and fuel to chip yard waste in the communities. Only one community participates now in the program. The County Road Department uses the chipper for roadway clearing projects as an alternative to burning.

Whitman County is currently shipping the processed yard debris to the Clearwater Paper Co-generation plant in Lewiston, Idaho. There it is used as hog fuel generating electricity. Another possible future use of the processed yard and wood chips being considered is as daily cover for the new landfill if that alternative is constructed.

3.4.11 Limited Purpose Landfill

Whitman County currently operates a limited purpose landfill (also known as Cell 4) located at the CRSWF. The waste accepted includes asbestos, inert waste, asphaltic shingles, demolition wood waste, and clean fill soil materials. In 2017, approximately 711 tons were buried at the site. Table 3-10 provides a summary of the amount of demolition debris and asbestos waste that was accepted between 2010 and 2017.

Table 3-10: Cell 4 Waste Acceptance Rate – 2010-2017 (tons)[1].			
Year	**Demolition Debris (tons)**	**Asbestos Waste (tons)**	**Total Waste Accepted (tons)**
2010	391	517	908
2011	336	102	438
2012	385	55	440
2013	1,017	186	1,203
2014	793	159	952
2015	1,934	277	2,211
2016	507	258	765
2017	454	256	711
Total	**5,817**	**1,810**	**7,628**

Note: [1] Data provided by David Nails (January 9, 2018).

The estimated long-term average of waste that is expected to be accepted at Cell 4 is 1,000 tons per year. As per the most recent grading and fill plan for Cell 4 (Great West Engineering, 2018), Cell 4 has approximately 38,400 cubic yards of airspace remaining. With the estimated in-place (effective) waste density of 942 tons per cubic yard, the estimated life remaining in the cell is 18 years. The County is in the process of evaluating the future disposal alternatives for these types of wastes. Currently, it is anticipated that these wastes will be included with the municipal solid waste once Cell 4 is full. The Great West Engineering document estimated that it would cost $986,000 to close Cell 4.

3.4.12 Other Waste Handling Facilities

In addition to the Whitman County CRSWF, there is one privately owned inert waste handling facility that is permitted by the Whitman County Health Department. The facility is presented in Table 3-11:

Table 3-11: Waste Handling Facilities In Whitman County.	
FACILITY NAME	**WASTE TYPE**
Clark's Inert Waste Landfill (permitted)	Concrete, Asphalt and Clean Earth
Atlas Sand and Rock Inert Landfill	Concrete, Sand, and Rock
WSU Compost Facility	Organic

Parker Auto/Waste Metal Recycling near Malden is closed. The following facilities used to accept demolition, concrete and asphalt but have closed: Delta Waste Handling, Roy Kopf Fill, and Valley Cement.

3.4.13 Variances

Whitman County required no land use variances (for permitted facilities) at the time this plan was prepared. There are two permitted facilities, the Whitman County CRSWF and the WSU Compost Facility.

3.4.14 Existing Solid Waste Collection in Whitman County

Whitman County does not operate collection services, although the Whitman County CRSWF is open for self-haul disposal. Collection services are provided by Empire Disposal, the Town of Garfield, Pullman Disposal, and WSU. Of these collectors, Empire Disposal and Pullman Disposal are the only private carriers and therefore regulated. Collection services are regulated by Chapter 81.77 RCW and Chapter 480-70 WAC. Chapter 81.77 RCW sets forth the WUTC's role in solid waste management. The Commission grants authority to operate, approves rates, prescribes accounting formats, and requires regulated companies to file annual reports. Exemptions from Commission regulation for solid waste collection include: collection by municipality, solid waste or recycling firms providing service under contract with a municipality, commercial recycling and recycling firms that are under contract with a county.

Quantities, fleet characteristics, and service areas are given in Figure 1-1. Service is provided either by contract and town ordinance, or subscription for rural residents. By Chapter 35.21.130 property owners and occupants of premises are required to use the County's solid waste collection and disposal system. The solid waste collection system is therefore regulated to ensure fair and equal practices are carried out in terms of the protection for the environment, costs to the consumer and the collectors. Collection is controlled through the establishment of a solid waste disposal service areas (districts). Solid waste districts are established through the public meeting process and administered by the Board of County Commissioners. Solid waste districts limit the fees that can be charged and the costs for reimbursement of solid waste facility construction projects. Per the RCW's, the Board of County Commissioners have the authority to form, dissolve and modify solid waste districts. The districts (service areas) have been established previously for each of the haulers serving areas in Whitman County.

Table 3-12 highlights rates for selected services offered by the four local haulers. Volume based MSW fees are offered by some of the companies allowing local citizens to reduce their garbage bills by reducing their quantities of waste. The current collection system has the capability to expand or contract to meet the solid waste needs of the community for the next six years. A company proposes changes in rates, terms, and conditions by publishing its tariff and filing the tariff with the Commission. The Commission determines whether to allow the tariff changes to become effective.

Table 3-12: Selected Residential Solid Waste Collection Rates.						
Weekly residential pickup	Single micro-can (10 gal)	Single mini-can (20 gal)	Single can (32 gal)	Single can (68 gal)	Single can (95 gal)	Curbside recycling
Empire Disposal (G-75)*	n/a	$14.27	$18.20	$25.91	$32.06	$9.98
Pullman Disposal (G-42)	$13.30	$15.26	$18.14	$24.14	$30.67/ 4 yd. pickup	incl. in garbage rates
Ada-Lin Waste Systems dba Sunshine Disposal & Recycling (G-104)	n/a	n/a	$25.17	n/a	n/a	n/a
Carroll-Naslund Disposal dba Naslund Disposal (G-37)	n/a	n/a	n/a	n/a	n/a	n/a

*A rate increase of 14% was put into effect on April 1, 2018.

Note: Carroll-Naslund Disposal serves the Port of Wilma with eight, 2-cu.yd. containers picked up weekly for $84.71 a month, one, 4-cu.yd container picked up monthly for $52.18 a month, and one, 1-cu.yd. container picked up monthly for $22.04 a month.

Note: Sunshine Disposal also offers a 2-cu.yd. container picked up weekly ($184.64 a month), every other week ($98.52 a month), and once a month ($51.87 a month).

3.5 Existing Municipal Solid Waste Transfer/Disposal

Whitman County operates the only MSW disposal/transfer facility in the County. MSW brought to the Whitman County CRSWF is placed in trailers and moved over county and state roads by Republic Services to Spokane, then by rail to the Roosevelt Regional Landfill in Roosevelt, WA. Current disposal fees for solid waste are shown in Table 3-13. Transfer and disposal services were provided by Waste Management of Washington, Inc., a solid waste services contractor. The contract was in effect until 2012. In July 2013, Republic Services began their contract with the County. The current contract goes until 2022. Waste which meets the criteria for disposal in the limited purpose landfill is also accepted and disposed in the active cell at the site.

Table 3-13: 2017 Disposal Fee Schedule for Whitman County Landfill-Transfer Station.				
Category	Limit	Unit	Intra-county fee, includes tax ($)	Inter-county fee, includes tax ($)
Municipal Solid Waste				
	wt < 260 lb.	Set Fee	15.00	15.00
	wt > 260 lb	Per Ton	106.00	106.00
Permitted Demolition Waste				
	wt < 400 lb.	Set Fee	15.00	15.00
	wt > 400 lb	Per Ton	75.00	75.00
Yard Waste				
	none	------	No charge	No charge
Clean Wood Waste				
	wt < 1,140 lb.	Set Fee	15.00	15.00
	wt > 1,140 lb.	Per Ton	25.00	25.00
Used Tires				
	car tires, if weighed with load of garbage, up to 10 tires	Per Tire.	0.90 extra	0.90 extra
	10<car tires	Per Tire	2.40	2.40
	10> car tires	Per Ton	160.00	160.00
	Truck tires, if weighed with load of garbage, up to 5 tires	Per Tire	3.00 extra	3.00 extra
	5< truck tires	Per Tire	8.40	8.40
	5> truck tires	Per Ton	160.00	160.00
	Tractor tires, if weighed with load of garbage, up to 2 tires	Per Tire	12.00	12.00
	2< Tractor tires	Per Tire	32.00	32.00
	2> Tractor tires	Per Ton	160.00	160.00
Friable Asbestos Contaminated Materials				
	wt < 280 lb.	Set Fee	15.00	15.00
	wt > 280 lb	Per ton	100.00	110.00
Household Hazardous Waste (Household chemicals, cleansers, batteries, paint, car batteries, used motor oil, old gasoline, pesticides, fluorescent tubes, compact fluorescent bulbs, etc.)				
	None		No charge	No charge
Recycling (cardboard, aluminum cans, plastics #1-6, mixed paper products, glass bottles and jars, metal appliances, scrap metal, tin/steel cans)				
	None		No charge	No charge

3.6 Existing Enforcement Program

Washington State established regulations for littering, illegal dumping and the hauling of unsecured loads. Local governments, the DOE, WSDA, and WUTC play various roles in the permitting and enforcement of these regulations. In Washington State, solid waste management activities, such as planning, disposal, permitting, administration of solid waste handling facilities, and enforcement of such activities is the responsibility of the local governments.

3.6.1 Permitting

3.6.1.1 Solid Waste Carriers

As discussed in Section 3.4.14 of this SWMP, the WUTC is responsible for regulating solid waste carriers in Washington State pursuant to RCW Chapter 81.77 and WAC Chapter 480-70. A component of the WUTC's regulatory responsibility is being a solid waste carrier permitting authority. As defined in 81.80.010 RCW, "any person who undertakes to transport property for the general public by motor vehicle for compensation, whether over regular or irregular routes, or regular or irregular schedules, including motor vehicle operations of other carriers by rail or water and of express or forwarding companies" is considered a "common carrier" and must obtain a "common carrier permit" issued by the WUTC. The Washington State Governor's Office for Regulatory Innovation and Assistance explains that property can be general commodities, materials transported by armored car service, and/or hazardous materials.

3.6.1.2 Solid Waste Handling

The Whitman County Health Department is the permitting authority for solid waste within the County. The permitting process consists of three steps:

1. Review of permit application by the Whitman County Health Department.
2. Review of permit application by Ecology.
3. SEPA review and approval upon successful completion of all steps.

The Whitman County Health Department attempts to respond to all complaints of illegal solid waste handling with an initial site inspection to verify the complaint. Photographs, observations, notes, and GPS points are taken to document the extent of the violation. A letter is then sent out via certified mail to the property owner. The letter notifies the property owner of the current violation and to contact the Whitman County Health Department to discuss clean-up efforts and any assistance they may need.

If the violations are resolved, a follow-up site visit is made to document and verify that there are no outstanding solid waste issues. If the violation is not corrected, the process is repeated and a compliance deadline is set. If the

compliance deadline is not met, a civil infraction is issued requiring a court appearance.

3.6.2 Littering and Unsecured Loads

Littering penalties are outlined in RCW 70.93 Waste Reduction, Recycling, and Model Litter Control Act, specifically Section 70.93.060. According to the DOE secured load handout published in 2009, the Washington State fine for an unsecured load is $216. However, larger fines are incurred if an item falls off of the vehicle, particularly if the fallen item causes bodily injury or results in property damage. Whitman County enforces the Washington State law for uncovered or unsecured loads. If the Whitman County scale clerk determines that a load is "unsecured", a $15 fee will be charged. The Washington State Patrol also patrols for unsecured loads in Whitman County.

The DOE established a Solid Waste Management Program in order to support local governments and agencies. A portion of this Solid Waste Management Program is litter pickup programs. For instance, the DOE offers local government funding opportunities for litter pickup and litter prevention education through the Community Litter Cleanup Program (CLCP) grants.

3.6.3 Illegal Dumping

The Washington Pesticide Control Act (15.58 RCW) and the Washington Pesticide Act (17.21 RCW) enable WSDA to enforce the storage, distribution, transportation, disposal, and use of pesticides. As such, WSDA regulates the illegal dumping of pesticides in Washington State. WSDA also works in cooperation with local agencies to operate the Waste Pesticide Identification and Disposal Program. In Whitman County, the Solid Waste Division uses this WSDA program to collect and properly dispose of commercial grade and agricultural pesticides. This program is offered to residents, farmers, and small businesses. The Waste Pesticide Identification and Disposal Program aids in the prevention of illegal dumping of pesticides.

CLCP funds are also provided to local governments to fund illegal dumping cleanup.

4. Analysis of Existing Solid Waste Programs, Facilities and Systems

4.1 Waste Reduction, Reuse, and Recycling

Whitman County has made great strides in recovering recyclable material from the waste stream and reducing waste generated. However, solid waste facility operators still observe recyclable material passing through the Whitman County CRSWF even with the available recycle options. Continued education and expansion of alternative markets must be pursued to reduce disposal of these recyclables.

4.2 Waste Reduction Measurement Methodology

RCW 70.95.030(23) defines waste reduction as "reducing the amount or toxicity of waste generated or reusing materials." The DOE guidelines for the development of a SWMP state, "Waste reduction efforts should only be included in a tally if a jurisdiction has established a method to measure achieved waste reduction which is acceptable to Ecology."

In 1995, the DOE formed a committee of solid waste professionals charged with the task of establishing waste reduction measurement and methodology standards for the State of Washington. Technical assistance of how to design and implement waste reduction practices was offered through training courses, workshops and solid waste professional meetings. There are currently no standards for the measurement of waste reduction in Washington and there are very few waste reduction measurement models in the Northwest even though RCW 70.95 identifies waste reduction as the top solid waste management priority in Washington State. Although local jurisdictions are supposed to formulate measurement standards, without statewide standards the resulting tally for the County may not be comparable to other jurisdiction's results. Also, waste reduction and reuse elements have recently been removed from the state's newly revised recycling survey. No additional report requirement has been made to measure Washington State's progress in waste reduction. Waste reduction programs are difficult to evaluate without meaningful measurement standards that are applicable to all programs within Washington. Until applicable measurement standards are completed, Whitman County should evaluate reduction programs using rational deductive and numerical approaches based on existing state waste and resource categories.

4.3 Reduction and Reuse

WSU operates a Surplus Store for the reuse of surplus office, computer and other equipment. School supplies and home furnishings discarded by students are also channeled through this outlet.

The practice of waste exchange has routinely occurred at the county MRW facility, particularly for water based paints. County residents will often check the inventory of paints at the MRW facility, looking there first, for a suitable product to meet their needs instead of purchasing new.

Many of the County's yard debris compost education programs offered by PCEI consist of providing various informational handouts and brochures to residents. The Master Gardener Program also promotes and provides training for backyard composting. However, there appears to be a lack of hands-on workshops and demonstrations that teach residents the process of composting, and an increase in hands-on workshops may help to solve compost pile problems and increase the number of residents that backyard compost.

4.4 Recycling Programs

Accessibility by the public to household recycle programs within the County appear to be generally adequate, with only a couple of exceptions where the public would like greater accessibility to facilities. Pullman, the only city that approaches an urban density, has required single stream programs for both multi- and single- family residences, which are currently operating. Pullman also has a drop-off recycling center available to the residents and businesses. WSU has recycle collection areas throughout the campus and a drop-off recycling center. The second largest city, Colfax, has a subscription curbside recycling program, but that program has a limited number of subscribers. A drop-off recycling center is available to the public free of charge, and most residents elect to drop their recyclables off at the center. The schools in each of these communities will also process their recyclables through these centers. The Town of Garfield, Town of Lacrosse, Town of Rosalia, Town of Endicott, and St. John offer large blue bins for recycling, located at the local schools. These blue bins are provided by Whitman County and funded by the CPG grant funds. Whitman County would like to place blue bins in the Town of Oakesdale, Palouse, and Tekoa. Rural community recycling centers are historically actively utilized by rural residents in the unincorporated area surrounding each particular center.

Volume based MSW fees are available through the two certificated haulers, which allows citizens to benefit from reducing waste quantities.

There are recycling services available to businesses through both certificated haulers, which allow businesses to have cardboard collected and recycled, and Pullman Disposal also provides a recycling collection to businesses for plastics,

glass, paper, corrugated cardboard, and tin. Rates for pickup vary depending on the commodities recycled and frequency of pick up.

The number of schools participating in the County recycling grant program has declined. No funding for school recycling programs was provided during the past several years. Probable reasons for the decline in the number of schools participating can be linked to the following:

* Of the 13 districts, 11 are rural. Rural schools struggle to provide recycling programs due in large part due to transportation costs to move the material to and from recycling centers, which are often many miles away. This is a time consuming, labor-intensive task.

* Many school districts indicate an interest in recycling but no leadership-or no one person-has the time to devote to such a program.

* The turnover of students each year makes it hard to keep a consistent interested core of students involved. Also, constant turnover requires on-going education of students on how to properly sort recyclables and to avoid contamination. In one school, a recycling program was halted when the local hauler refused to collect the school's recyclables due to heavy contamination.

In the City of Pullman, all five public schools are recycling to one degree or another. Cardboard and other items are being collected in the elementary and middle schools. The County allocates grant funds to provide for the collection of the recyclable materials from the schools through Pullman Disposal.

The County Recycling Director will assist in coordinating with waste haulers in the County to pick up school recycling. The haulers have the necessary equipment and will receive the revenues from the commodities, minus processing fees by the County.

4.5 Community Recycling Education and Outreach

Community exposure to recycling information appears to be generally sufficient, although reduction in the amount of CPG funds has caused the County to necessarily suspend or reduce some of the promotional programs; increased exposure to information regarding recycling services and current environmental issues will further help to meet the State's recycling goals and reduce waste. The County is hopeful that additional grant funding will be available from the state in the future to fund informational and promotional programs.

The Whitman County Green Star Program is one of the programs which has been suspended due to lack of funding. The program provided businesses with waste

reduction practices, energy conservation, and methods to buy recycled products (also referred to as 'closing the loop'). Resumption of this program is needed to expand the knowledge base on cost-effective environmental business practices, while also increasing awareness about the program to prospective businesses/members.

4.6 Disposal Bans

eWaste and CFL and fluorescent bulbs are the only disposal bans in Whitman County. Disposal of these materials in MSW is also banned statewide. Whitman County might consider other disposal bans, especially if applied in concert with alternative disposal/recycle methods. Bans could be used as a basis of a reduction strategy for such material as yard waste and other green wastes.

4.6.1 Special Waste

Review of existing special waste programs and systems reveal that, except for automobile salvage and paint, no programs need be modified or added.

Availability of an auto salvage facility could reduce the potential for improper disposal of automobiles. While the Department of Health has not identified any cases of improper disposal, Whitman County could assist private industry in establishing an auto wrecking facility. The County can also encourage businesses that specialize in reconditioning vehicles for sale and reuse, which would otherwise be sent to a wrecking yard. There is a small number of private salvagers who pick up vehicles for salvage in Whitman County.

4.6.2 Collection

Collection services are available to all citizens within the County, and offer variable can rates. The current system has the capability to expand or contract to meet the solid waste needs of the community for the next six years. Additional considerations or modifications to those services need not be considered.

4.6.3 Transfer and Disposal

In 2015, the County completed construction of the new transfer building and various site improvements at the CRSWF. The new approximate 12,000 square foot transfer building was constructed to increase capacity and enhance the safety of the County's waste transfer operations. The new building features eight stalls separating commercial and public haulers, and a knuckleboom crane to compact the garbage and distribute payload in the haul trailers. The new building is also designed for a second loading bay with a future preload waste compactor, if the need arises. One modification considered for the old system

was to eliminate the conveyor and position the trailer below grade so that MSW unloaded onto the tipping floor can be moved across the floor and into the trailer by gravity. This consideration was implemented in the new building. Other site improvements included: an automated scale for commercial trucks, a covered z-wall for yard waste collection, and general improvements to the site grading and drainage.

The County also completed a study to consider development of a new MSW landfill cell (Cell 5) at the CRSWF. A new cell would eliminate the need for a long haul disposal contract and allow the County to better control its long-term cost commitments. When the current limited purpose landfill cell (Cell 4) reaches capacity, the waste would be placed in the new MSW cell. The County will also encourage development of facilities to process demolition waste for reuse.

The inflation factor applied to the tipping fee (2% every year, or 4% every other year), in accordance with Resolution #066100, is adequate for maintaining the current programs. The fund continues to accumulate revenues at a rate sufficient to meet periodic capital expenditures and to moderately grow capital reserves which will be used towards development of a new MSW cell if the County chooses to implement that plan. Based on the recently completed CFP, it is estimated that the new Cell 5 would cost approximately $7.4 million before inflation, or $9 million considering inflation.

4.7 Compliance in Meeting WAC Standards, and Possible Enhancements

The Minimum Functional Standards (MFS) for solid waste handling are described under WAC 173-304. Whitman County closed the original MSW unit (Cells 1-3) at the CRWSF in 1995 under the MFS requirements (pre-subtitle D). The groundwater monitoring program at the closed landfill is for the detection monitoring of groundwater contaminants. There are a total of nine active groundwater monitoring wells on the site. Six of these wells are used to collect quarterly samples as part of the groundwater monitoring network. Of the six, four are used to monitor the closed landfill unit. These wells include MW-5, MW-8, MW-10, and MW-11. The other two active wells (MW-12 and MW-13) are used to monitor Cell 4.

The four wells used to monitor the closed landfill unit consist of one up-gradient well (MW-11) and three down-gradient wells (MW-5, MW-8, MW-10). The wells are tested for field parameters (temperature, conductivity, and pH) and geochemical indicator parameters (such as chloride, nitrate, nitrite, dissolved and total metals, and a variety of others in accordance with WAC 173-304). Water levels in all of the active monitoring wells are also measured quarterly. Public Works publishes a groundwater sampling and testing summary report each year, made available to the public upon request. A copy is forwarded to

both Ecology and Whitman County Department of Environmental Health for concurrence.

Some low levels of constituents have been detected in the groundwater and periodic monitoring will continue until it is determined that no adverse environmental impact will occur. The current fee, which supports post-closure care activities, will be continued until landfill gas monitoring and groundwater monitoring is completed. The fee has been evaluated and adjusted to support the future post-closure activities.

Whitman County adheres to requirements set forth in WAC 173-350 for solid waste facilities at their CRSWF. Facility components include:

1. Intermediate solid waste handling (transfer station and compaction);
2. Piles of combined yard debris, mulch, and clean wood waste used for storage or treatment;
3. Surface (water) tanks;
4. Moderate Risk Waste facility (household hazardous waste); and,
5. Limited purpose landfill.

The County completed improvements to the contact water management system this year that services the old transfer building and new transfer building. The improvements included replacement of the lined impoundment pond with two underground, double-containment storage tanks and an at-grade lined tank used seasonally to evaporate contact water. The system also includes a truck fill station to off-load contact water and an underground tank for fire suppression water.

Other future capital projects were described in the recently completed CFP. Over the next 20 years, the County plans to undertake one major capital improvement project, and two major maintenance projects at the waste transfer building. The projects include: remodeling/expanding the waste transfer building and installing a preload compactor unit, repairing the waste transfer building tipping floor, and replacing the knuckleboom crane used at the waste transfer building.

In addition to the previously described capital improvement and maintenance projects, the CFP states that the County may need to consider adding a new 80-foot, in-ground platform scale and a new scale shack. The purpose of these improvements would be to increase efficiency at serving inbound and outbound customers. Also, the County may convert the original waste transfer building into a small material recovery facility (mini MRF). The feasibility evaluation of the mini MRF conversion was not included as part of the CFP.

Documents used as part of the site's operation are an Operations and Maintenance Plan and a Closure/Post-Closure plan for the facility's

components. The limited purpose landfill is anticipated to have a remaining life of 18 years. The County is in the process of evaluating the future disposal alternatives for these types of wastes. Currently, it is anticipated that these wastes will be included with the municipal solid waste once Cell 4 is full. The closure plan contains a section on financial assurance.

In 2022, Whitman County's contract with Republic Services will end. Come 2021, Whitman County will need to decide whether they would like to construct a new landfill cell, renegotiate their contract with Republic Services, or rebid for the contract.

4.8 Possible Program and System Enhancements

The previous sections have provided an inventory of existing solid waste facilities, programs and services, and have discussed the needs and opportunities of each general category. This section responds to those needs by presenting programs which could enhance those already in place, or provide services that are not included in existing programs. Selection of each program was made by evaluating current literature. Those programs which were clearly defined, included reasonably rigorous quantitative analysis, and were considered a success by the implementing party were nominated for additional economic analysis by staff. These programs are included here.

Three essential definitions precede the discussion of the programs, namely:

1. Designation of recyclable materials;
2. Urban/rural designation; and,
3. Criteria for selection of applicable programs.

4.8.1 Designation of Recyclable Materials

RCW 70.95.090(7) (c) requires a "schedule for the designation of specific material to be collected for recycling." This section provides that designation of material. Single stream collection of these materials has already been implemented, so no implementation schedule is incorporated in this section. Additional materials are collected by agencies other than the County, depending on location and marketability. The designated materials are:

1. Old newsprint (ONP)
2. Old corrugated cardboard (OCC)
3. Mixed Paper/Books
4. Tin cans
5. Aluminum cans/foil
6. PET plastic bottles #1
7. HDPE plastic milk jugs #2

8. Glass
9. Yard debris
10. White goods / Scrap iron
11. Magazines
12. Fats and oils (from WSU)
13. Food Waste (from WSU)
14. Colored Plastic
15. Plastic grocery bags
16. Clean Wood
17. Tires
18. Electronic Products

Items 1 through 11 in the list above represent commodities which have historically generated revenue and are collected at the Whitman County CRSWF. The facility cannot handle some recyclables for the following reasons:

- Material is not source separated; or,
- Material is source separated, but cannot be accumulated except in relatively small quantities; or,
- Material has low value; or,
- Material is not handled by area markets.

Because marketing of recyclables is sensitive to economies of scale, Whitman County does attempt to process and market material on a cooperative basis. The County accepts materials from certificated haulers, who also process and market materials on their own. The Whitman County CRSWF is used for process and storage until enough material is accumulated to transport efficiently. Whitman County Staff markets single stream and separated materials to receive the greatest return on commodities pricing. Whitman County does not rely on a single source or hold a contract with Republic Services for recycling processing. However, Whitman County typically uses Republic Services for recycling services because they have provided a solution to make recycling more economical. Republic Services transports recyclables by rail, using 48 foot containers, and then delivers the material to their recycling facility in South Seattle for processing. Republic Services then broker material for the greatest return and provide a rebate to the County based on market conditions. The revenue received by the County is returned to the haulers with the County retaining a $30/ton processing fee to support the equipment and infrastructure required for processing and storing recyclables.

In addition to the above listed materials, other materials that are useable and marketable may also be recycled through a number of other programs within the County.

4.8.2 Urban/Rural Designation

The previous Plan addressed differences in population density and other factors throughout the County and as a result delineated urban and rural areas in accordance with RCW 70.95.090(7)(b)(i).

The review of resources indicated the following:

- The Whitman County Comprehensive Management Plan states as a goal to: "Discourage urban and suburban development outside of incorporated areas within Whitman County, except within designated incorporated communities."
- The WUTC currently certifies four private collection services, which serve 1) Pullman 2) Town of Lamont with rural, 3) Port of Wilma and 4) the rest of the County.
- Pullman's population of 32,110 is much larger than any other incorporated area of Whitman County and meets the threshold of 25,000 suggested by State Planning Guidelines for an urban area.
- Pullman has passed an ordinance allowing mandatory fees be assessed to support curbside recycling for residential customers and a voluntary curbside recycling fee for customers who reside up to two miles outside the city limits. The level of service offered in Pullman is therefore demonstrably different from the other communities and rural areas of the County.
- The designation adopted in the previous plan for urban and rural is: property within the incorporated boundary of Pullman will be considered urban and all other property and communities outside of that boundary will be considered rural.
- Programs developed for the urban designation can also be considered for Colfax, the second largest community in the County with a similar density to Pullman and a significant population base, totaling 2,790. All other communities in Whitman County are much smaller in size and therefore warrant a rural designation.

4.8.3 Criteria for Selection of Applicable Options

A number of new ideas have been suggested in Whitman County and existing programs in other states, counties, and municipalities were reviewed for content to determine if they could be reasonably applied in Whitman County. All programs that appeared to be useful are included in this section. The programs were evaluated using the following criteria:

I. The hierarchy for waste management adopted by the State, which are (in order of priority):

1. Reduction

2. Reuse
3. Recycle
4. Energy recovery
5. Landfill

II. The initiatives of the State Beyond Waste plan, including the following initiatives:

1. Moving toward Beyond Waste with industries
2. Reducing small-volume hazardous materials and wastes
3. Increasing recycling for organic materials
4. Making green building practices mainstream
5. Measuring progress toward Beyond Waste

III. The goals established by the SWAC are:

1. Emphasize and encourage effective solid waste reduction activities throughout the county and its towns/cities, tailored around the State Beyond Waste Plan.
2. Emphasize and encourage the recovery, re-use, and sale of materials diverted from the waste stream to offset the cost of countywide waste handling.
3. Emphasize and encourage the safe collection and disposal of moderate risk wastes such as chemicals, pesticides, and herbicides.
4. Provide educational opportunities to students and the public at large about types of waste, where it ends up, and ways to recycle, reuse and reduce solid waste in the community and encourage policies and practices to minimize waste.
5. Develop and implement a plan to reduce illegal dumping and litter activities countywide.
6. Develop and implement a long range plan for the effective operation of solid waste and recycling activities in Whitman County, including developing Whitman County's own landfill and utilizing technology to continuously improve efficiencies in solid waste handling and disposal.

IV. The directives of the Board of County Commissioners, which include:

1. Support of solid waste programs that support and conform with state regulations;
2. For large investments greater than $300,000, outside financial assistance should first be considered for program capitalization and startup costs; and,

3. That staffing of programs is minimized at the County level.

V. The use of basic economic analysis, including:

1. Evaluation of each option in regard to possible alternative disposal costs.

Whitman County should continue to evaluate additional and innovative programs as they mature. All programs should be evaluated using the criteria presented above.

The following reduction, reuse and recycling programs are introduced for evaluation and recommendation in the final chapter of the Plan.

4.9 Waste Reduction

4.9.1 Product and Disposal Bans

As previously stated, disposal bans, if applied in concert with alternative disposal/recycle methods, could be used on a targeted basis and as a part of a larger reduction strategy. Possible disposal bans could include yard waste. The Board of County Commissioners have stated that product bans should be addressed at the state or federal level due to the fact that most products are distributed at the regional and national levels, which is beyond the venue of Whitman County. The only disposal bans in Whitman County are for eWaste and mercury containing light bulbs (e.g. CFLs and fluorescent bulbs).

4.9.2 Waste Reduction/Prevention Program (Backyard Composting)

Waste reduction or prevention is the preferred management strategy for solid waste. Whitman County currently has no official prevention program in service. A system which eliminates waste at the source, such as backyard composting, or the use of a mulching mower to return lawn clippings to the ground, is preferable to providing service which requires additional handling and infrastructure support.

Although not an official program, backyard composting and lawn mulching practices are encouraged in Whitman County.

4.9.3 Shop Smart Campaign

The goal of this program is to expose the public to minimizing consumption of merchandising material by reducing or reusing packaging. The program would also promote buying recycled products, or material that can be recycled.

The State of Washington offers a shop smart contract in which a county may participate for their purchases. The state contract contains many items that meet criteria for EPP.

4.10 Reuse/Reuseables Programs

There are currently a number of thrift stores offering used items for sale which have been donated to the store. A few examples of the industries currently offering goods for resale include Goodwill Industries, The Grandmother Shop in Colfax, and a facility for the disabled in Pullman. A more comprehensive list of stores handling donated items for resale can be found in the published Hop to Shop brochure published for Whitman and Latah Counties.

The Move Out, Pitch In program in Pullman accepts donations of useable items from students who are relocating and redistributes the items to other students who want to reuse them. Whitman County partners with a number of non-profit organizations in the outlying (off-campus) areas to coordinate the collection of items. WSU coordinates collection of items from campus student housing. In 2010, 50 tons of household items from students were re-diverted for use by other students. This resulted in an overall savings of $24,000 in disposal costs. The College Hill Association has awarded this program the 2010 Good Neighbor Award. The Move Out, Pitch In program is ongoing, though the tonnage of household items collected and resulting disposal savings are no longer tracked.

4.11 Recycling

4.11.1 Recycled Product Promotion

Review of existing programs leads to the conclusion that while recycling is reasonably available, there are few programs that actively encourage the use of products which incorporate recyclables. The Green Star Program, which is targeted to businesses, has recently been suspended due to lack of funding. Consequently, programs are needed which would help "close the loop," namely a buy recycled campaign and a recycled procurement program along with a restart of the Green Star program.

4.11.1.1 Business Audit Program

In addition to encouraging the recycling of used materials and conserving resources, the County-sponsored Business Audit program encourages businesses to increase their use of recycled products. This program helps businesses identify the products they could readily incorporate in their inventory of consumable items. This program is also available to public organizations, and encourages the product procurement methods outlined below.

4.11.1.2 Recycled Product Procurement Program

Much of the material that enters the waste stream can be recycled, reused or incorporated in the manufacture of new products. For recycling programs to be effective, markets must be developed for products that incorporate post-consumer materials in their manufacture, are reusable (not disposable) or designed to be recycled.

Currently, Whitman County purchasing is decentralized. However, all County departments are encouraged to buy office supplies made from recycled content whenever it is economically feasible. Whitman County Information Services has operated as the lead to coordinate purchases of recycled products. The Information Services Department consistently orders products made from recycled content, and many departments share orders if the supplies are cost-effective. Review of existing purchasing practices could determine the most economical purchasing system for Whitman County. Creation of a commercial purchasing agent and storage area would enable the County to purchase in bulk, which would lower prices, and make recycled content products a more competitive choice than virgin products.

The following elements could be included in a resolution establishing a recycled product procurement policy for Whitman County:

1. Employ bidding procedures which require suppliers to meet product standards that incorporate recycled material in the product.
2. Require use of recycled paper in all copy machines and printers.
3. Use reasonable efforts to label the products to indicate that they contain recycled material. Mast-head stationary and envelopes should indicate post-consumer recycled content and indicate on the paper and envelopes that they contain recycled material.
4. Allow a price preference (10%) to be given to recycled products, reusable products offered as alternatives to disposable products, and products designed to be recycled when they are offered as alternatives to non-recyclable products. Funding for the price preference may become available when the County moves to central purchasing policy for all departments. The savings from buying larger quantity could be applied to the recycled material products with no increase in spending.
5. Cooperate to the greatest extent feasible with neighboring counties, municipalities, school districts, and companies in an effort to develop a comprehensive, consistent and effective procurement effort intended to stimulate the market for recycled products, reusable products, and products designed to be recycled.

A potential diversion resulting from a procurement policy is not currently available. However, there are potential savings associated with a central

purchasing system with a preference for recycled content materials and durable goods, as opposed to the current system.

WSU does have a purchasing policy that requires departments to purchase 100 percent recycled content white paper, and non-white multipurpose paper with 30 percent recycled content (minimum). The Purchasing section, specifically 70.37.1 revised 2-16, of the WSU Business Policies and Procedures Manual details the purchasing policy.

4.11.2 Infrastructure Assistance

The 2012 SWMP concluded that, especially with small programs, the cost of transportation of recyclables seriously reduces the viability of the program. It would be an expensive venture to equip each program with suitable transportation equipment, and as it is the intent of the County to assist in program development only, the use of County resources for transporting recyclables on an on-going basis should be discouraged and only utilized if no other mechanism is available. However, the County could provide on-going coordination and education assistance to these community programs as a whole, and it may be possible that, while no single program can support transportation cost, the aggregation of these small programs could generate sufficient recyclables to support a single transportation program.

This means that many small programs may be able to succeed if the County can arrange for coordinated collection. One method of accomplishing this would be for the County to prepare criteria and a request for proposals (RFP) from recycling firms to provide such a service.

Another avenue considered was making arrangements with the existing solid waste franchised haulers that currently service most of the county. The haulers have equipment and facilities which could be utilized or adapted for the transport of recyclables. Revenue from the sale of the commodities would likely be a component of the funding.

Currently, Whitman County assists smaller communities by providing large blue recycling bins to communities, as well as sponsoring educational programs put on by PCEI. Though not all of the rural communities currently have blue bins, the County is working to extend blue bins to more communities. These recycling and educational programs are funded by CPG funds.

4.11.3 Community Programs

The current community program involving education and facility development is meeting the needs for enhancement of recycling efforts. Continuing the existing funding program will eventually allow for assistance to all communities within Whitman County to capitalize on recycling facilities and programs.

4.11.4 Regional Composting Facility

Currently, only one permitted compost facility exists in Whitman County (WSU) and it is not available to the public. The Whitman County CRSWF accepts yard debris and processes it for hog fuel. Clean wood is also separated or accepted and combined with the yard debris pile that is ground for hog fuel. Hog fuel is transported to the Clearwater facility for power production. Participation has increased significantly since the program was started, with current annual tonnage at 3,763 tons. It is anticipated that even more compostable material will be available as diversion and treatment programs mature.

While backyard programs can divert material, not everyone has the space, time or inclination to operate such a program. Further, for economic and regulatory reasons, Whitman County does not plan to turn its yard debris pile into a compost site. The County will continue to urge/inform residents to backyard compost, and to use the County's yard debris program which produces hog fuel.

Interest has been expressed in combining food scraps with yard debris and create a compost facility. Again, this will require a composting facility which currently does not exist for the public. Transfer, transportation, and disposal programs are introduced for evaluation and recommendation in the final chapter of the Plan. Each of these programs responds to a program need.

Another option is transporting compost product to Barr-Tech, a regional composting company (located in Lincoln County, Washington). Barr-Tech manages and recycles yard waste, food waste, and municipal/bio waste provided by local companies in Eastern Washington and Northern Idaho. The fees associated with the option make it cost prohibitive.

4.11.5 Commingled Recycling Program

In 2008, WSU started a new commingled recycling pilot program. This pilot program allowed WSU to accept commingled recyclables from the campus waste stream. These commingled recyclables were then baled and shipped to a regional Material Recovery Facility (MRF) in Tacoma, WA. Cardboard was collected and baled separately. This program is still being implemented at WSU. In 2012, WSU installed a bailer that is used to more efficiently package recyclables. By increasing packaging efficiency, WSU minimized the number of recycling shipments and was able to generate enough revenue to offset some of the recycling costs.

Both the City of Pullman and Empire Disposal are implementing a commingled/single stream approach to managing recyclables. However, due to the contamination problems associated with single stream recycling, certain commodities can no longer be recycled. The recyclables received by the Whitman County Transfer Station are transported and processed by Republic Services.

4.12 Transportation

In the past, service was provided by Waste Management to transport and dispose of Whitman County solid waste. In 2012, Whitman County awarded through a public request for proposals a Transportation and Disposal contract to Republic Services for disposal at the Roosevelt Regional Landfill outside the community of Roosevelt, Washington in Klickitat County. Republic Services utilizes a local company as a sub-contractor to haul transport Whitman County Solid Waste to the Burlington Northern Santa Fe Railroad Parkwater Trans load Facility in the City of Spokane Valley in specially constructed 48' Open Top transfer containers which are then placed on rail cars bound for Roosevelt. This contract runs from 2012 until 2022. Staff should, on an annual basis, review and evaluate the viability of continuing the current system as opposed to either alternative modes of transportation or disposal within county borders.

In 2012, the Transfer Facility at Carothers Road was nearing its capacity, which is 30,000 tons per year. Whitman County completed a study to consider constructing a new MSW landfill cell at their Carothers Road site. Conclusions of the analysis were that a new Carothers Road landfill cell was the most feasible and viable option for the County with the potential to reduce overall transport and disposal costs.

Due to the inadequate capacity of the Transfer Facility at Carothers Road, in 2014 a new transfer station was constructed and later opened in 2015.

4.13 Disposal

The disposal analysis described in the previous SWMP update was completed by CH2MHill ("Whitman County Solid Waste Disposal Strategic Analysis Plan & Financial Assessment"). The purpose of the following sections is to discuss the results from the past analysis and describe any differences in the current conditions that may impact future evaluation.

A detailed reevaluation of disposal options is beyond the scope of this SWMP update. The disposal evaluation will be considered when the long haul disposal contract with Republic Services comes up for review in 2022. It is assumed that the results of the future evaluation would be similar, however, specific conditions would need to be reviewed and a more detailed analysis would need to be performed to identify current opportunities and associated costs.

4.13.1 General

In the 2012 SWMP update, Whitman County described several disposal options. The disposal options were evaluated according to five different models:

- **Local Landfill Disposal** included developing a new cell at the existing solid Carothers Road waste facility site, or developing a new landfill within Whitman County either publicly or privately;

  Case One: Whitman County constructs and operates landfill; or,

  Case Two: Private firm constructs and operates landfill.

- **Local/Regional Landfill Disposal** included contracting with a public or private agency for landfill disposal in an adjacent county, for example Asotin County Landfill;

- **Regional Landfill Disposal** included contracting with a private agency for disposal at a landfill outside of Whitman County and adjacent counties, i.e. the current operation;

- **Incineration** evaluated disposal of solid waste at a new local incinerator or a regional incinerator facility, i.e. the Spokane Incinerator.

Estimates of costs per ton were included for each option or program. County capitalization costs were included where applicable. These preliminary estimates were made to determine if the proposed programs are significantly different in their economic impact, whether based on a per ton cost, or in terms of capitalization or other significant funding. The County contracted with CH2MHILL to evaluate the feasibility of the options above, with the exception of the incineration option. The Whitman County CRSWF New Landfill Feasibility Study was completed in February 2010 and the Phase 2 Field Investigation Workplan for the South Landfill Cell, CRSWF was completed in September 2010. Portions of these plans are summarized in the section which follow.

Of the aforementioned disposal options described in the past SWMP update, Case Two is no longer under consideration for the County as an option to be considered.

4.13.2 Local Landfill Disposal

4.13.2.1 Construct a New Cell at Existing Carothers Road Landfill Site

The basis for this option is that although Whitman County has ceased landfilling municipal solid waste at the Whitman County Solid Waste Facility, there is still space available for landfill development. A cell approximately 8.3 acres in area would initially be constructed. The cell would be the first phase of a 50 acres total MSW landfill which would serve the County for 30 years at current levels and projected growth rates.

The benefits of such a cell at this site include:

- Utilization of existing infrastructure;
- Less reliance on outside solid waste disposal services;
- Close proximity to the major population centers of the County;
- Avoid investing in replacement and expansion of transfer facilities at Carothers Rd; and,
- Greater local employment.

The cost for this program is a high capital cost to Whitman County and would probably require bonds be sold for a major portion of the funding. At the time of the first evaluation, the initial cell was expected to cost approximately $5.2 million dollars (2009$). Current estimates described in the recent CFP by Great West estimate that a new cell (Cell 5) would cost approximately $7.4 million (2018$), not considering inflation.

A new cell would be constructed every five years. The first analysis put the levelized tipping fee for this alternative (over a period of time which ends in 2023) at $92 per ton.

Consideration in past studies had also been given to adding the Latah County (Moscow, ID) waste stream to the new landfill. This would provide some reduction in cost, but would shorten the life of the landfill by approximately half. This option is not currently under consideration because Latah County is looking into signing a new haul and disposal contract that would be effective October 1, 2018 to 2025, with two five year extensions. Future analysis must be given to determine the current levelized cost for this alternative.

4.13.2.2 Construct a New Landfill within Whitman County

CASE ONE: COUNTY CONSTRUCTS AND OPERATES LANDFILL

This option evaluated the possibility of constructing a landfill elsewhere in the County which would provide similar service to that possible at the existing Carothers Road site. The location may be in the southwest portion of the County where rainfall is approximately one half of that at the present transfer station site. This option assumed that the Carothers Road facility would continue to function as a transfer facility for hauling waste to the new site.

The benefits of a new, publicly owned and operated landfill at a new site include:

- Potentially lower environmental risk, and
- Greater local employment.

The disadvantages include:

- A higher capital cost than the Carothers Road site as existing infrastructure such as roadway, scale house, maintenance shop etc., will need to be constructed at the new site.
- Land will need to be acquired.
- Haul costs will be greater from the major population centers of the county.
- Improvements will be need at Carothers Road transfer facility to improve aging and under capacity transfer systems.

The costs for this alternative were even greater than utilizing the existing site at the Whitman County CRSWF because of added facilities and land acquisition. Initial cell capital cost was estimated at approximately $7 million. At the time of the past SWMP update, the levelized tipping cost for this alternative was $176 per ton. Future analysis must be given to determine the current levelized cost for this alternative.

CASE TWO: PRIVATE FIRM CONSTRUCTS AND OPERATES LANDFILL

Case Two is no longer under consideration by the County. The following section describes the previous discussion regarding this option.

At the time of the previous SWMP update, and as it stands, no recent proposals to handle MSW were generated within Whitman County. If this program had been desired, a request for proposals could have been made by Whitman County to determine if any opportunity might develop.

The benefits of a new privately owned and operated system may include:

- Potential utilization of local railroads,
- Continued disposal within the county, and
- Greater local employment.

The same disadvantage as identified for Case One could exist for a private landfill provider. Costs for land acquisition might be lower, but the facility would be operated "for profit," which adds to the revenue requirements. An estimated range for a levelized tipping fee was $150 to $200 per ton. All initial capital costs would be absorbed by the owner.

4.13.3 Regional Landfill Disposal (Asotin County Landfill)

The recent study evaluated the alternative to utilize the Carothers Road transfer facility to load out MSW and long haul to the existing Asotin County publically owned landfill for disposal. The site is located about 45 miles from the Whitman County Transfer Station. Benefits if this plan were to move forward include:

- Reduction in transportation cost over existing long-haul contract by reducing the one-way haul distance 175 miles, and
- Creation of regional jobs.

The levelized cost over the time period of analysis was $139 per ton. This was greater than the long haul and disposal arrangement with Waste Management due to a high tipping surcharge at the Asotin County facility. Future evaluation should utilize the current transportation and disposal fees costs from Republic Services, and the current tipping fee (plus any surcharges) at Asotin County Landfill.

4.13.4 Long Haul and Landfill Disposal

This was and continues to be the current status quo alternative. This case represented the current transportation and disposal system and was presented as the basis for comparison to other methods. Benefits of continuing this service include:

- Avoidance of capitalization costs of a new facility; and,
- Continuation of an accepted program.

For the 2012 SWMP, export and regional disposal costs were based on the contract with Waste Management of Washington, $62 per ton. Currently, Whitman County is contracted with Republic Services at $52.79 per ton.

The long haul alternative will continue to increase in cost with time, especially during times of high fuel price. In the previous SWMP update, the levelized tipping rate for continuing this alternative was $113 per ton.

4.13.5 Local/Regional Landfill Disposal (Proposed Adams County Landfill)

Another facility that could impact Whitman County is the proposed Waste Management Adams County Regional Solid Waste Landfill near Whitman County's western border. Although the landfill project has received the necessary permits for development, the company has put construction on hold pending changes in market conditions. The site is located about 60 miles from the Whitman County Transfer Station. Benefits if this site were to move forward include:

- Reduction in transportation cost over existing long-haul contract,
- Contracting with an established company specializing in landfilling, and
- Creation of regional jobs.

At the time costs were unknown for this possible alternative. If this proposal to construct the landfill were to move forward, it could be a potential option for Whitman County.

4.13.6 Local Incineration/Landfill

Incineration is a method used to thermally oxidize solid waste. Based on experience gained by City of Spokane's Waste to Energy (WTE) Facility, Whitman County would have needed an estimated waste flow of between 1,500 and 2,200 tons per day to achieve reasonable economy of scale. Incineration has two major benefits:

- Stabilization of the waste by oxidizing hydrocarbons, removing water, and creating a slightly caustic ash which binds many metals as oxides; and,
- Reduction in volume and weight of the waste by as much as 70%.

The program has a very high capital and operating cost and it was determined that it was not practical to pursue without a much greater waste volume.

4.13.7 Regional Incineration/Landfilling (Spokane Waste to Energy Facility)

This proposal was to transfer and ship Whitman County solid waste to the City of Spokane WTE Plant. The tipping fee at the WTE facility was $98 per ton. In addition, the cost of transfer and transportation (estimated at $25.00 per ton) would need to be added for a total estimated cost of $123.00 per ton which was higher than other options considered. At the time, the WTE facility had sufficient capacity to handle Whitman County's current waste stream. This regional incineration has the following advantages:

- Utilization of an existing facility, already permitted and meeting strict air pollution regulations; and,
- Generation of electrical power.

Future evaluation of this alternative should consider the current the tipping fee at the WTE facility, $104.50 per ton, and transportion costs (Republic Services transportation costs are currently $25.96 per ton).

4.14 Analysis of Transfer and Disposal Programs

Review of the programs presented above led to the following observations:

1. The level and certainty of local employment was maximized with local programs.
2. Major capitalization would be required if the County chose to construct new landfills.
3. The current method of disposal, namely transportation to a regional facility for disposal, met the needs of the 2012 Plan.
4. Development of a new landfill at the County's Carothers Rd appeared to have a long term advantage in reducing costs for MSW disposal.

5. Recommendations and Implementation Schedules for 6 and 20 Years

Previous sections of this Plan have inventoried the existing solid waste systems, facilities and programs. Analysis of these existing works has led to a description of needs and opportunities, which resulted in the discussion of applicable programs which would enhance or add additional services to future systems, facilities and programs, thus maximizing opportunities and reducing needs. This chapter briefly summarizes the issues, evaluates and recommends proposed changes, and documents how recommended actions be implemented.

5.1 Summary of Issues and Enhancements

So far this Plan has identified several issues with the existing solid waste systems. Previous sections have also described enhancements. The following Table 5-1 summarizes the pertinent issues and their possible enhancements:

Table 5-1: Synopsis of Solid Waste Issues and Their Corresponding Proposed Enhancements.	
Issue	**Proposed Enhancement**
A statewide waste reduction measurement methodology must be determined in order to evaluate County programs.	Staff can continue to assist state officials
Whitman County currently has several reduction and/or reuse programs available to the public, however, most programs need further analysis and expansion to increase participation rates.	Waste reduction/prevention program Recycled Product Purchasing Home Composting Workshops and Education
Whitman County has a number of recycling programs in place.	Community Recycling Education School Recycling Programs/Green Schools Whitman County In-House Recycling Open a Recycling Center in Tekoa (June 2011) Open a Recycling Center in St. John (2011) Open a Recycling Center in Palouse Composting Facility for Food Scraps Revaluate and implement commingled recycling
Recycling access by private individuals appears to be adequate, but the recycling programs/assistance to businesses needs improvement as there is little participation and no current funding.	Community programs (PCEI) Pullman/Colfax Business Recycling Recycling Program Infrastructure assistance Tire Collection Recycling
Need more effort to "close the loop," i.e. the facilitation of purchasing recycled content products needs additional support.	Recycled Product Purchasing Whitman County Purchasing Program Whitman County Business Recycling
Transfer/disposal programs were discussed and evaluated in the previous plan.	The transfer/disposal program element of this plan consider options for the future, post 2022 when the current disposal contract expires. The County has the option to go out for another proposal from companies prior to 2022.
Limited Purpose Landfill is nearly full. Anticipated time frame: 2035	Close the Limited Purpose Landfill when full. A plan and funding program is in place. Divert the LP waste stream to the MSW system.

5.2 Analyses and Recommendation of Reduction, Reuse and Recycling Enhancement Programs

Table 5-2: Tabulation of Estimated Cost and Diversion Rate for Proposed Programs in 2012.

	Cost/Ton	Tons	Total Costs
Reduction			
Waste Reduction/Prevention	$50	600	$30,000
Backyard Composting	$95	300	$28,500
Reuse			
Buy Previously Owned Items	$70	72	$5,040
Recycling			
Regional Yard Debris Grinding	$34	2,500	$85,000
School Programs	$24	45	$1,080
Business Assistance	$26	45	$1,170
Totals		**2,262**	**$131,790**
Avg cost/ton			$58

Note: These quantities were generated at the time of the 2012 SWMP update and have not been updated with current amounts. Since the time of the previous SWMP update, various changes have led to the inability to accurately quantify the tonnages for each program. For example, the Move Out & Pitch In program at WSU no longer records tonnages.

Table 5-2 presents the results of a preliminary economic analysis and estimation of diverted waste quantities that existing and proposed programs may generate. Because these analyses are based on approximate models and programs from diverse communities, differing costs and diversion rates may occur. Consequently, the County will be able to test this estimate with tonnage from the actual waste stream diverted through implementation of these programs. It should be noted that fluctuations in market prices over time are likely to influence diversion rates. Therefore, any program based on this information should be monitored and analyzed for consistency with the estimated costs presented to ensure budget and plan compliance.

In order to accurately assess the benefits and costs of certain programs it is important to monitor the program tonnages and costs, when feasible.

5.2.1 Waste Reduction

5.2.1.1 Waste Reduction/Prevention

Waste reduction is a state priority. However, the number of reduction/prevention programs in Whitman County is limited. The County at one time had the County's Green Star program for businesses. The program was suspended due to a funding shortage, which was formerly provided by the State. The County also provides limited information on backyard composting. Other programs on waste reduction exist and should be pursued as resources permit. Research related to the cost benefit to Whitman County should be conducted, with a comparative analysis of neighboring county's programs to indicate the probable success of a reduction program. In addition, appropriate methods to determine the extent of involvement of rural areas should be made, as should delineation of the program area. A method for evaluating program success should also be evaluated. If such analysis shows a particular program appears viable, a formal program should be prepared and implementation should be scheduled.

5.2.1.2 Disposal Bans

Whitman County currently takes the position that it will allow the State to take the lead on disposal bans. The County will support the implementation of the disposal bans through educational programs for the County residents and businesses. If the County were to determine that a specific beneficial disposal ban had not been adopted by the State, implementation of the ban by the County could be considered.

The County supports the state's current ban on disposal of eWaste and CFL/fluorescent bulbs in MSW and educates the public on where to dispose of these wastes. Current items of interest for statewide bans include paint. The County intends to provide support for the state policy on disposal of these items.

5.2.1.3 Backyard Composting/Lawn Mulching

Backyard composting and lawn mulching is considered as waste reduction, which places it at a higher priority than reuse and recycle programs. The preliminary analysis shows that backyard composting and lawn mulching would eliminate a relatively small quantity of material at a cost similar to disposal fees. However, an additional consideration should be made, namely that a successful backyard compost program could be used for education about compost in general.

It is recommended that a backyard compost program be compiled which would serve as an adjunct program to the County's yard debris, grinding, recycling and energy program. A program emphasizing the importance of backyard composting while including the process of yard debris collection,

grinding and utilization, would allow residents several options to keep yard waste out of the landfill.

5.2.1.4 Sustainable Projects

Ecology has identified sustainability as a priority for the State of Washington. Sustainable projects (i.e. upcycling, green building, energy conservation, pollution prevention) should be considered and implemented whenever economically feasible in accordance to the state's goal and plan.

5.2.3 Recycling

5.2.3.1 County Procurement Policy

County procurement of recycled content goods, when coupled with a recyclable collection program, can provide a model for other agencies to follow. The County does try to buy recycled content office supplies whenever it is economically feasible, however, price becomes the first priority rather than purchasing items made from recycled content. It is recommended that the County evaluate the existing purchasing structure and determine if a policy can be created requiring all departments to purchase paper and other office supplies made from recycled content. If all departments shared orders, the bulk orders would help reduce the cost of the items.

5.2.3.2 Infrastructure Assistance

The County should continue to provide coordination and education assistance to recycling programs as a whole.

It is recommended that the County arrange for coordinated collection and transportation of recyclables for rural, school, and business recycling programs. A RFP from recycling firms to provide such a service would be one method of coordination, although other methods may be found. If coordination alone is insufficient, additional support, such as arranging for individual collection, or even providing for capitalizing support equipment, should be considered.

5.2.3.3 Yard Debris Recycling

Collection of yard debris at the Carothers Road Facility for processing (grinding) and then recycling the material for hog fuel has eliminated a significant volume of material from the land fill. Expansion of this program is desired. It is recommended that the possibility of yard debris collection in specific towns be researched, in which a local hauler can assist in the transport of yard debris from the town to the County's yard debris pile. A pilot project using this method was performed in several towns and was successful; however, Ecology eliminated the funding for this project due to the transportation costs. Further analysis of this

program may allow the County to reach an agreement with Ecology to assist on funding this project.

5.2.3.4 Regional Composting

The County conducted a pilot project composting operation in 1997 at the transfer and landfill site. The pilot project indicated that the County did not have sufficient feedstock to support compost. The demands of proper equipment and adequate space for siting of compost would not be economically viable for the County. The County does operate a yard trimming program which generates hog fuel for energy production and keeps yard trimmings out of the landfill while also avoiding the liability and high cost factors of a compost operation. Expansion of this program is recommended.

5.2.3.5 Community Recycling Programs

As part of the Waste Reduction Recycling campaign, Whitman County utilizes CPG funds to provide large blue recycling bins to several of the smaller, rural communities of the County. There are currently blue bins in St. John, Garfield, Rosalia, Endicott, and Lacrosse. Whitman County would like to extend the blue bin service to additional communities including, Oakesdale, Palouse and Tekoa.

It is recommended that community recycling programs should be continued in the same manner as the existing programs. These programs will continue to mature, and can be used as models for other small communities. The County desires to further enroll the support of contracted haulers to take the lead in the pickup of recyclables at each of the existing recycle centers and centers proposed for implementation.

5.2.3.6 School Recycling Programs

The current school recycling program in Whitman County consists of providing large blue recycling bins to schools (funded by CPG funds), in concert with student/youth educational programs coordinated by PCEI.

Maintaining blue bins and recycling education programs at schools should have priority over other recycle programs, due to the fact that continued education of children is the most consistent and accessible resource available to present and future recycle programs.

5.2.3.7 Business Recycling and Conservation Assistance

The business audit program sponsored by the County will continue to be offered to businesses on an as-requested basis. This program provides each participating business with a written plan for implementing measures that will reduce waste and conserve resources. The County will continue to offer this service to businesses. Pullman Disposal and Empire Disposal will continue to offer recycling collection for the businesses as well.

5.2.3.8 Commingled Recycling

The 2012 SWMP update recommended that the County evaluate the concept of collecting commingled recyclable in the larger communities such as Pullman and Colfax. Interest was expressed by citizens and haulers to pursue this recycling program. As a pilot program, WSU accepted commingled recyclables from the campus waste stream that are baled and shipped to a regional MRF in Tacoma, WA. Cardboard is collected and baled separately. The idea was that this program might open up more commodities recycling, and subsequently remove additional material from the waste stream that currently goes to the County's transfer station for disposal. Both Pullman Disposal and Empire Disposal, primary haulers in Whitman County, made the infrastructure transition to commingled, or single stream recycling in 2013. Since first implementing single stream recycling, there has been a steady increase in contamination linked to dirty recyclables and unrecyclable items. Because of this contamination problem, recyclables can no longer be sold to China. To minimize contamination, Whitman County would like to streamline the recyclable material list and establish a unified message to recycle clean, dry, empty materials. Whitman County would like to encourage recyclers, "When in doubt, check it out (or throw it out)."

It is anticipated that the County will continue to provide baling of the recyclables, but will charge on a "per ton" basis for this service. In the past, the County has provided the service with revenue being directed to the haulers, minus a processing fee by the County (30% on fiber, 20% other recyclables). Commingled recyclables will likely not generate adequate revenue to cover the County's cost on the percentage fee basis. The current MRF in the Spokane area by Waste Management could provide a more cost-effective opportunity for the collection and processing of mixed recyclables in the region.

5.3 Analysis and Recommendation of Transfer and Disposal Programs

This section analyzes disposal programs presented earlier in this plan and recommends a preferred program. Alternative programs are also named, and criteria for implementation are included.

5.3.1 Preliminary Economic Evaluation of Transfer and Disposal Programs

Summary results of alternative transfer/disposal systems discussed in the 2012 SWMP are presented in Table 5-3. For the 2012 SWMP update, the County engaged a consultant to consider options for disposal of solid waste involving a new County owned landfill at the Carothers Road site, a new landfill to be developed at a different site within the County, disposal at an existing landfill

owned by Asotin County and continuation of current (at the time) long haul and disposal at a regional landfill near Arlington, Oregon. The study also considered the option of adding Latah County Idaho (City of Moscow) waste stream to the disposal options for economy of scale advantages. Disposal through incineration was also considered in the study and added to this plan.

Costs were reported in terms of a levelized cost per ton over a period of time ending in 2023. For some options, implementation would require significant capital expense. This expense may require funds in excess of those accumulated by the solid waste fund. Unless the Whitman County Commissioners direct otherwise, solid waste activities are to be supported by revenue generated by the tipping fee alone. This means that an essential consideration is whether or not the solid waste fund has or can accumulate enough funds to cover such capital expenditures. An additional avenue for funding solid waste capital systems is to sell bonds for a portion of the needed capital dollars.

Of the landfill disposal options, construction of a new landfill at the Carothers Road site had the lowest long-term cost. It was slightly better than the long haul and regional disposal option with Waste Management and better than the transport and disposal option at the Regional Incinerator/WTE in Spokane. The landfill in Asotin County and a new landfill to be developed at a different site in the County were much higher cost options. Sending wastes to the regional landfill in Adams County was another option considered, but assuming that Adams County would begin to accept wastes.

The disposal options analyzed in the "Whitman County Solid Waste Disposal Strategic Analysis Plan & Financial Study" and described in Section 4.13 should be reevaluated in the future.

5.3.2 Recommendations for Transportation and Landfill Disposal Options

5.3.2.1 Recommended Programs

Whitman County originally entered into a transfer and disposal contract with Waste Management on July 1, 1993. The original contract ran for three years and ended on June 30, 1996. The contract was subsequently renewed on July 1, 1996 and extended to June 30, 1999, then further renewed until 2012. In July 2012, Whitman County entered into a contract with Republic Services that runs until 2022. The continued financial favorability of this transfer and disposal contract will depend upon the cost negotiations and the time of re-consideration of this contract.

The County completed a study in 2009 which indicated that development of a new MSW landfill cell at the Carothers Road site would provide disposal at the lowest cost over the long term considered, a period of time ending in 2023 (see

Table 5-3). Other close options include long haul and disposal at a regional landfill. Come 2022, the County can either renegotiate and renew its contract, rebid the contract, and or construct another landfill cell. The County will need to give careful consideration to this option as plans for future disposal progress, this includes detailed analysis and reevaluation of the disposal and transfer options.

Table 5-3: Tabulation of Estimated Cost of Disposal Through Various Systems for the Period ending in 2023.	
System/Program	**Estimated cost (per ton)**
Local landfill	
New Landfill at Carothers Rd Site	$92
New site publicly owned	>$176
New site privately owned	Unknown
Local/Regional landfill	
Site in Asotin County	$139
Regional landfill	
Site in adjacent county (Adams Co.)	Unknown
Current transport & disposal	$113
Incineration/Landfill	
Site in County	Unknown
Spokane Regional Facilities	$123

Source: Whitman County Carothers Road Solid Waste Facility New Landfill Feasibility Study. Prepared by CH2MHILL February 2010.

5.3.2.2 Alternate Programs

Alternate programs should be considered if:

- Current contractor is in default or breach of contract; or,
- Analysis indicates that lower costs and/or increased benefits would result from selection of another program.

The 2012 SWMP stated, that based on maximizing the number of local jobs and businesses, cost of program, and capitalization requirements, the following option should be considered as a first priority to the current transportation and disposal system:

Local landfill disposal

This option, which proposes to construct a new County owned landfill cell at the Carothers Road site, maximizes the number of local jobs, creates and supports the maximum number of local businesses (creates landfill

construction and operation employment opportunities). Implementation of this option would require 2-6 years.

Following the future reevaluation of transfer and disposal options, Whitman County may prioritize transfer and disposal options if these are shown to be most feasible.

5.3.3 Recommendations for Bringing Landfills and Other Facilities into Compliance with 173-350 WAC Solid Waste Handing Standards

Whitman County solid waste facilities are monitored by Whitman County Health Department. None of the facilities are considered by Whitman County Health Department to be out of compliance with their operating permits. It is recommended that the Health Department continue monitoring all solid waste facilities in the County.

5.4 Implementation Schedules

5.4.1 Six Year Schedule

Table 5-4: Six Year Implementation Schedule.

Task Name	2019	2020	2021	2022	2023	2024	Total (Hours)
Plan Adoption	**200**						**200**
Waste Reduction/ Prevention	**50**	**190**					**240**
Preliminary Analysis	10	90					
Program Preparation	25	50					
Program Implementation	15	50					
County Procurement Policy	**10**	**5**					**15**
Evaluate Existing Structure	8						
Create Guidelines	2						
Implement Program	0	5					
Sustainable Projects	**15**	**30**					**45**
Preliminary Analysis	15	10					
Program Preparation	0	10					
Program Implementation	0	10					
Community Recycling Events (Education/Collection)	**600**	**600**	**600**	**600**	**600**	**600**	**3,600**
Administration	600	600	600	600	600	600	
School Programs	**130**	**130**	**130**	**130**	**130**	**130**	**780**
Program Review	30	30	30	30	30	30	
Program Implementation	100	100	100	100	100	100	
Disposal	**200**	**1,080**	**660**				**1,940**
Implementation Plan – New County Landfill	200						
Design/Permitting		1,000					
Selection and Award		80	80				
Construction			500				
Startup			80				

5.4.2 Twenty Year Schedule

The County's plan for solid waste handling facilities have estimated long-range needs. The following table projects needs over a twenty-year period of time. Changes in disposal practices, population and waste reduction and recycling levels will affect these needs. Adjustments are anticipated in the future through future plan updates or amendments.

Table 5-5: Whitman County 20-Yr Solid Waste Handling Summary Needs Estimate – 2019 to 2038 (in year 2018 dollars).

Program	Activity	Year	County Cost/Yr.	Annual Revenue	Total Cost per Year
Recycling	Carothers Road Recycling Facility	2019-2038	$150,000	$80,000[1]	$70,000
Limited Purpose Landfill	Closure Cost	2036	$986,000	$0	$986,000
	Post Closure Monitor	2037-2050	$35,577	$0	$35,577
	Post Closure Maint.	2037-2050	$5,718	$0	$5,718
MRW	HHW Education	2019-2038	$10,000	$0	$10,000
	HHW Collection	2019-2038	$50,000	$1,000[2]	$49,000
Waste Reduction & Recycling Programs	Community, School, Business Audits, Procurement Policy	2019-2038	$75,000	$0	$75,000
New County Landfill	Design Construction Startup New Cell	2025	$7,434,000	T.B.D.	$92/Ton[3]

[1] Revenue is from cardboard recycling.
[2] Revenue is from battery recycling.
[3] This number was derived from the levelized tipping fee discussed in Section 4.13.2.1 and should be reevaluated in the future. If the total cost per year increased by the same proportion as the County cost per year, this number would be approximately $131.52 per ton per year.

6. MODERATE RISK WASTE MANAGEMENT

6.1 Introduction and Background

This chapter is prepared as a part of the Whitman County SWMP to address management of Moderate Risk Waste (MRW) and to serve as an update of the original MRW management plan which is incorporated herein by reference. This update has been prepared with input from Whitman County staff, consulting engineering staff, the Whitman County SWAC and other officials and citizens with interest in MRW management.

Section 1 of this SWMP describes the planning area, including the physical, environmental, and socioeconomic conditions that affect MRW generation in Whitman County.

6.2 Current MRW Management Conditions

Whitman County has continuously operated, since opening, their MRW facility at Carothers Road (252 Landfill Road, Pullman, WA 99163) receiving HHW from households within the County. Conditionally exempt small quantity generators have also transported MRW to this site where materials have been received by private hazardous waste disposal firms at a cost born by the small quantity generator. Materials collected from households are processed and stored until sufficient quantity is accumulated at which time the material is transported by Clean Harbors, a statewide contracted organization, to a qualified facility for disposal.

In addition to the fixed drop off processing and disposal facility, Whitman County also sponsors collection events at mobile satellite locations. Whitman County participates in and encourages education for citizens and businesses on HHW. Printed materials are distributed at events within the County. Educational programs are offered in schools and County staff provide ongoing technical assistance for households with questions regarding HHW. County staff also provide technical assistance to businesses for identifying, collecting and proper handling for disposal of hazardous waste that might be produced by CESQG.

The MRW facility is open the same hours as the transfer facility receives municipal solid waste (8 a.m. to 5 p.m., Monday through Saturday, closed holidays). This facility is a covered building with an area for receiving HHW, processing some waste types and then holding all materials received in storage areas until shipped for disposal. Access to the facility is limited to trained personnel. Residents are asked to park in front of the facility where the material is loaded

onto cart(s) in an acceptance area. Once the material is unloaded, trained site operators sort and segregate the material according to categories for storage. Operator's bulk and treat to solidify water based paints. Oil based paints are bulked into 55 gallon drums in a special handling area with ventilation to evacuate fumes. Used motor oil is transferred into a larger storage tank. Anti-freeze is transferred into 55 gallon drums. Used oil and anti-freeze is periodically pumped and removed by private contractors.

From storage, chemicals are periodically packaged into drums by a contractor with assistance from the trained site personnel. Whitman County has an inter-local agreement with the City of Spokane for disposal of HHW. The HHW is transported directly to the City of Spokane waste storage site for ultimate processing. Unlabeled or unknown chemicals either delivered to the facility or left at the gate of the transfer facility, are segregated and stored in a special area until tested and properly handled at the time of packaging by the contractor. Complete records are kept for all materials received and processed.

Since the original MRW management plan was adopted and the facility was constructed, participation in the program has generally been consistent. The existing MRW facility appears to meet the needs of households for hazardous waste disposal in Whitman County. Assistance is given to farmers for disposing of used motor oil and unwanted pesticides and herbicides. Typically for used oil, the farmer is given names of several private contractors who collect and re-process this waste. For agricultural chemicals, the farmer is given contacts at the Department of Agriculture and DOE. Small quantity generators are provided names of contractors that privately handle waste the business generates.

At the MRW facility, the exchange of materials is encouraged. Paint is a HHW which is often taken from the facility by citizens who find a use for the material. Exchange and re-use of HHW is encouraged to reduce volumes of waste and conserve resources.

The inventory of household hazardous waste materials Whitman County currently receives are listed in Table 6-1. Recent quantities collected for each material are shown.

Table 6-1 Whitman County Moderate Risk Waste Collection 2001-2017 (all quantities are in pounds).																		
Year	**Antifreeze**	**Oil Non-Contaminated**	**Acids**	**Bases**	**Batteries - Auto Lead Acid**	**Batteries - Small Lead Acid**	**Batteries - Nicad/NIH M/Lithium**	**Batteries - Household Dry Cell**	**Electronic Wastes (except CRTs)**	**Flammable Liquid - Poison**	**Mercury - Fluorescent Tubes & CFL's**	**Paint Related Materials**	**Paint - Latex**	**Paint - Oil Based**	**Pesticide/ Poison Liquids**	**Pesticide /Poison Solids**	**Loose Misc.**	**Total**
2017	2,604.00	22,821.60	162.00	-	3,960.00	-	489.00	-	-	-	1,320.00	14,320.00	19,500.00	-	425.00	235.00	364.00	66,201.00
2016	3,276.00	25,530.00	149.00	-	5,450.00	-	523.60	-	-	-	1,190.00	11,638.00	21,300.00	-	648.00	516.00	201.00	70,421.60
2015	1,092.00	13,875.00	180.00	-	3,879.00	-	93.00	-	-	-	710.00	2,945.00	18,600.00	-	725.00	485.00	166.00	42,750.00
2014	2,058.00	22,991.00	240.00	-	4,139.00	-	240.00	-	-	-	980.00	3,150.00	20,400.00	-	846.00	564.00	218.00	55,826.00
2013	3,192.00	17,316.00	103.00	282.00	5,273.00	-	149.00	-	-	-	1,100.00	5,400.00	15,600.00	-	564.00	282.00	180.00	49,441.00
2012	504.00	9,990.00	123.00	282.00	4,020.00	-	215.00	-	-	-	1,200.00	6,600.00	14,800.00	-	240.00	98.00	145.60	38,217.60
2011	2,016.00	14,430.00	92.00	110.00	3,708.00	-	285.00	-	-	-	1,360.00	4,800.00	16,200.00	-	282.00	141.00	191.80	43,615.80
2010	1,890.00	17,612.00	127.00	140.00	6,480.00	-	302.00	-	-	232.00	143.00	7,200.00	14,000.00	-	705.00	282.00	24.00	46,872.00
2009	2,184.00	-	220.00	220.00	5,724.00	-	216.50	200.00	-	-	-	-	13,734.00	5,060.00	660.00	220.00	93.00	49,256.00
2008	-	-	456.5	495.00	7,194.00	-	130.00	-	-	-	-	-	11,270.00	8,602.00	1,540.00	1,155.00	67.00	31,085.75
2007	880.00	-	913.00	990.00	13,055.00	-	80.00	-	9,200.00	407.00	-	-	9,660.00	9,614.00	3,465.00	385.00	532.00	49,181.00
2006	1,600.00	18,448.00	456.50	-	11,515.00	1,000.00	40.00	1,300.00	12,700.00	-	-	-	10,626.00	8,096.00	1,540.00	-	190.00	67,511.50
2005	1,852.00	21,171.00	456.5	990.00	8,785.00	-	388.00	637.00	-	-	-	-	11,914.00	10,120.00	3,080.00	-	-	59,393.50
2004	1,680.00	28,209.00	456.50	-	7,000.00	-	-	250.00	-	814.00	-	-	9,660.00	9,614.00	3,080.00	-	-	60,763.00
2003	1,000	15,740.00	456.50	495.00	6,510.00	-	-	-	-	407.00	-	-	8,050.00	8,096.00	1,540.00	-	-	42,294.50
2002	2,120.00	19,928.00	456.50	-	10,955.00	-	-	-	-	407.00	-	-	8,464.00	9,108.00	770.00	-	175.00	52,383.50
2001	1,424,00	18,862.80	466.5	456.50	9,170.00	-	-	-	-	-	-	-	7,792.40	8,179.00	7,132.00	-	78.00	48,161.20
Total	**29,372.00**	**266,924.40**	**5,514.50**	**4,460.50**	**116,817.00**	**1,000.00**	**3,151.50**	**2,387.00**	**21,900.00**	**2,035.00**	**8,529.25**	**56,053.00**	**231,570.40**	**76,489.00**	**21,842.00**	**4,363.00**	**2,857.20**	**855,265.75**

6.2.1 Hazardous Waste Inventory

Information for a Hazardous Waste Inventory was provided by DOE and is described below.

Transporters

There are no hazardous waste transporters in Whitman County.

Zone Designations

The Washington State Hazardous Waste Management Act (HWMA) required local governments to establish land use zones or geographic areas for siting "designated zone facilities," such as hazardous waste recycling, storage and treatment facilities. These local zoning requirements must be consistent with the State's hazardous waste siting criteria and must allow hazardous waste processing or handling where hazardous substances, such as raw materials, are processed or handled. Local governments are not required under the HWMA to develop land use zones for siting designated zone facilities if they can show that within their jurisdictions no regulated amounts of hazardous waste were generated over the previous two years, and no geographic area meets the state's siting criteria. Zone designations or requests for exemptions were required to be submitted to Ecology by June 30, 1988.

According to Ecology records, the following communities have approved land use zones, or have received approval of their request for an exemption from the zoning requirements:

- Albion (Exempt)
- Colfax (Approved)
- Colton (Exempt)
- Farmington (Exempt)
- Lamont (Approved)
- Malden (Exempt)
- Oakesdale (Approved)
- Palouse (Approved)
- Pullman (Approved)
- St. John (Approved)
- Tekoa (Approved)

Ecology files do not provide documentation of approval of zone designations or exemptions for the following jurisdictions:

- Whitman County, Endicott
- Whitman County, Garfield
- Whitman County, LaCrosse
- Whitman County, Rosalia
- Whitman County, Uniontown

Table 6-2: Zone Designations in Whitman County, WA as provided by DOE.				
City	**Approved**	**Exempt**	**Correspondence Only**	**No Paperwork**
Albion		X		
Colfax	X			
Colton		X		
Endicott			X	
Farmington		X		
Garfield				X
LaCrosse				X
Lamont	X			
Malden		X		
Oakesdale	X			
Palouse	X			
Pullman	X			
Rosalia				X
St. John	X			
Tekoa	X			
Uniontown				X

Dangerous Waste Generators

- Bagotts Motors, Inc.
- Brians Body Shop
- Clearwater Fiber LLC
- Colfax Body Repair LLC
- Greens Cleaners
- Jerry L. Griebling Auto Repair
- Myers Auto Rebuild, Inc.
- Oakesdale School Dist. 324
- Pullman City
- Pullman Regional Hosp Public Hosp
- Rite Aid 5301
- Rogers Seed Co Colfax
- Safeway Store 2639
- Schweitzer Engineering Labs Inc 2440 HOP
- TSA @ Pullman Moscow Regional Airport
- UPS Pullman
- US Army COE Lower Granite Dam
- WA WSU Pullman Camp
- WalMart Supercenter 1870
- WSU USDA ARS Palouse Field Station

Remedial Action Sites

Table 6-3: Remedial Action Sites in Whitman County, WA as provided by DOE.	
Facility Name	**Site Cleanup Status**
WA WSU LANDFILL	Awaiting Cleanup
ENDICOTT SCHOOL DIST	Cleanup Started
WA WSU SCRAP METAL YARD	Cleanup Started
WA WSU POWER PLANT OIL BULKING	Cleanup Started
UPRR TEKOA LINE SEGMENT 2	Awaiting Cleanup
UPRR TEKOA LINE SEGMENT 3	Awaiting Cleanup
UPRR TEKOA LINE SEGMENT 4	Awaiting Cleanup
UPRR TEKOA LINE SEGMENT 5	Awaiting Cleanup
UPRR TEKOA LINE SEGMENT 6	Awaiting Cleanup
INLAND POWER & LIGHT SPILL a.k.a. Inland Power & Light Transformer Spill	Awaiting Cleanup
WA WSU Fulmer Hall Crawlspace	Awaiting Cleanup
WA WSU ROAD PAINT SHOP	Cleanup Started
Crop Production Services Inc St John a.k.a. WESTERN FARM SERVICE INC UST 8858 SHELL OIL COMPANY WESTERN FARM SERVICE INC ST JOHN WESTERN FARM SERVICE SAINT JOHN	Awaiting Cleanup
Latah Apartments	Cleanup Started
Sterling Savings Bank	Cleanup Started
Dusty Farm Cooperative a.k.a. DUSTY FARM CO OP INC DUSTY RD DUSTY FARM COOP INC	Cleanup Started
GARDNER OIL COMPANY a.k.a. GARDNER OIL CO TEKOA	Cleanup Started
OLD JENSEN TEXACO	Cleanup Started
Chevron USA Inc Tekoa	Cleanup Started
COLFAX GRANGE SUPPLY INC MAIN & TYLER a.k.a. NORTH COLFAX PETROLEUM	Cleanup Started

CONTAMINATION SITE 104 E TYLER COLFAX GRANGE SUPPLY 102 TYLER ST	
MOSCOW PULLMAN HWY SERVICE CENTER a.k.a. WWP Service Garage	Awaiting Cleanup
Palouse School Dist 301 a.k.a. PALOUSE SCHOOL DISTRICT 301	Cleanup Started
LARRYS SERVICE	Cleanup Started
STANDARD SERVICE STATION	Cleanup Started
GUY BENNETT LUMBER COMPANY UST 6606	Cleanup Started
CORNER CHEVRON UST 11900	Cleanup Started
WHITMAN COUNTY GROWERS INC	Cleanup Started
ROSALIA CHEVRON TIRE SHOP	Cleanup Started
US BANK SITE PULLMAN	Cleanup Started
Chevron 206196 a.k.a. CHEVRON USA INC PULLMAN BULK P BNRR Bridge 270/4 Replacement	Cleanup Started
JE Love Co	Cleanup Started
DORSEY CHEVROLET	Cleanup Started
PULLMAN CITY UST 3205	Cleanup Started
CONOCO 1672 a.k.a. 2GO TESORO 62160 GULL 1672 TESORO 62160	Cleanup Started
RENNIE KEASALS SERVICE a.k.a. RENNIE KEASALS SERVICE INC	Cleanup Started
PULLMAN SCHOOL BUS GARAGE	Cleanup Started
WA WSU MOTOR POOL	Cleanup Started
WHITMAN COUNTY TRAVEL PROPERTY	Cleanup Started
HAY BUS GARAGE	Cleanup Started
CAMPUS CHEVRON	Cleanup Started
PULLMAN MOSCOW REGIONAL AIRPORT	Cleanup Started
COLFAX GRANGE SUPPLY HARRISON ST	Cleanup Started

6.3 Legal Authority for the Plan

The Hazardous Waste Management Act, Chapter 70.105 Revised Code of Washington (RCW) directed local governments to prepare Hazardous Waste Management Plans by 1991, for the purpose of addressing management of Moderate Risk Waste (MRW) within their jurisdiction. Moderate risk waste is hazardous waste produced by households which is known as HHW and by businesses, institutions and governments in small quantities (do not exceed specified limits) are known as Conditionally Exempt Small Quantity Generators (CESQG). If a business or entity produces hazardous materials above the quantities specified in the exemption, the waste generator fall within a group which are subject to stringent management, tracking and reporting of their hazardous materials.

Whitman County prepared an initial moderate risk waste management plan which was adopted in 1994. The plan focused on identification of HHW and on the collection for proper disposal of these materials. An outcome of the management plan was the construction of a facility designed to receive, process and prepare for shipment and disposal of HHW. The facility was constructed at the Whitman County CRSWF and has continuously operated since completion. An operations plan was developed for the facility in April 1994.

The Whitman County Code, Title 19, addresses the siting of facilities processing, handling, and storing hazardous materials. The existing MRW facility at the CRSWF is located in the Agricultural District. Section 19.10.090 of the County code allows "on-site hazardous waste treatment and storage facilities, provided that such facilities are accessory to a permitted or conditional use, and provided that such facilities meet the state siting criteria adopted pursuant to RCW 70.105.210."

For other facilities seeking a location to process, handle, and store hazardous materials, Section 19.20.080.A.3 of the County code allows in a Heavy Commercial Zone, a "recycling facility, provided, however, that hazardous material, infectious material and/or radioactive material which federal or state regulations would allow to be recycled but which the Conditional Use Permit issued by the Board of Adjustment and a Special Permit issued by the Whitman County Health Department. Said permits shall establish specific conditions for the processing/handling of hazardous material, infectious material and/or radioactive material, where State of Washington or the Federal Government has not otherwise preempted all control and regulation of said materials."

6.3.1 Governance Structure

The Whitman County Solid Waste Division is responsible for MRW management implementation decisions, as outlined in Section 6.3.

6.4 Financing of the Program

The cost for operating the program have been borne by Whitman County tipping fees and supplemented by any funding received from State sources. In order to keep the program financially sustainable absent any Ecology funding, Whitman County would have to charge people for dropping off MRW, or add this additional cost into the tipping fee. Another option would be holding a MRW event twice annually, instead of maintaining a fixed facility. Absent Ecology funding, tipping fees would likely still need to be increased in order to pay for this event.

6.5 Program Philosophy

Whitman County and SWAC have made it a priority to emphasize and encourage the safe collection and disposal of moderate risk wastes such as chemicals, pesticides, and herbicides, as stated in Section 1.4 Plan Goals and Objectives.

6.6 Program Services

Whitman County offers MRW management program services that are based on six core elements:

1. HHW Collection
    a. Sponsoring/arranging collection events
2. Household and Public Education
    a. Attending/tabling at community events
3. Small Business Technical Assistance
    a. Business and small quantity generator MRW education
4. Small Business Collection Assistance
    a. Encouraging private companies to handle MRW
5. Enforcement
    a. Disposal bans
    b. Whitman County Code regulations
    c. Issuing of permits that outline specific conditions to regulate the handling of MRW and HHW
6. Used Oil Education and Collection
    a. Assistance is given to farmers for disposing of used motor oil and unwanted pesticides and herbicides.

6.7 Process for Updating the Plan

As mentioned in Section 6.1, this chapter functions as an update to the original MRW management plan. This update was prepared with input from various stakeholders including Whitman County staff, consulting engineering staff, Whitman County SWAC members, and citizen participation.

6.8 Implementation

6.8.1 Implementation Plan

The County has actively implemented the MRW Plan and has provided facilities to receive and dispose of MRW. Whitman County has begun implementing MRW upgrades due to the new compliance regulations for MRW facilities. The County MRW Plan involves several MRW programs that relate to MRW household collection, household and public education, small business technical assistance, small business collection assistance, enforcement, and used oil education and collection. The programs are detailed in Section 6.8.3 Elements of the Plan.

6.8.2 Guiding Principles

MRW management goals for Whitman County are as follows:

- To meet the State requirements in providing a facility for the safe disposal of HHW, including updating the facilities (as necessary) to meet new State standards.
- To provide education to citizens relative to identifying and removing HHW from the municipal solid waste stream for proper disposal.
- To provide for efficient collection, transfer and disposal of MRW waste.
- To encourage the reduction of MRW by environmentally preferred purchasing of products to reduce creation of HHW.
- To promote product stewardship for HHW whenever possible. Shifting the responsibility of disposal back to the producer reduces the burden on the County.
- To reduce the creation of HHW whenever possible, and to capture the greatest quantity possible of HHW material that does exist, and to reduce long-term costs associated with handling and disposal of these materials.
- To continue public outreach and education regarding MRW re-use and reduction.

- To provide on-going enforcement and inspection of the MSW stream on a consistent basis and where practical for detection of HHW in the waste stream.

6.8.3 Elements of the Plan

1. Household Collection:

    a. Whitman County is active in sponsoring/arranging for collection events within the County and communities including HHW collection. Collection events may also involve events like those arranged by the Department of Agriculture for specific agricultural business waste such as pesticides and herbicides.

2. Household and Public Education:

    a. Education specifically concentrated on reduction of MRW generated is a key area in which Whitman County wishes to focus. A preferred method to accomplish reduction of MRW generated is environmentally preferred purchasing. Citizen education is critical for MRW management in Whitman County. Targeting citizens during social events, such as Community Days and the County Fair, is a great opportunity to provide education on MRW. Also, reaching students at a young age provides for better management in the future and often provides immediate increased participation in the home as children interact with their parents on waste issues.

3. Small Business Technical Assistance:

    a. Where possible, private collection companies are encouraged to handle MRW and municipal solid waste instead of expanding the role of government in this area.

4. Small Business Collection Assistance:

    a. Ongoing business and small quantity generator education is encouraged as it provides technical assistance, helps reduce the amount of MRW generated, and facilitates efficient and cost-effective disposal of waste created.

5. Enforcement:

    a. In Whitman County, there are disposal bans in place for eWaste and mercury containing light bulbs (e.g. CFLs and fluorescent bulbs). The Whitman County Department of Health is the lead agency in enforcing disposal bans.

b. The Whitman County Code, Title 19, addresses the siting of facilities processing, handling, and storing hazardous materials.

c. Whitman County issues conditional use permits and special permits that establish specific conditions for the processing/handling of hazardous material, infectious material and/or radioactive material, where State of Washington or the Federal Government has not otherwise preempted all control and regulation of said materials.

6. Used Oil Education and Collection:

   a. Assistance is given to farmers for disposing of used motor oil and unwanted pesticides and herbicides. Typically for used oil, the farmer is given names of several private contractors who collect and re-process this waste.

6.8.4 Alternative Programs

Should priorities change, or additional funding opportunities become available, the Whitman County Solid Waste Division would like to consider alternative programs. For instance, Whitman County has expressed an interest in locating a MRW collection facility in the northerly portion of the County to better serve those citizens, many of which are in rural areas.

6.9 Annual Budget

Currently, there is no fee for dropping off MRW. The Moderate Risk Waste Fixed Facility is funded by a combination of tipping fees and CPG grant funds. Table 6-4 shows the current and past cost of operating the Fixed Facility. In 2017, the MRW program had 1,076 participants and cost $76,162.00, including employee, education, advertising, operation, disposal, and capital improvement related costs. This is approximately $70.78 per participant (see Table 6-5). Three full time equivalent (FTE) employees are needed to maintain the existing MRW programs and Fixed Facility. If CPG grant funds were reduced or became unavailable, this would require charging a fee for dropping off MRW, or covering this cost by increasing the tipping fees more than 4% every other year. Another option could be closing the Fixed Facility entirely and moving towards MRW disposal events held twice yearly.

Table 6-4: Fixed Facility Annual Costs from 2010 – 2017.							
Calendar Year	Cost by Category ($)						Total Cost ($)
	Employee Staffing, Training, Benefits	Education	Advertising	Operation	Disposal	Capital Improvement	
2017	49,512.00	10,000.00	750.00	8,500.00	6,200.00	1,200.00	76,162.00
2016	52,486.00	0.00	450.00	7,812.00	4,600.00	0.00	65,348.00
2015	49,485.00	3,965.00	1,800.00	6,945.00	3,900.00	1,200.00	67,295.00
2014	51,523.00	4,253.00	2,300.00	7,125.00	4,500.00	990.00	70,691.00
2013	41,263.45	3,993.25	1,789.23	6,231.39	4,255.00	0.00	57,532.32
2012	38,309.23	4,201.49	1,950.00	5,425.00	3,944.12	0.00	53,829.84
2011	32,566.59	2,299.41	2,909.53	4,921.53	2,967.28	0.00	45,684.34
2010	35,418.93	2,401.59	3,009.31	5,221.14	3,129.64	0.00	49,180.61
Average Cost	43,820.53	3,889.22	1,869.76	6,522.63	4,187.00	423.75	60,712.89

Table 6-5: Moderate Risk Waste Fixed Facility Participants from 2010 – 2017.			
Calendar Year	**Number of Participants**	**Cost ($)**	**Cost Per Participant ($)**
2017	1,076	76,162.00	70.78
2016	1,149	65,348.00	56.87
2015	879	67,295.00	76.56
2014	1,015	70,691.00	69.65
2013	871	57,532.32	66.05
2012	789	53,829.84	68.23
2011	894	45,684.34	51.10
2010	930	49,180.61	52.88
Average Cost Per Participant ($)			64.01

- To provide on-going enforcement and inspection of the MSW stream on a consistent basis and where practical for detection of HHW in the waste stream.

6.8.3 Elements of the Plan

1. Household Collection:

    a. Whitman County is active in sponsoring/arranging for collection events within the County and communities including HHW collection. Collection events may also involve events like those arranged by the Department of Agriculture for specific agricultural business waste such as pesticides and herbicides.

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    a. Education specifically concentrated on reduction of MRW generated is a key area in which Whitman County wishes to focus. A preferred method to accomplish reduction of MRW generated is environmentally preferred purchasing. Citizen education is critical for MRW management in Whitman County. Targeting citizens during social events, such as Community Days and the County Fair, is a great opportunity to provide education on MRW. Also, reaching students at a young age provides for better management in the future and often provides immediate increased participation in the home as children interact with their parents on waste issues.

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    a. Ongoing business and small quantity generator education is encouraged as it provides technical assistance, helps reduce the amount of MRW generated, and facilitates efficient and cost-effective disposal of waste created.

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    a. In Whitman County, there are disposal bans in place for eWaste and mercury containing light bulbs (e.g. CFLs and fluorescent bulbs). The Whitman County Department of Health is the lead agency in enforcing disposal bans.

b. The Whitman County Code, Title 19, addresses the siting of facilities processing, handling, and storing hazardous materials.

c. Whitman County issues conditional use permits and special permits that establish specific conditions for the processing/handling of hazardous material, infectious material and/or radioactive material, where State of Washington or the Federal Government has not otherwise preempted all control and regulation of said materials.

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6.8.4 Alternative Programs

Should priorities change, or additional funding opportunities become available, the Whitman County Solid Waste Division would like to consider alternative programs. For instance, Whitman County has expressed an interest in locating a MRW collection facility in the northerly portion of the County to better serve those citizens, many of which are in rural areas.

6.9 Annual Budget

Currently, there is no fee for dropping off MRW. The Moderate Risk Waste Fixed Facility is funded by a combination of tipping fees and CPG grant funds. Table 6-4 shows the current and past cost of operating the Fixed Facility. In 2016, the MRW program had 1,149 participants and cost $65,348.00, including employee, education, advertising, operation, disposal, and capital improvement related costs. This is approximately $56.87 per participant (see Table 6-5). Three full time equivalent (FTE) employees are needed to maintain the existing MRW programs and Fixed Facility. If CPG grant funds were reduced or became unavailable, this would require charging a fee for dropping off MRW, or covering this cost by increasing the tipping fees more than 4% every other year. Another option could be closing the Fixed Facility entirely and moving towards MRW disposal events held twice yearly.

Table 6-4: Fixed Facility Annual Costs from 2010 – 2016.							
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	Employee Staffing, Training, Benefits	Education	Advertising	Operation	Disposal	Capital Improvement	
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2015	49,485.00	3,965.00	1,800.00	6,945.00	3,900.00	1,200.00	67,295.00
2014	51,523.00	4,253.00	2,300.00	7,125.00	4,500.00	990.00	70,691.00
2013	41,263.45	3,993.25	1,789.23	6,231.39	4,255.00	0.00	57,532.32
2012	38,309.23	4,201.49	1,950.00	5,425.00	3,944.12	0.00	53,829.84
2011	32,566.59	2,299.41	2,909.53	4,921.53	2,967.28	0.00	45,684.34
2010	35,418.93	2,401.59	3,009.31	5,221.14	3,129.64	0.00	49,180.61
Average Cost	43,007.46	3,016.25	2,029.72	6,240.15	3,899.43	312.86	58,508.73

Table 6-5: Moderate Risk Waste Fixed Facility Participants from 2010 – 2016.			
Calendar Year	**Number of Participants**	**Cost ($)**	**Cost Per Participant ($)**
2016	1,149	65,348.00	56.87
2015	879	67,295.00	76.56
2014	1,015	70,691.00	69.65
2013	871	57,532.32	66.05
2012	789	53,829.84	68.23
2011	894	45,684.34	51.10
2010	930	49,180.61	52.88
Average Cost Per Participant ($)			63.05

APPENDICES

APPENDICES

A. WUTC Cost Assessment
B. SEPA Checklist
C. Resolutions of Adoption
D. SWAC Meeting Minutes
E. Interlocal Agreement
F. Flow Control Ordinance (Ord. No 73385, 9-17-2012)
G. Solid Waste Plan Matrix

A. Washington Utilities and Transportation Commission Cost Assessment for Local Solid Waste Management Planning

COST ASSESSMENT QUESTIONNAIRE

Please provide the information requested below:

PLAN PREPARED FOR THE COUNTY OF: Whitman

PLAN PREPARED FOR THE CITY OF:

PREPARED BY: J-U-B Engineers, Inc.

CONTACT TELEPHONE:_509-458-372_ DATE: _9/25/18_____

DEFINITIONS

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

Throughout this document:

YR.1 shall refer to **_2019_.**

YR.3 shall refer to **_2021_.**

YR.6 shall refer to **_2024_.**

Year refers to (circle one): calendar (Jan 01 - Dec 31)

fiscal (Jul 01 - Jun 30)

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

1.1 Population

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

YR.1 **50,927** YR.3 **52,984** YR.6 **56,228**

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

YR.1 **see above** YR.3 _____ YR.6 _____

1.2 References and Assumptions

A 2% population increase per year was applied to actual population data from 2017 (population 49,046).

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

2.1 Tonnage Recycled

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

YR.1 **20,299** YR.3 **21,119** YR.6 **22,412**

2.2 Tonnage Disposed

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

YR.1 **34,989** YR.3 **36,403** YR.6 **38,631**

2.3 References and Assumptions

A 2% growth rate per year was applied to actual tonnages from 2017; actual tonnages for recycling and total tonnage disposed are 19,511 tons and 33,630 tons. The 2017 tonnage in 2.1.1 (19,511 tons) includes all recycling within Whitman County including the blue bins, recycling centers, (Empire, Pullman, Carothers Road Facility, metals recycling, WSU recycling), curbside recycling programs, School Districts recycling, regional composting, community yard debris programs and office recycling. The 2017 tonnage in Section 2.2.1(33,630 tons) is the total tonnage of waste including

construction/ demolition debris and inert waste, asbestos, municipal solid waste (29,077 tons), tires, yard waste, and wood waste disposed of at the Whitman County Solid Waste Division facilities.

The estimates for YR. 1, YR. 3, and YR. 6 assume a tonnage increase of approximately 2% each year and achieving the Waste Reduction goals outlined in the 2018 SWMP Update for the 2019-2024 planning period.

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

3.1 Waste Reduction Programs

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

	IMPLEMENTED	PROPOSED
Private and Public Composting, p. 22 SWMP		_____
Home Composting, p. 22-23 SWMP	_____	
Recycled Art Competition, p. 23 SWMP	_____	

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

$10,000-20,000 a year for education, not including the Recycling Director's time spent tabling at local events. $24,000 a year to rent the loader. Relining the baler every 18 years costs $100,000, or $10,000 per year. Operating costs of facility is about $72,000 a year. This totals to $126,000 for 2017. For 2019-2024, inflation (2% per year) was applied to this total. Also, beginning Year 1, the MRF facility would be installed at a cost of $1,000,000 to be paid over 6 years and the HHW facility would be installed in Year 1 at a cost of $300,000 to be paid over 6 years.

IMPLEMENTED

YR.1 **$347,757** YR.3 **$353,054** YR.6 **$361,401**

PROPOSED

YR.1 _____ YR.3 _____ YR.6 _____

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

Department of Ecology CPG funds ($53,000 for organics + $57,000 for waste reduction/recycling = $110,000 for two years). Whitman County could use additional funding for each program (approximately $100,000 per year for each task). Tipping fees are also used to fund the programs and operational costs. A 4% inflation factor is applied to tipping fees every 2 years.

IMPLEMENTED

YR.1 **$55,000** YR.3 **$55,000** YR.6 **$55,000**

PROPOSED

YR.1 _____ YR.3 _____ YR.6 _____

3.2 Recycling Programs

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

IMPLEMENTED

Community Recycling Education and Outreach, p. 23-24 SWMP

School Recycling and Curricula Programs, p. 24-26 SWMP

Pharmaceutical Drug Drop Off, p. 26 SWMP

Whitman County Business Recycling, p. 27 SWMP

Whitman County In-house Recycling, p. 27 SWMP

Recycled Product Purchasing, p. 28 SWMP

Household Hazardous Waste Exchange, p. 28 SWMP

Disposal Bans, p. 28 SWMP

PROGRAM	COST	FUNDING
Total Programs	**$131,090***	**CPG Grant Funds and tipping fees**

***2% growth rate per year was applied to the 2017 total program cost ($126,000).**

3.3 Solid Waste Collection Programs

3.3.1 Regulated Solid Waste Collection Programs

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

WUTC Regulated Hauler Name Empire Disposal

G-permit # 75

	YR. 1	YR. 3	YR. 6
RESIDENTIAL			
- # of Customers	**4,682**	**4,871**	**5,169**
- Tonnage Collected	**6,086**	**6,332**	**6,719**
COMMERCIAL			
- # of Customers	**884**	**920**	**976**
- Tonnage Collected	**2,941**	**3,060**	**3,247**

Number of customers and tonnage collected was provided by the hauler for 2017; 4,500 residential customers generated 5,850 tons, and 850 commercial customers generated 2,827 tons in 2017. Projections for 2019-2024 were determined by applying a 2% increase per year to the actual 2017 number of customers and tonnages.

WUTC Regulated Hauler Name Pullman Disposal

G-permit # 42

	YR. 1	YR. 3	YR. 6	
RESIDENTIAL				
- # of Customers	**6,183**	**6,433**	**6,827**	****Estimated based on**
- Tonnage Collected**	**6,343**	**6,599**	**7,003**	**assumptions.**
COMMERCIAL				
- # of Customers	**646**	**672**	**713**	
- Tonnage Collected**	**7,446**	**7,747**	**8,221**	

Number of customers in 2017 was provided by the hauler; 6,062 residential customers and 633 commercial customers. A 2% increase per year in number of customers was applied to the 2017 data.

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

Hauler Name Town of Garfield

	YR. 1	YR. 3	YR. 6
# of Customers**	**306**	**318**	**338**
Tonnage Collected	**305**	**317**	**337**

Number of customers (294 customers) and tonnage (299 tons) for 2017 was provided by the Town of Garfield. A 2% increase per year was applied to the number customers and tonnages to project 2019-2024 numbers.

Hauler Name Washington State University

	YR. 1	YR. 3	YR. 6
# of Customers	**203**	**211**	**224**
Tonnage Collected	**3,736**	**3,887**	**4,125**

Number of customers (195 customers) and tonnage (3,663 tons) for 2017 was provided by WSU. A 2% increase per year was applied to the number customers and tonnages to project 2019-2024 numbers.

3.4 Energy Recovery & Incineration (ER&I) Programs

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

3.4.1 Complete the following for each facility:

Name: **N/A**

Location: **N/A**

Owner: **N/A**

Operator: **N/A**

3.4.2 What is the permitted capacity (tons/day) for the facility? ___**N/A**_____

3.4.3 If the facility is not operating at capacity, what is the average daily throughput?

YR.1 __**N/A**_____ YR.3 ___**N/A**_____ YR.6 __**N/A**_____

3.4.4 What quantity is estimated to be land filled which is either ash or cannot be processed.

YR.1 __**N/A**_____ YR.3 __**N/A**_____ YR.6 __**N/A**_____

3.4.5 What are the expected capital costs and operating costs, for ER&I programs (not including ash disposal expense)?

YR.1 ___**N/A**_____ YR.3 ___**N/A**_____ YR.6 ___**N/A** _____

3.4.6 What are the expected costs of ash disposal?

YR.1 ___**N/A** _____ YR.3 __**N/A** _____ YR.6 __**N/A** _____

3.4.7 Is ash disposal to be: _____ on-site? **N/A**

_____ in county? **N/A**

_____ long-haul? **N/A**

3.4.8 Please describe the funding mechanism(s) that will fund the costs of this component.

N/A

3.5 Land Disposal Program

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

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

Landfill Name: Whitman County Limited Purpose Landfill

Owner: Whitman County

Operator: Whitman County

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

YR.1 **188** YR.3 **196** YR.6 **208**

Approximately 31 tons by Pullman Disposal and 150 tons by Empire Disposal in 2017. A 2% growth increase per year was applied to 2017 total.

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

YR.1 **551** YR.3 **573** YR.6 **608**

The total tonnage accepted at the LPL in 2017 was 711. A 2% growth increase per year was applied to 2017 total.

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

YR.1 **Tipping fees and CPG grant funding.**

YR.3 **Tipping fees and CPG grant funding.**

YR.6 **Tipping fees and CPG grant funding.**

3.5.5 Please describe the funding mechanism(s) that will defray the cost of this component.

Tipping fees and CPG grant funding.

3.6 Administration Program

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

Budgeted Cost

YR.1 **$286,266** YR.3 **$297,831** YR.6 **$316,061**

Funding Source

YR.1 _____ YR.3 _____ YR.6 _____

Tipping fees and CPG grant funding.

Solid waste program administration was approximately $94,000 in 2017 and the administrative cost of the recycling programs was approximately $181,150 in 2017. The total budgeted cost for 2017 was $275,150; a 2% growth increase per year was applied to this total.

3.6.2 Which cost components are included in these estimates?

Salaries for management and development of programs, educational materials, office materials, program supplies, professional development, etc.

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

See 3.6.1.

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

3.7 Other Programs

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

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

3.7.2 Owner/Operator:

3.7.3 Is WUTC Regulation Involved? If so, please explain the extent of involvement in section

3.7.4 Please estimate the anticipated costs for this program, including capital and operating expenses.

YR.1 _____ YR.3 _____ YR.6 _____

3.7.5 Please describe the funding mechanism(s) that will recover the cost of this component.

3.8 References and Assumptions (attach additional sheets as necessary)

Thurston County, WA determined that 60% of waste in the County is generated by commercial customers. An EPA study determined that an average of 54% of waste is generated by commercial customers. Since Whitman County is more rural than Thurston County, it is anticipated that the proportion of waste generated by commercial customers is closer to 54%. Therefore, the waste generated by residential and commercial customers (for Pullman Disposal) was based on the

assumption that approximately 54% of waste is generated by commercial users, and 46% of waste is generated by residential users. As determined by historic patterns, is also assumed that tonnage and population grow approximately 2% annually (1.6% average growth per year for tonnage and 1.9% growth per year for population).

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

Table 4.1.1 Facility Inventory

Facility Name	Type of Facility	Tip fee per ton	Transfer Cost	Transfer Station Location	Final Disposal Location	Total Tons Disposed	Total Revenue Generated (Tip Fee x Tons)
Whitman County	T	$110.24*	$52.79**	Whitman County		30,252*	$3,334,948.60
Landfill and Transfer Station	L1	$75.00	-	Whitman County	Whitman County	472*	$35,400.00
Landfill and Transfer Station	L2	$100.00	-	Whitman County	Whitman County	267*	$26,700.00
L1 = Limited Purposed Landfill							
L2 = Asbestos							
*The 2017 tip fee is $106. A 4% increase every 2 years is applied. 2017 tonnage was 29,077 at the transfer station, 454 at L1 and 257 at L2; a 2% increase per year was applied to this number.							
**Includes disposal							

Table 4.1.2 Tip Fee Components

Tip Fee by Facility	Surcharge	City Tax	County Tax	Transportation Cost	Operational Cost*	Administration Cost*	Closure Costs*
Refuse (Transfer)	$110.24			$52.79**	$22.51	$11.71	$2.93
Asbestos	$100.00			-	$93.00	$7.00	$2.50
LPL	$75.00			-	$65.50	$7.00	$2.50
**Includes disposal. A new contract became effective 7/1/2012 which accounts for the reduction in transportation costs compared to the previous cost assessment.							
*Costs were determined by inflating the values from the previous cost assessment (beginning at 2011 values).							

Table 4.1.3 Funding Mechanism										
Name of Program Funding Mechanism will defray costs	Bond Name	Total Bond Debt	Bond Rate	Bond Due Date	Grant Name	Grant Amount	Tip Fee	Taxes	Other	Surcharge
Recycling and Waste Reduction	-	-	-	-	CPG	$110,000	-	-	-	-

Table 4.1.4 Tip Fee Forecast						
Tip Fee per Ton by Facility	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Refuse (Transfer)	$110.24	$110.24	$114.65	$114.65	$119.28	$119.28
Limited Purpose Landfill	$75.00	$75.00	$75.00	$75.00	$75.00	$75.00
Asbestos	$100.00	$100.00	$100.00	$100.00	$100.00	$100.00

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

Table 4.2.1 Funding Mechanism by Percentage
YEAR ONE

Component	Tip Fee%	Grant %	Bond %	Collection Rates %	Other %	Total
Waste Reduction	75	25	-	-	-	100%
Recycling	75	25	-	-	-	100%
Collection	100	-	-	-	-	100%
ER&I	-	-	-	-	-	-
Transfer	100	-	-	-	-	100%
Land Disposal	100	-	-	-	-	100%
Administration	100	-	-	-	-	100%
Other	-	-	-	-	-	-

Table 4.2.2 Funding Mechanism by Percentage
YEAR THREE

Component	Tip Fee%	Grant %	Bond %	Collection Rates %	Other %	Total
Waste Reduction	75	25	-	-	-	100%
Recycling	75	25	-	-	-	100%
Collection	100	-	-	-	-	100%
ER&I	-	-	-	-	-	-
Transfer	100	-	-	-	-	100%
Land Disposal	100	-	-	-	-	100%
Administration	100	-	-	-	-	100%
Other	-	-	-	-	-	-

Table 4.2.1 Funding Mechanism by Percentage
YEAR SIX

Component	Tip Fee%	Grant %	Bond %	Collection Rates %	Other %	Total
Waste Reduction	75	25	-	-	-	100%
Recycling	75	25	-	-	-	100%
Collection	100	-	-	-	-	100%
ER&I	-	-	-	-	-	-
Transfer	100	-	-	-	-	100%
Land Disposal	100	-	-	-	-	100%
Administration	100	-	-	-	-	100%
Other	-	-	-	-	-	-

4.3 References and Assumptions

Please provide any support for the information you have provided. An annual budget or similar document would be helpful.

Refer to 2018 SWMP for details of financial surety, and other information regarding the annual budget.

4.4 Surplus Funds

Please provide information about any surplus or saved funds that may support your operations.

Refer to 2018 SWMP for details of financial surety, and other information regarding the annual budget.

B. SEPA Checklist

The final SEPA Checklist will be inserted following DOE review of the Preliminary SWMP Submittal.

SEPA 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.

A. Background [HELP]

1. Name of proposed project, if applicable:

Whitman County Solid Waste Management Plan (SWMP) 2018

2. Name of applicant:

Whitman County Public Works, Solid Waste Division

3. Address and phone number of applicant and contact person:

Mark Storey
Director of Public Works/County Engineer
Whitman County
310 N. Main Street
Colfax, WA 99111
509-397-6206

4. Date checklist prepared:

September 25, 2018

5. Agency requesting checklist:

Whitman County Planning Department

6. Proposed timing or schedule (including phasing, if applicable):

Proposed implementation of the 2018 SWMP is from 2019-2024.

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

The SWMP is reviewed and updated every 5 years.

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

None.

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

None.

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

SWMP approval is required from the Whitman County Board of Commissioners, participating municipal jurisdictions, the Washington Utilities and Transportation Commission (WUTC), and the Washington Department of Ecology (DOE).

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The Whitman County 2018 SWMP discusses the management and disposal of municipal solid waste generated in Whitman County. The plan discusses the goals and objectives of the SWMP, identifies the type and quantity of waste generated in the County's waste stream, and describes the current solid waste programs and facilities in the County, as well as their implementation schedule. The SWMP offers recommendations, following the analysis of potential program and system enhancements. The final chapter of the SWMP discusses the County's moderate risk waste management plan.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The plan encompasses all incorporated and unincorporated areas within Whitman County, WA (including Washington State University). Figure 1-1 in the SWMP illustrates the incorporated communities, major haul routes, and WUTC certificate areas.

B. Environmental Elements [HELP]

1. *Earth* [help]

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

The terrain in Whitman County varies throughout. Flat, rolling, hilly, and steep slopes are all characteristic of Whitman County in different areas.

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

Not applicable.

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.

Not applicable. The SWMP is a planning document and would not remove any soils. The physical conditions of Whitman County are described in the SWMP, including the general soil characteristics of the area. In general, Whitman County contains highly productive soils. Seven soil associations make up the majority of soils in the County: Walla Walla,

Athena,Athena-Calouse, Palouse, Palouse-Stanley, Palouse-Thatuna, and Palouse-Thatuna-Naff.

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

Not applicable.

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.

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

2. Air [help]

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.

Some emissions will result from the operation of the Carothers Road Solid Waste Facility, WSU compost facility, and from vehicles used to transport solid waste. The quantity of emissions is undetermined, but they are expected to be a negligible amount relative to Whitman County.

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

No. According to the Environmental Protection Agency (EPA) Green Book, Whitman County is in attainment for all criteria pollutants.

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

Emissions are controlled by applicable Federal, State, and local regulations.

3. Water [help]

a. Surface Water: [help]

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.

Surface waters in Whitman County include the Snake and Palouse Rivers and their associated tributaries, Rock Creek, and other smaller streams. Rock Lake is the largest lake in Whitman County. No surface waters are in the immediate vicinity of the Whitman County solid waste operating facilities.

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.

Not applicable.

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.

Not applicable.

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

Not applicable.

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

Not applicable.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water: [help]

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 general description, purpose, and approximate quantities if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The Carothers Road Solid Waste Facility uses a small, on-site septic system.

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.

Runoff and stormwater management techniques are implemented at all solid waste facilities pursuant to the Stormwater Management Manual for Eastern Washington.

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.

Not applicable.

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

Various system controls are utilized at Whitman County solid waste facilities to prevent waste materials from entering ground and surface waters. These system controls include: diversions, covers, caps, liners, leachate control systems and ground water monitoring.

4. Plants [help]

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

A variety of vegetation is found throughout Whitman County including but not limited to deciduous and evergreen trees, shrubs, grasses, pasture land, and crops.

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

Not applicable.

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

Spalding's catchfly (threatened) and water howellia (threatened) are known to exist within portions of Whitman County.

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

Not applicable.

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

Common noxious weeds found in Washington State include: babysbreath, field bindweed, reed canary grass, white cockle, spiny cocklebur, hoary cress, dodder, jointed goatgrass, common groundsel, hawkweed, black henbane, yellow flag iris, English ivy, knotweed, bohemian curly-leaf pondweed, old man's beard, poison-hemlock, common reed, common rye, spikeweed, common St. Johnswort, common tansy, bull thistle, Canada thistle, yellow toadflax, hairy willowherb, absinth wormwood, scentless mayweed, and butterfly bush.

5. Animals [help]

a. List any birds and other animals which 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 _____

A variety of birds, mammals, and fish are present throughout Whitman County including, but not limited to, hawk, songbirds, deer, and trout.

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

The yellow-billed cuckoo (threatened) and bull trout (threatened) are known to exist within Whitman County.

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

Not applicable.

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

There are no specific measures to preserve wildlife, though implementation of solid waste management is essential for protecting water quality and soils used by wildlife.

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

Not applicable.

6. Energy and Natural Resources [help]

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.

Electricity is used to operate the existing Whitman County solid waste facilities and equipment.

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

No.

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:

No energy conservation features are part of the SWMP. The programs described in the SWMP relate to reducing solid waste, recycling, and reuse. These strategies promote energy savings.

7. Environmental Health [help]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Household hazardous waste is accepted at the Carothers Road Solid Waste Facility. Procedures are in place to minimize exposure to these substances, such as a facilities operating plan. Also, the SWMP describes the moderate risk waste management plan implemented at Whitman County solid waste facilities.

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

None.

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.

Whitman County operates a solid waste facility that handles and manages household hazardous waste/moderate risk waste. Compliance with applicable regulations is

necessary when implementing the SWMP.

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.

Household hazardous waste is received at the solid waste facility. Clean Harbors is used to transport the waste for disposal.

4) Describe special emergency services that might be required.

Solid waste personnel are trained in emergency procedures. In case of an emergency, the Whitman County fire and emergency services will be contacted.

5) Proposed measures to reduce or control environmental health hazards, if any:

A Fire and Emergency Response Plan, Hazardous Spills Plan, and Emergency Procedures and Directory, and Safety programs are in place. Implementation of the SWMP will reduce/control environmental health hazards related to solid waste, as well as frequent review and update of the plan. The Whitman County Department of Health is the permitting and enforcement authority for solid waste facilities in the County.

b. Noise

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

None.

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.

Low, short-term noise related to operation of facilities and equipment, and transportation of solid waste would be created.

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

None.

8. Land and Shoreline Use [help]

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.

Not applicable.

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 as a result 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?

Not applicable.

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:

Not applicable.

c. Describe any structures on the site.

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

Not applicable.

9. Housing [help]

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

Not applicable.

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

Not applicable.

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

Not applicable.

10. Aesthetics [help]

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

No structures are proposed by the SWMP, with the possible exception of a replacement Moderate Risk Waste Facility, comparable in height to the existing facility. The SWMP discusses and briefly analyzes the feasibility of constructing a new Cell 5.

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

Not applicable.

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

Not applicable.

11. Light and Glare [help]

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

12. Recreation [help]

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

None.

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

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None.

13. Historic and cultural preservation [help]

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.

Not applicable.

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.

According to DAHP's WISAARD database, Whitman County contains a mixture of areas that are high risk (highly advise surveys), moderate risk (recommend surveys), and are low risk (state surveys are contingent upon the specific project).

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.

The SWMP is a planning document and would not impact cultural or historic resources.

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.

Not applicable.

14. Transportation [help]

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.

The Transfer Station can be accessed by Landfill Road, off of Carothers Road. Solid waste is transported throughout the County on various major roads and highways.

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?

Not applicable. Whitman County contains public transit, but solid waste is transported using trucks.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No.

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

Rail is used to transport solid waste to the Roosevelt Regional Landfill.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The number of vehicle trips per day related to solid waste transport and disposal would not increase as a result of the SWMP. One objective of the SWMP to promote positive solid waste behavior among residents. If resident behavior were to improve, it is possible that residents would make more trips to the transfer facility.

g. 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.

No.

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

None.

15. Public Services [help]

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No. The need for public services would not increase from the current need.

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

None.

16. Utilities [help]

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

Not applicable.

c. 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.

Not applicable.

C. Signature [HELP]

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.

Signature: _____

Name of signee Mark Storey

Position and Agency/Organization Public Works Director/County Engineer

Date Submitted: 9/25/18

D. Supplemental sheet for nonproject actions [HELP]

(**IT IS NOT NECESSARY** to use this sheet 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 SWMP is anticipated to result in a decrease of the above stated environmental consequences. The SWMP should improve the management of solid waste handling, transportation and disposal.

Proposed measures to avoid or reduce such increases are:

- **Solid waste community and business education**
- **Waste reduction programs**
- **Recycling programs**
- **Reuse programs**
- **Compliance with applicable regulations (solid waste handling facilities and carriers)**
- **Moderate Risk Waste management programs**

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

SWMP implementation should preserve and protect habitat for plants, animals, and fish by properly managing solid waste disposal operations. The programs described in the SWMP are important methods for maintaining a clean and healthy environment for all life.

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

Measures to protect plants and animals include proper solid waste disposal, compliance with solid waste regulations, and groundwater monitoring.

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

The proposal would not deplete energy or natural resources. The programs described in the SWMP are meant to maintain existing energy and natural resources by encouraging the recycling and reuse of products.

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

- **Education programs (i.e. recycling)**
- **Recycling and reuse programs**

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

The SWMP would not use or negatively impact the above stated environmentally sensitive areas or areas designated for governmental protection. Implementation of the SWMP should protect the environment by maintaining water quality and soil conditions and encouraging the public to properly dispose of solid waste and moderate risk waste.

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

The various solid waste programs discussed in the SWMP should aide in protecting such resources.

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?

No impacts to land and shoreline use are anticipated to result from implementation of the SWMP. The SWMP describes the current solid waste operations in Whitman County. The SWMP should not encourage or allow incompatible land uses.

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

None.

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

The SWMP is not anticipated to significantly impact demands on transportation, public services or utilities.

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

None.

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

Preparation of the SWMP is required by state requirements with the intent to protect the environment. The SWMP was prepared to ensure that solid waste operations in Whitman County conform with all local, state, and federal laws.

C. Resolutions of Adoption

The Resolutions of Adoption will be inserted following approval of the plan

D. SWAC Meeting Minutes

The SWAC Meeting Minutes can be found at the following link:

http://whitmancounty.org/page.aspx?pn=Solid+Waste+Recycling+Division

E. Interlocal Agreements

The Interlocal Agreements will be included during the Preliminary Draft Submittal review, or upon submittal of the Final Draft Submittal.

F. Flow Control Ordinance (Ord. No 73385, 9-17-2012)

Chapter 8.13 - SOLID WASTE

Sections:

8.13.001 - Jurisdiction.

These regulations shall apply to all territory embraced within the limits of Whitman County except the incorporated area of towns and cities which have their own boards of health and health officers.

(Ord. 51922 (part), 1997).

8.13.010 - Purpose and objectives.

A. The purpose of these regulations is to protect the health and well being of the public and to prevent contamination of the environment through the attainment of the following objectives:
   1. Establish minimum functional performance standards for the proper handling and disposal of solid waste materials as defined in the Minimum Functional Standards for Solid Waste Handling, Chapter 173-304 and 173-351, Washington Administrative Code;
   2. Establish minimum location, design, operation, maintenance and monitoring requirements for solid waste facilities;
   3. Establish permitting and enforcement procedures consistent with provisions of WAC 173-304 and Whitman County department of public health policies and procedures;
   4. Reduce the Whitman County municipal solid waste stream as much as possible by promoting and facilitating the reuse and recycling of natural and manufactured resources.

(Ord. 51922 (part), 1997).

8.13.015 - Authority.

These regulations are adopted pursuant to Chapters 70.95.160, 70.05.060, 70.05.070, 70.05.120, 70.46.060 and 70.46.120 RCW, and Chapter 173-304 WAC and Chapter 173-351 WAC.

(Ord. 51922 (part), 1997).

8.13.020 - Administration.

The Whitman County health officer shall administer the provisions of these regulations.

(Ord. 51922 (part), 1997).

8.13.030 - General adoption of WAC 173-304 and WAC 173-351.

In accordance with the provisions of Chapter 70.95.160 RCW, the Whitman County department of public health adopts criteria for Municipal Solid Waste Landfills, Chapter 173-351 WAC and the following sections of the Minimum Functional Standards for Solid Waste Handling, Chapter 173-304 WAC, as adopted by the Washington Department of Ecology on October 28, 1985, except as modified and specified in this regulation.

Future amendments, modifications and changes thereto shall be reviewed by Whitman County Board of Health and may be incorporated as amendments to this regulation.

(Ord. 51922 (part), 1997).

8.13.040 - Applicability (WAC 173-304-015).

WAC 173-304-015, Applicability, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.050 - Definitions (WAC 173-304-100).

WAC 173-304-100 is adopted by reference with the following additions:

A. "Department" means the Whitman County health department.

B. "Garbage" means unwanted animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food, swill and carcasses of dead animals, and of such character and proportion as to be capable of attracting or providing food for vectors. Sewage and sewage sludge (biosolids) are not included in this definition.

C. "Junk vehicle" means a vehicle meeting at least three of the following requirements:

   a. Is three years old or older;

   b. Is extensively damaged, such damage including but not limited to any of the following: A broken window or windshield or missing wheels, tires, motor or transmission;

   c. Is apparently inoperable; and

   d. Has an approximate fair market value equal only to the approximate value of scrap in it.

D. "Solid waste" means all putrescible and nonputrescible solid and semisolid wastes, including but not limited to garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, junk vehicles, abandoned vehicles or parts thereof, and discarded commodities. This includes all liquid, solid and semisolid materials, which are not the primary products of public, private, industrial, commercial, mining and agricultural

operations. Solid waste includes but it is not limited to sludge from wastewater treatment plants and septage from septic tanks, woodwaste, dangerous waste, and problem wastes.

(Ord. 58340 (part), 2001: Ord. 58064 (part), 2001: Ord. 51922 (part), 1997).

8.13.060 - Locational standards for disposal sites (WAC 173-304-130).

WAC 173-304-130 is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.070 - Owner responsibility for solid waste (WAC 173-304-190).

WAC 173-304-190 is adopted by reference. The owner, operator or occupant of any premises, business establishment or industry shall be responsible for the satisfactory and legal arrangement for the solid waste handling of all solid waste accumulated by them on the property.

(Ord. 51922 (part), 1997).

8.13.080 - Permit required (WAC 173-304-195).

WAC 173-304-195, Permit Required, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.090 - On-site containerized storage, collection and transportation standards for solid waste (WAC 173-304-200).

WAC 173-304-200, On-site containerized storage, collection and transportation standards for solid waste, is adopted by reference with the following additions:

A. All garbage shall be stored in containers meeting the requirements of WAC 173-304-200(2)(b)(i) and (ii). Disposable containers shall be sufficiently strong to allow lifting without breakage and shall be thirty-two gallons in capacity or less where manual handling is practiced. Reusable solid waste containers shall be:
    1. Rigid and durable;
    2. Corrosion resistant;
    3. Nonabsorbent and water tight;
    4. Rodent-proof and easily cleanable;
    5. Equipped with a close-fitting cover;
    6. Suitable for handling with no sharp edges or other hazardous conditions; and

7. Equal to or less than thirty-two gallons in volume where manual handling is practiced.

B. Garbage shall be removed from a premises no less than once per week unless a different frequency is approved by the health officer.

C. The owner and/or occupant of any premises shall be responsible for the safe and sanitary storage of all solid waste generated or accumulated at that premises until it is transported to a permitted solid waste handling facility. The storage area and containers shall be maintained in a clean, safe and nuisance free condition. Light weight solid wastes shall be contained to prevent blowing and scattering.

D. All solid wastes shall be disposed of at an appropriate solid waste handling facility as designated and permitted under these regulations, or in a manner consistent with these regulations as approved by the health officer. Should a situation arise where disposal of solid waste is not covered under these regulations, the health officer shall determine acceptability of a method of disposal for the solid waste on a case-by-case basis.

(Ord. 51922 (part), 1997).

8.13.100 - Waste recycling facility standards (WAC 173-304-300).

WAC 173-304-300, Waste recycling facility standards, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.110 - Solid waste handling facility standards (WAC 173-304-400).

WAC 173-304-400, Solid waste handling facility standards, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.120 - General facility requirements (WAC 173-304-405).

WAC 173-304-405, General facility requirements, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.130 - Transfer stations, baling and compaction systems, and drop box facilities (WAC 173-304-410).

WAC 173-304-410, Transfer stations, baling and compaction systems and drop box facilities, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.140 - Piles used for storage and treatment-Facility standards (WAC 173-304-420).

WAC 173-304-420, Piles used for storage and treatment-Facility standards, is adopted by reference with the following addition: Seasonal or temporary storage of agricultural or other solid wastes in piles can be an acceptable practice provided that the pile is adequately protected from surface runoff, appropriate measures are taken to prevent odors, control vermin and insects, and other measures as may be specified by the health officer to protect the public health.

(Ord. 51922 (part), 1997).

8.13.150 - Surface impoundment standards (WAC 173-304-430).

WAC 173-304-430, Surface impoundment standards, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.160 - Energy recovery and incinerator standards (WAC 173-304-440).

WAC 173-304-440, Energy recovery and incinerator standards, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.170 - Landspreading disposal standards (WAC 173-304-450).

WAC 173-304-450, Landspreading disposal standards, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.180 - Landfilling standards (WAC 173-304-460).

WAC 173-304-460, Landfilling standards, is adopted by reference with the following additions:

A. Asbestos Wastes. Asbestos wastes must be transported to a permitted disposal site in a manner which prevents the visible emission of asbestos-containing material into the outside air. This can be accomplished by double-bagging small amounts of properly-wetted, asbestos-containing waste in plastic garbage bags. The bags must be taped closed and clearly marked as follows:

Caution

Contains Asbestos

Avoid opening or Breaking Container

Breathing Asbestos is Hazardous to Your Health

B. Used Oil. Used oil shall be recycled, re-refined or disposed in a facility permitted for that purpose by Ecology or the health officer, or as otherwise allo or the health officer. These wastes can be taken to service stations or other like facilities that collect used oil for subsequent reprocessing.

(Ord. 51922 (part), 1997).

8.13.190 - Inert waste and demolition waste landfilling facility requirement (WAC 173-304-461).

WAC 173-304-461, Inert waste and demolition waste landfilling facility requirements, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.200 - Woodwaste landfilling facility requirements (WAC 173-304-462).

WAC 173-304-462, Woodwaste landfilling facility requirements, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.210 - Problem waste landfills (WAC 173-304-463).

WAC 173-304-463, Problem waste landfills, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.220 - Other methods of solid waste handling (WAC 173-304-470).

WAC 173-304-470, Other methods of solid waste handling, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.230 - Groundwater monitoring requirements (WAC 173-304-490).

WAC 173-304-490, Groundwater monitoring requirements, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.240 - Permit requirements for solid waste facilities (WAC 173-304-600).

WAC 173-304-600, Permit requirements for solid waste facilities, is adopted by reference with the following additions:

A. Permit Fees.

1. Applications for new solid waste facility permits and permit renewals shall be submitted to the department with a nonrefundable fee established by the board of health.

2. The health officer may also require reimbursement for additional actual expenses incurred in processing a new permit or permit renewal application. Examples of such additional expenses include but are not limited to consultants fees, sampling and testing and public notification.

   a. If an application is approved, the reimbursement fees for additional expenses shall be paid prior to final issuance of permit.

   b. If the application is not approved, the reimbursement fees for additional expenses shall be paid within thirty days from the date a determination is made by the health officer.

B. The date of receipt of an application referred to in WAC 173-304-600(2)(g) shall be the date when all the information required by the health officer, appropriate fees and the appropriate number of copies have been received by the department.

(Ord. 51922 (part), 1997).

8.13.250 - Variances (WAC 173-304-700).

WAC 173-304-700, Variances, is adopted by reference with the following additions:

A. Variance Fees.

1. Requests for variances for solid waste facility permits and permit renewals shall be submitted to the department with a department fee established by the board of health.

2. The health officer may also require reimbursement for additional actual expenses incurred in processing a variance request. Examples of such additional expenses include but are not limited to consultants' fees, sampling and testing and public notification.

   a. If a request for variance is approved, the reimbursement fees for additional expenses shall be paid prior to final issuance of the variance.

   b. If the request for variance is not approved, the reimbursement fees for additional expenses shall be paid within thirty days from the date a determination is made by the health officer.

B. The date of receipt of an application referred to in WAC 173-304-700 (5) shall be the date when all the information required by the health officer, appropriate fees and the appropriate number of copies have been received by the department.

(Ord. 51922 (part), 1997).

8.13.260 - Maximum contaminant levels for ground water (WAC 173-304-9901).

WAC 173-304-9901, Maximum contaminant levels for ground water, is adopted by reference.

(Ord. 51922 (part), 1997).

8.13.270 - Administration and enforcement.

A. Enforcement Authority. The health officer shall have the authority to enforce the provisions of these regulations equally on all persons. The health officer is also authorized to adopt rules consistent with the provisions of these rules and regulations for the purpose of enforcing and carrying out its provisions.

B. Right of Entry.

1. Whenever necessary to make an inspection to enforce or determine compliance with the provisions of these regulations, and other relevant laws and regulations, or whenever the health officer has cause to believe that a violation of these regulations has been or is being committed, the health officer or his/her duly authorized representative may enter any building, structure, property or portion thereof at reasonable times to inspect the same.
2. If such building, structure, property or portion thereof is occupied, the inspector shall present identification credentials, state the reason for the inspection, and demand entry. Entry shall not be unreasonably denied by the owner or his or her agent, but may be conditioned on the owner or an agent of the owner escorting the inspector, such escort to be provided immediately upon request.
3. If such building, structure, property or portion thereof is unoccupied, the inspector shall first make a reasonable effort to locate the owner or other persons having charge or control of the building, structure, property or portion thereof and demand entry. If the inspector is unable to locate the owner of such other persons and he/she has reason to believe that conditions therewith create an immediate and irreparable health hazard, then he/she shall make entry.
4. It is unlawful for any owner or occupant or other person having charge, care or control of any building, structure, property or portion thereof to fail or neglect after proper demand to permit prompt entry thereon where the inspector has reason to believe that conditions therein create an immediate and irreparable health hazard.
5. Unless entry is consented to by the owner or person in control of any building, structure, property or portion thereof, or conditions are believed to exist which create an immediate and irreparable health hazard, the inspector prior to entry shall obtain a search warrant as authorized by the laws of the state.

C. Violations and Penalties-Persons Not Requiring a Permit. The requirements in this section apply to all persons which are not required to obtain a permit under these regulations. The violation of any provisions of these regulations shall constitute an infraction. Each such violation shall constitute a separate infraction for each and every day or portion thereof during which such violation is committed, continued, or not permitted.

1. Violations-Investigations-Evidence. An authorized representative of the department may investigate alleged or apparent violations of these regulations. Upon request of the authorized representative of the department, the person allegedly or apparently in violation of these regulations shall provide information identifying themselves. Wilful refusal to provide information identifying a person as required by this section is a

misdemeanor.

2. Notice and Order to Correct Violation.
    a. Issuance. Whenever an authorized representative of the department determines that a violation has occurred or is occurring, he/she may issue a written notice and order to correct violation to the property owner or to any person causing, allowing or participating in the violation.
    b. Content. The notice and order to correct violation shall contain:
        i. The name and address of the property owner or other persons to whom the notice and order to correct violation is directed;
        ii. The street address or description sufficient for identification of the building, structure, premises, or land upon or within which the violation has occurred or is occurring;
        iii. A description of the violation and a reference to that provision of the regulation which has been violated;
        iv. A statement of the action required to be taken to correct the violation and a date or time by which correction is to be completed;
        v. A statement that a monetary penalty in an amount per day for each violation shall be assessed against the person to whom the notice and order to correct violation is directed for each and every day, or portion of a day, on which the violation continues following the date set for correction; and
        vi. A statement requiring the person to whom the notice and order to correct violation is directed to produce receipts from a permitted solid waste disposal facility or transporter to demonstrate compliance with any order issued by the department of public health.
    c. Service of Order. The notice and order to correct violation shall be served upon the person to whom it is directed, either personally or by mailing a copy of the order to correct violations by certified mail, postage prepaid, return receipt requested, to such person at his/her last known address. Proof of service shall be made at the time of service by a written declaration under penalty of perjury executed by the persons effecting the service, declaring the time and date of service and the manner by which service was made.
    d. Extension. Upon written request received prior to the correction date or time, the authorized representative may extend the date set for corrections for good cause. The authorized department representative may consider substantial completion of the necessary correction or unforeseeable circumstances which render completion impossible by the date established as a good cause.
3. Notice of Civil Infraction-Service. An authorized representative of the department may issue a notice of civil infraction pursuant to Chapter 7.80 RCW if the authorized representative has reasonable cause to believe that the person has violated any provision of these regulations or has not corrected the violation as required in the written notice and order to correct violation. A notice of civil infraction may be served either by:
    a. The authorized representative serving the notice of civil infraction on the person named in the notice of civil infraction at the time of issuance; or
    b. The authorized representative filing the notice of civil infraction with the district court, in which case the district court shall issue the notice and the authorized representative shall have it served, either personally or by mail, postage prepaid, on the person named in the notice of infraction at his or her last know address.
4. Notice of Civil Infraction-Forum-Contents. The notice of civil infraction shall include the following:
    a. A statement that the notice represents a determination that the infraction has been committed by the person named in the notice and that

the determination shall be final unless contested as provided in this regulation;

b. A statement that the infraction is a noncriminal offense for which imprisonment shall not be imposed as a sanction;

c. A statement of the specific infraction for which the notice was issued;

d. A statement that monetary penalties as set forth below have been established for each infraction;

e. A statement of the options provided in these regulations for responding to the notice and the procedures necessary to exercise these options;

f. A statement that at any hearing to contest the determination that the department has the burden of proving by a preponderance of the evidence that the infraction was committed; and that the person may subpoena witnesses, including the authorized representative of the department, who issued and served the notice of infraction;

g. A statement that at any hearing requested for the purpose of explaining mitigating circumstances surrounding the commission of the civil infraction, the person will be deemed to have committed the civil infraction and may not subpoena witnesses;

h. A statement that the person must respond to the notice as provided in this section within fifteen days; and

i. A statement that failure to respond to the notice or a failure to appear at a hearing requested for the purpose of contesting the determination or for the purpose of explaining mitigating circumstances will result in a default judgment against the person in the amount of the penalty and that this failure may be referred to the prosecuting attorney or city attorney for criminal prosecution for failure to respond or appear.

5. Notice of Civil Infraction-Filing-Hearing in District Court. A notice of civil infraction shall be filed in district court within forty-eight hours of issuance, excluding Saturdays, Sundays and holidays. Whitman County district court shall have jurisdiction to hear and determine violations occurring under these regulations.

6. Notice of Civil Infraction-Determination Infraction Committed. Unless contested in accordance with this regulation, the notice of civil infraction represents a determination that the person to whom the notice was issued committed the infraction.

7. Notice of Civil Infraction-Response Requesting a Hearing-Failure to Respond or Appear-Order to Set Aside.

   a. A person who receives a notice of civil infraction shall respond to the notice as provided in this section within fifteen days of the date the notice was served.

   b. If the person named in the notice of civil infraction does not contest the determination, the person shall respond within fifteen days by completing the appropriate portion of the notice of civil infraction and submitting it, either by mail or in person to the court specified in the notice. A check or money order in the amount of the penalty prescribed for the infraction must be submitted with the response. When a response which does not contest the determination is received, an appropriate order shall be entered in the court's records and a record of the response shall be furnished to the department.

   c. If the person named in the notice of civil infraction wishes to contest the determination, the person shall respond within fifteen days by completing the portion of the notice of civil infraction requesting a hearing and filing it with the court specified on the notice. The court shall notify the person in writing of the time, place, and date of the hearing and that date shall not be earlier than seven days and not more than

ninety days from the date of the notice of hearing except by agreement.

d. If the person named in the notice of civil infraction does not contest the determination, but wishes to explain mitigating circumstances surrounding the infraction, the person shall respond by completing the portion of the notice of civil infraction requesting a hearing for that purpose and filing it with the court specified in the notice. The court shall notify the person in writing of the time, place and date of the hearing, and that date shall not be earlier than seven days and not more than ninety days from the date of the notice of the hearing, except by agreement.

e. The court may enter a default judgment assessing the monetary penalty prescribed for the infraction, and may notify the prosecuting attorney of the failure to respond to the notice of civil infraction or to appear at a requested hearing if any person issued a notice of civil infraction:

i. Fails to respond to the notice of civil infraction as provided in Section 8.13.270(C)(7)(b); or

ii. Fails to appear at a hearing requested pursuant to either Section 8.13.270(C)(7)(c) or Section 8.13.270(C)(7)(d).

8. Notice-Failure to Sign, Nonappearance-Failure to Satisfy Penalty.

a. A person who fails without just cause to sign a notice of civil infraction is guilty of a misdemeanor.

b. Any person wilfully violating his or her written and signed promise to appear in court or his or her written and signed promise to respond to a notice of civil infraction is guilty of a misdemeanor regardless of the disposition of the notice of civil infraction; provided, that a written promise to appear in court or a written promise to respond to a notice of civil infraction may be complied with by appearance by counsel.

c. A person who wilfully fails to pay a monetary penalty or to perform community service as required by a court under these regulations may be found in civil contempt of a court order notice and hearing.

9. Representation by Attorney.

a. A person subject to proceedings under these regulations may appear or be represented by counsel.

b. The prosecuting attorney or city attorney representing the department may, but need not, appear in any proceedings under these regulations, notwithstanding any statute or court rules to the contrary.

10. Infraction-Hearing-Procedure-Burden of Proof-Order-Appeal.

a. A hearing held to contest the determination that an infraction has been committed shall be without a jury.

b. The court may consider the notice of civil infraction and any sworn statements submitted by the department-authorized representative who issued and served the notice in lieu of his or her personal appearance at the hearing. The person named in the notice may subpoena witnesses, including the authorized representative who has issued and served the notice, and has the right to present evidence and examine witnesses present in court.

c. The burden of proof is on the department to establish the commission of the infraction by a preponderance of the evidence.

d. After consideration of the evidence and argument, the court shall determine whether the infraction was committed. If it has not been established that the infraction was committed, an order dismissing the notice shall be entered in the court's records. If it has been established that a civil infraction has been committed, an appropriate order shall be entered in the court's records.

e. An appeal from the court's determination or order shall be to the Superior Court in the manner provided by the Rules of Appeal of Decisions of Jurisdiction. The decision of the Superior Court is subject only to discretionary review pursuant to the Rules of Appellate Procedure.

11. Infraction-Explanation of Mitigating Circumstances.
    a. A hearing held for the purpose of allowing a person to explain mitigating circumstances surrounding the commission of an infraction shall be an informal proceeding. The person may not subpoena witnesses. The determination that an infraction has been committed may not be contested at a hearing held for the purpose of explaining mitigating circumstances.
    b. After the court has heard the explanation of the circumstances surrounding the commission of the infraction, an appropriate order shall be entered in the court's records.
    c. There shall be no appeal from the court's determination or order.
12. Monetary Penalties-Restitution.
    a. In addition to or as an alternative to any other judicial or administrative remedy provided in this regulation or by law or other rules and regulation, any person found to have committed an infraction shall be assessed a monetary penalty. All violations of this ordinance shall be denominated Class I Civil Infractions. The maximum penalty and default amount for Class I Civil Infraction shall be two hundred fifty dollars, not including statutory assessments, per violation.
    b. Whenever a monetary penalty is imposed by court under this ordinance it is immediately payable. If the person is unable to pay at that time, the court may grant an extension of the period in which the penalty may be paid. If the penalty is not paid on or before the time established for payment, the court may proceed to collect the penalty in the same manner as other civil judgments and may notify the prosecuting attorney or city attorney of the failure to pay. The court shall also notify the department of the failure to pay the penalty, and the department shall not issue the person any future permits or approvals until the monetary penalty has been paid.
    c. The court may also order a person found to have committed a civil infraction to make restitution.
13. Order of Court-Civil Nature-Modification of Penalty-Community Service.
    a. An order entered after the receipt of a response which does not contest the determination, or after it has been established at a hearing that the civil infraction was committed, or after a hearing for the purpose of explaining the mitigating circumstances is civil in nature.
    b. The court may waive, reduce to be consistent, or suspend the monetary penalty prescribed for the civil infraction. If the court determines that a person has insufficient funds to pay the monetary penalty, the court may order performance of a number of hours of community service in lieu of a monetary penalty, at the rate of the current state's minimum wage per hour.
14. Costs and Attorney's Fees. Each party in a civil infraction case is responsible for costs incurred by that party, but the court may assess witness fees against a nonprevailing respondent. Attorney's fees may be awarded to either party in a civil infraction case.
15. Written Assurance of Discontinuance. The health officer may accept a written assurance of discontinuance of any act in violation of this regulation from any person who has engaged in such act. Failure to comply with the assurance of discontinuance shall be a further violation of this regulation.
16. Stop-Work and Abatement Orders.

a. Stop-Work Orders. The health officer may cause a stop-work order to be issued whenever the health officer has reason to believe that a violatio occurring. The effect of the stop-work order shall be to require the immediate cessation of such work or activity until authorized by the health o stop-work order shall be posted upon the property where the violation is occurring, and shall be served upon the owner of the property either p certified mail, return receipt requested, at the owner's last known address.

b. Abatement Orders. In addition to or as an alternative to any other judicial or administrative remedy provided in these regulations or by law or other rules and regulations, the health officer may order a violation of these regulations to be abated. The effect of the abatement order shall be to require work to be done to correct the violation within a reasonable time period. If the required corrective work is not commenced or completed within the time specified, the health officer will proceed to abate the violation and cause the work to be done. The abatement order shall be posted upon the property where the violation is occurring, and shall be served upon the owner of the property either personally or by certified mail, return receipt requested, at the owner's last known address. The property owner is responsible for the costs of all corrective action, whether done by the owner or the department. The department shall have the right to collect the amount expended for abatement through appropriate legal action.

17. Other Legal or Equitable Relief. Notwithstanding the existence or use of any other remedy, the health officer may seek legal or equitable relief to enjoin any acts or practices or abate any conditions which constitute or will constitute a violation of these regulations, or rules and regulations adopted under them.

D. Violations and Penalties-Persons Requiring a Permit. The requirements in this section apply to all persons which are required to obtain a permit under these regulations.

1. Violations-Investigations-Evidence. An authorized representative of the department may investigate alleged or apparent violations of these regulations. Upon request of the authorized representative of the department, the person allegedly or apparently in violation of these regulations shall provide information identifying themselves. Wilful refusal to provide information identifying a person as required by this section is a misdemeanor.

2. Notice and Order to Correct Violation.

a. Issuance. Whenever an authorized representative of the department determines that a violation has occurred or is occurring, he/she shall pursue reasonable attempts to secure voluntary correction, failing which he/she may issue a written notice and order to correct violation to the property owner or to any person causing, allowing or participating in the violation.

b. Content. The notice and order to correct violation shall contain:

i. The name and address of the property owner or other persons to whom the notice and order to correct violation is directed;

ii. The street address or description sufficient for identification of the building, structure, premises, or land upon or within which the violation has occurred or is occurring;

iii. A description of the violation and a reference to that provision of the regulation which has been violated;

iv. A statement of the action required to be taken to correct the violation and a date or time by which correction is to be completed; and

v. A statement that a monetary penalty in an amount per day for each violation shall be assessed against the person to whom the notice

and order to correct violation is directed for each and every day, or portion of a day, on which the violation continues following the date set for correction.

c. Service of Order. The notice and order to correct violation shall be served upon the person to whom it is directed, either personally or by mailing a copy of the order to correct violations by certified mail, postage prepaid, return receipt requested, to such person at his/her last known address. Proof of service shall be made at the time of service by a written declaration under penalty of perjury executed by the persons effecting the service, declaring the time and date of service and the manner by which service was made.

d. Extension. Upon written request received prior to the correction date or time, the authorized representative may extend the date set for corrections for good cause. The authorized department representative may consider substantial completion of necessary correction or unforeseeable circumstances which render completion impossible by the date established as a good cause.

e. Administrative Conference. An informal administrative conference may be conducted at any time by the health officer for the purposes of bringing out all the facts and circumstances related to an alleged violation, promoting communications between concerned parties, and providing a forum for efficient resolution of any violation. The health officer may call a conference in response to a request from any person aggrieved by the health officer's order or the health officer may call a conference on his/her own motion. Attendance at the hearing shall be determined by the health officer and need not be limited to those named in an order to correct violations. As a result of information developed at the conference, the health officer may affirm, modify or revoke his/her order. The administrative conference is optional with the health officer and is not a prerequisite to utilization of any of the enforcement provisions described in these regulations.

f. Appeals. Appeals from any decision by the health officer made pursuant to these regulations, shall be made to the board of health within the stated time period and in the following manner:

   i. Any bonafide party of interest feeling aggrieved by a decision or order of the health officer made pursuant to these regulations pertaining to a solid waste handling or disposal site or facility in which the person has an interest may file an appeal.

   ii. Any appellant wishing to appeal the decision of the health officer must file in writing a statement with the health officer within thirty calendar days of the date of serving of the order. Such notice must be delivered personally to the environmental health office of the Whitman County health department (Attn: health officer) or sent by certified mail. The appellant shall submit specific statements in writing of the reason why error is assigned to the decision of the health officer, and which shall be accompanied by a fee as established in the current department schedule.

   iii. When an appeal of the health officer's decision is made to the board of health, the filing of such appeal shall stay the effective date of the decision until such time as the appeal is adjudicated or withdrawn, unless in the opinion of the board of health such decision is necessary to protect the immediate health and safety of the public.

   iv. A health officer's decision which has been timely appealed shall be reviewed by the board of health or designated member within not less than twenty days nor more than thirty days after service of the state of appeal upon the health officer. Parties shall be notified of the date of review by the board of health. Both parties may submit additional written information, if desired, for review by board members. Such information must be received by the health officer not fewer than five working days prior to the hearing to permit copying and mailing to board members.

g. Supplemental Order to Correct Violation. The health officer may at any time add to, rescind in part, or otherwise modify a notice and order to co supplemental order shall be governed by the same procedures applicable to all notice and order to correct violations procedures contained in tl

h. Finality of Order.

i. Any order duly issued by the health officer pursuant to the procedures contained in this regulation shall become final thirty days after service of the order unless a written request for hearing or statement of appeal is received by the health officer within the thirty day period.

ii. An order which is subjected to the appeal procedure shall become final twenty days after mailing of the board of health's decision unless within that time period an aggrieved person initiates review by writ of certiorari in Whitman County Superior Court.

i. Enforcement of Final Order.

i. If, after any order duly issued by the health officer has become final, the person to whom such order is directed fails, neglects, or refuses to obey such order, the health officer may:

(A) Cause such person to be prosecuted under these regulations; and/or

(B) Institute any appropriate action to collect a civil penalty assessed under these regulations; and/or

(C) Abate the health violation using the procedures of these regulations; and/or

(D) Pursue any other appropriate remedy at law or equity under these regulations.

ii. Enforcement of any notice and order of the health officer pursuant to these regulations shall be stayed during the pendency of any appeal under these regulations, except when the health officer determines that the violation will cause immediate and irreparable harm and so states in the notice and order issued.

3. Written Assurance of Discontinuance. The health officer may accept a written assurance of discontinuance of any act in violation of this regulation from any person who has engaged in such act. Failure to comply with the assurance of discontinuance shall be a further violation of this regulation.

4. Violation of Permit Conditions-Misdemeanor Penalty. Any person who (a) fails, neglects, or refuses to obey a final order of the health officer to correct a violation as set forth in Section 8.13.270(D)(2)(i) above; or (b) fails, neglects, or refuses to comply with a written assurance of discontinuance pursuant to Section 8.13.270 (D)(3) above; or (c) operates a solid waste facility without a permit; or (d) operates a solid waste facility after a permit has been revoked, is guilty of a misdemeanor, and upon conviction, shall be punished by imprisonment in the county jail for a maximum term fixed by the court of not more than ninety days, or by a fine in an amount fixed by the court of not more than one thousand dollars, or by both such imprisonment and fine. The court may also impose restitution.

5. Stop-Work and Abatement Orders.

a. Stop-Work Orders. The health officer may cause a stop-work order to be issued whenever the health officer has reason to believe that a violation of this regulation is occurring. The effect of the stop-work order shall be to require the immediate cessation of such work or activity until authorized by the health officer to proceed. The stop-work order shall be posted upon the property where the violation is occurring, and

shall be served upon the owner of the property either personally or by certified mail, return receipt requested, at the owner's last known address.

b. Abatement Orders. In addition to or as an alternative to any other judicial or administrative remedy provided in these regulations or by law or other rules and regulations, the health officer may order a violation of these regulations to be abated. The effect of the abatement order shall be to require work to be done to correct the violation within a reasonable time period. If the required corrective work is not commenced or completed within the time specified, the health officer will proceed to abate the violation and cause the work to be done. The abatement order shall be posted upon the property where the violation is occurring, and shall be served upon the owner of the property either personally or by certified mail, return receipt requested, at the owner's last know address. The property owner is responsible for the costs of all corrective action, whether done by the owner or the department. The department shall have the right to collect the amount expended for abatement through appropriate legal action.

6. Other Legal or Equitable Relief. Notwithstanding the existence or use of any other remedy, the health officer may seek legal or equitable relief to enjoin any acts or practices or abate any conditions which constitute or will constitute a violation of these regulations, or rules and regulations adopted under them.

7. Permit Suspension, Revocation and Appeal.

   a. Suspension of Permits.

      i. The health officer may temporarily suspend any permit issued under these regulations for (A) failure of the holder to comply with the requirements of the permit; (B) failure to comply with any notice and order issued pursuant to these regulations related to the permitted activity; or (C) the dishonor of any check or draft used by the permit holder to pay any fees associated with the permit.

      ii. Permit suspension shall be carried out through the notice and order provisions specified in Section 8.13.270(C)(2), and the suspension shall be effective upon service of the notice and order upon the holder or operator. The holder or operator may appeal such suspension as provided in Section 8.13.270(D)(2)(f) and Section 8.13.270(D)(7)(c).

      iii. Notwithstanding any other provision of this regulation, whenever the health officer finds that a violation of this regulation has created or is creating an unsanitary, dangerous or other condition which, in his/her judgment, constitutes an immediate and irreparable hazard, he/she may, without service or a written notice and order, suspend and terminate operations under the permit immediately.

   b. Revocation of Permits.

      i. The health officer may permanently revoke any permit issued by him/her for (A) failure of the holder to comply with the requirements of the permit; or (B) failure of the holder to comply with any notice and order issued pursuant to these regulations related to the permitted activity; or (C) interference with the health officer in the performance of his/her duties; or (D) discovery by the health officer that a permit was issued in error or on the basis of incorrect information supplied to him/her; or (E) the dishonor of any check or draft used by the holder to pay any fees associated with the permit.

      ii. Such permit revocation shall be carried out through the notice and order provisions specified in Section 8.13.270(C)(2) and the revocation shall be effective upon service of the notice and order upon the holder or operator. The holder or operator may appeal such

revocation, as provided in these regulations.

iii. A permit may be suspended pending its revocation or a hearing relative to revocation pursuant to the provisions of Section 8.13.270(D)(7)(a) above.

c. Permit Appeal.

i. Subject to Appeal. Any denial, suspension or revocation of a solid waste permit by the health officer may be appealed.

ii. Appellant Defined. The appellant shall be the applicant for a solid waste permit or holder of a solid waste permit who appeals a decision denying, suspending or revoking a solid waste permit.

iii. Appeal Procedure. The appeal procedure shall be carried out through the appeals process specified in Section 8.13.270(D)(2)(f).

E. Inspections. As a minimum, annual inspections of all permitted solid waste facilities shall be performed by the authorized representative of the department. Findings shall be noted and kept on file. A copy of the inspection report or annual summary shall be furnished to the site operator at the discretion of the health officer or upon request.

F. Imminent and Substantial Dangers. Notwithstanding any provisions of this regulation, the health officer may take immediate action to prevent an imminent and substantial danger to the public health by the improper management of any waste irrespective of quantity or concentration.

(Ord. 51922 (part), 1997).

8.13.280 - Previous regulations repealed.

Whitman County Solid Waste Regulations, Chapter 8.12, dated June 11, 1973, are repealed. In addition, any resolution, code, words, rules or regulations of the Whitman County department of public health in conflict with this regulation are repealed to the extent necessary to give these regulations full force and effect.

(Ord. 51922 (part), 1997).

8.13.290 - Authority to amend regulations.

The health officer shall have the authority to adopt or incorporate any addendums or amendments to these regulations, provided such addendums or amendments are not at variance with the Minimum Functional Standards for Solid Waste Handling, Chapter 173-304 WAC, and Criteria for Municipal Solid Waste Landfills, Chapter 173-351 WAC in accordance with due process of law.

(Ord. 51922 (part), 1997).

8.13.300 - Severability.

Should any section, paragraph, phrase, sentence or clause of these regulations be declared invalid or unconstitutional for any reason, the remainder of these regulations shall not be affected thereby.

(Ord. 51922 (part), 1997).

Chapter 8.14 - SOLID WASTE HANDLING REGULATION

Sections:

8.14.010 - Authority and scope.

A. Pursuant to Chapter 70.95 RCW, and Chapter 173-350 WAC, the following regulation is adopted for the handling of solid waste and the permitting of solid waste disposal facilities in Whitman County, Washington.

B. Solid Waste Handling Standards, Chapter 173-350 WAC and as hereinafter amended is adopted by reference as the solid wasted handling regulation for Whitman County.

(Ord. 62463 § 1, 2004).

8.14.020 - Definitions.

"County" means Whitman County, state of Washington.

"Ecology" means the Washington State Department of Ecology.

"Health department" means the Whitman County Health Department.

"Health officer" means the Whitman County Health Department, Health Officer or their authorized representative.

(Ord. 62463 § 2, 2004).

8.14.030 - Procedure for permits and applications.

A. Applications for solid waste facility permits shall be reviewed for completeness, and one completed copy shall be forwarded to ecology for review and comments. All applications will be reviewed for compliance with the Solid Waste Handling Standards, Chapter 173-350 WAC, all applicable local ordinances and the Whitman County Comprehensive Solid Waste Management Plan.

B. Applications for all facilities owned, operated by, or under contract to operate on behalf of any city, county, or other governmental unit and all privately owned facilities which provide services to others in the disposal of solid wastes, including incineration, except for land application sites, shall require county health officer approval. All applications in which a variance from the solid waste handling standards is requested shall also require approval by the county health officer.

(Ord. 62463 § 3, 2004).

8.14.040 - Procedure for application approval.

A. A permit shall be issued in the case of new facilities, after inspection of the site, and a finding that the application, the site, and the facility all meet the requirements of 173-350 WAC, other applicable local ordinances, and payment of all applicable permit fees.

B. If an application fails to meet the requirements of the regulation, it will be disapproved and the applicant will be informed of the decision.

C. Action to approve or disapprove an application and/or variance will be taken by the County Health Department Environmental Health Director upon review and consideration of a recommendation by ecology regarding the facility, review of the health officer's inspection report, testimony presented by the applicant at a public meeting, if any, other facts as necessary, and conditions set forth in Chapter 173-350 WAC.

D. Upon approval of all necessary variances, the application for a permit shall be approved or disapproved.

(Ord. 62463 § 4, 2004).

8.14.050 - Permit expiration and renewal.

Permits may be issued for up to five years.

(Ord. 62463 § 5, 2004).

8.14.060 - Solid waste handling.

Except as provided otherwise in RCW 70.95.305 or 70.95.310, after approval of a county's comprehensive solid waste management plan by ecology no solid waste handling facility or facilities shall be maintained, established, or modified until the county, city, or other person operating such site has obtained a permit pursuant to RCW 70.95.180 or 70.95.190. Persons or entities that wish to construct and/or operate a solid waste transfer station, drop-box site, landfill, incinerator, composting facility, storage and treatment facility, or other solid waste disposal site shall first obtain a permit from the county health department.

(Ord. 62463 § 6, 2004).

8.14.070 - Beneficial use permit exemptions.

Any person may apply to ecology for exemption from the permitting requirements of the rule for beneficial use of solid waste. Applications for permit exemptions shall be prepared and submitted in accordance with the requirements of subsections (3) and (4) of 173-350-200 WAC.

(Ord. 62463 § 7, 2004).

8.14.080 - Suspension of permit.

A. Upon finding that any facility operating with a valid permit has been operated in violation of the solid waste handling standards, or other applicable laws

and regulations, and after a notice of violation has been served to the owner or operator the health officer may suspend the permit. The health officer may suspend any permit issued under this regulation for failure to meet any of the following:

1. Compliance with this regulation;
2. Adherence to the operation conditions specified in the permit; and
3. Compliance with a notice of violation.

Notwithstanding any other provision of the regulation, whenever the health officer finds a violation of the ordinance codified in this chapter has created or is creating an unsanitary, dangerous, or other condition which in his or her judgment, constitutes an immediate hazard or threat to human health and the environment, the officer may, without written notice, immediately suspend or terminate operations under the permit.

B. The health officer may require any violator of the ordinance codified in this chapter to immediately correct violations, which, in his or her opinion, are detrimental to public health and the environment. If required corrective action is not commenced or completed within the scope and time frame specified by the health officer, the health department may, at its own expense, proceed to undertake the necessary corrective action. Such expense shall be charged against the owner of the land where the corrective action occurred and/or the operator of the facility that caused the violation.

(Ord. 62463 § 8, 2004).

8.14.090 - Violation penalty.

Any person, firm or corporation found to be in violation of any of the requirements or provisions of the ordinance codified in this chapter shall be deemed to have committed a civil infraction and upon a determination that such infraction has been committed shall be subject to a penalty of up to one thousand dollars per day; provided, however, that violation of WAC 173-350-700(1)(a) shall not be subject to this provision and shall be punished pursuant to state law. Each day a violation of any portion of the ordinance codified in this chapter occurs or continues shall be considered a separate violation.

(Ord. 62463 § 9, 2004).

8.14.100 - Hearing and appeals.

An aggrieved applicant may appeal a denial of a permit or suspension of a permit in accordance with Chapter 70.95.210 RCW.

(Ord. 62463 § 10, 2004).

8.14.110 - Severability clause.

If any provision of this regulation or its application to any person or circumstance is declared unconstitutional or invalid for any reason, such declaration shall not affect the validity of the remainder of the regulation or its application.

(Ord. 62463 § 11, 2004).

Chapter 8.15 - SOLID WASTE DISPOSAL REGULATION

Sections:

8.15.010 - Purpose and applicability.

A. Whitman County has established a system for the disposal of all solid waste generated, collected, or disposed in unincorporated Whitman County. Additionally, this system includes all solid waste either generated or collected, or both, in any other jurisdictions with which a solid waste interlocal agreement exists. This waste disposal system is designed to ensure the safe disposal of solid waste generated within the county; promote recycling; and ensure landfill-disposed materials are properly handled and disposed.

B. This chapter is designed to ensure the county-wide system is adequate to handle solid waste generated within the county, while protecting the public health and safety; preventing land, air, and water pollution; and conserving and protecting the county's natural resources and environment. Providing for solid waste generated within the county to be disposed of at county facilities ensures the continued financial viability of the county solid waste system. This allows necessary upgrades and investment in system facilities, including transfer stations, involving large capital expenditures, thereby allowing achievement of the above stated objectives.

(Ord. No. 73385, 9-17-2012)

8.15.020 - Definitions.

For purposes of this chapter, the following definitions apply:

A. The definitions located in chapters 8.13 and 8.14 are incorporated by reference, and govern interpretation, unless this chapter defines those same terms. In such case, this chapter governs.

B. Where not otherwise addressed through the County Code, relevant definitions addressing solid waste in RCW Chapters 36.58 and 70.95, and in Title 173 WAC, govern interpretation.

C. "Board" means board of county commissioners, except in an appeal situation where the board has designated a hearings officer to hear the appeal. In such a case, references in the appeal procedures section to the board are to the designated hearings officer.

D. "Health officer," for purposes of this chapter, means the director of the county health department, or his or her designee, or the director of the public works department, or his or her designee.

E. "Recyclable materials" means those solid wastes that are separated from other wastes for anaerobic digestion, composting, recycling or reuse, including but not limited to papers, metals, glass, plastics, aggregates, fabrics, yard debris, food waste, manures, wood waste and other materials that are identified as recyclable mater in the Whitman County Solid Waste Management Plan, and are recycled. Wood waste processed as hog fuel and used for energy recovery shall be considered a recyclable material for purposes of this chapter.

F. "Recycling" means the transformation or remanufacturing of recyclable materials into usable or marketable materials for use other than landfill dispc daily cover, industrial waste stabilizer or incineration.

(Ord. No. 73385, 9-17-2012)

8.15.030 - Approved disposal sites.

A. Unless otherwise permitted by state law, or exempted through subsection (C) or other provisions of this title, it is unlawful for any collecting agency or other person to deliver or deposit any solid waste generated and collected within the county outside the borders of Whitman County, or within the county except at a "designated facility."

B. Designated facilities are the Whitman County Carothers Road Solid Waste Facility and any county-owned transfer station.

C. Exemptions are:

1. Solid waste not authorized for receipt by a designated facility, or unauthorized waste as determined by the Whitman County Health Officer;
2. Recyclable materials which have been separated from non-recyclable materials prior to transport, may be utilized or delivered to recycling facilities operating consistent with applicable county and state laws for reclamation;
3. Inert waste, if: (a) the site is subject to a valid, Washington State Department of Natural Resources mining and reclamation permit; (b) the site is subject to a valid, county health department inert waste landfill permit; (c) any applicable local land use permits, such as a conditional use permit; and (d) the site is not permitted to operate as any other category of landfill than an inert waste landfill; or
4. The Whitman County Health Officer provides prior written authorization for the disposal for public health and safety, and planning purposes, and the disposal is consistent with the adopted Whitman County Solid Waste Management Plan, and implementing regulations. Such authorization may include situations where a waste route is at least 35 miles from a designated facility, and the collected waste is part of a route primarily located outside the county.

(Ord. No. 73385, 9-17-2012)

8.15.040 - Enforcement.

A. Violations of this chapter are subject to enforcement as set forth in this chapter.

B. Initiation of Enforcement Action.

1. The health officer is authorized to enforce this chapter.
2. If the health officer determines through investigation, inspection, or other means that any person has violated any provision of this chapter, the health officer may issue a notice of violation containing:
   (a) The name and address of the person in violation of this chapter;
   (b) A brief description of the violation;

(c) A statement assessing a civil penalty for each violation, which shall be paid to the county within 20 days from the date of issuance;

(d) A statement advising that if any civil penalty is not timely paid, the matter will be referred to a collection company;

(e) A statement advising:

(i) The notice of violation may be appealed by filing an appeal with the board within 15 days;

(ii) Any penalty shall not accrue during the pendency of such administrative appeal;

(iii) A summary of the requirements for filing a complete appeal; and

(iv) The failure to file a timely and complete appeal will constitute a waiver of all rights to an administrative appeal of the notice of violation under the county code.

3. The notice of violation shall be served on the person alleged to be in violation of this chapter either personally or by mailing a copy of such notice by certified mail, postage prepaid, return receipt requested, to the person at the last known address. Proof of service shall be made at the time of service by a written declaration under penalty of perjury executed by the person effecting service, declaring time, date and manner in which service was made.

4. Each waste diversion event shall constitute a separate violation. For example, if the same violator diverts two truck loads of solid waste away from a designated facility, each load is a separate violation.

C. Penalties shall be set at an amount equivalent to the cost which would have been charged the violator, had the waste been processed at a designated facility. Should the violation constitute a second or multiple violation of this chapter by the same violator, this penalty may be doubled. Reasonable and actual investigation and enforcement costs may be incorporated into the penalty, as long as the total penalty does not exceed four times the cost of processing the waste at a designated facility.

D. Appeal Procedures.

1. The person served with a notice of violation may appeal to the board within 15 days of service of the notice of violation. To be complete, the appeal must: (a) identify the notice of violation appealed; (b) identify the specific grounds on which the appeal relies, including a concise statement of the factual reasons for the appeal, and if known, identification of any laws appellant claims are violated; (c) the name, mailing address, and daytime telephone number of the appellant together with the signature of appellant or appellant's legal counsel, if any.

2. Failure to file a timely and complete appeal with the board shall constitute waiver of all rights to an administrative appeal under the county code.

3. The board shall hear the appeal, or designate a hearings officer to hear the appeal. At the appeal hearing, the health officer shall have the burden of proving the violation, which burden shall be met by a preponderance of the evidence.

4. No new issues may be raised after the deadline for filing an appeal, unless the board grants an exception for good cause. The board may only grant an exception for good cause upon a showing that:

(a) The new issue was not known and could not reasonably have been known by the filing deadline;

(b) The issue was immediately raised after the basis for it could reasonably be known; and

(c) The issue was raised within 15 days of the deadline for filing the appeal.

5. The appeal may be summarily dismissed in whole or in part if untimely, incomplete, or without merit.
6. Unless summarily dismissed, an appeal hearing shall be held before a decision is made. Notice of the appeal hearing shall be given to the appellant or their representative by first class mail and to the health officer by electronic or regular mail. The notice of hearing shall include the date, time, and place of the hearing, and other appropriate information, or other deadlines, including briefing deadlines, where applicable. Unless the notice of hearing provides an alternative schedule, at least seven days before the hearing, the health officer shall submit a report to the board and parties by mail or electronic mail summarizing the basis for the notice of violation.
7. The board may make any procedural determinations necessary to implement this chapter and to process the matter fairly and expeditiously.
8. The board may uphold, reverse, or remand, the health officer's determination through a written decision, with findings and conclusions. The board has discretion to consider mitigating circumstances in making its decision.
9. The board's decision shall be final and conclusive, unless appealed to superior court within 20 days of either the decision, or a decision on reconsideration. If the optional reconsideration process is utilized, any reconsideration motion must be filed within ten days of the decision. To the extent there is an irreconcilable conflict with state law over the appeal period, state law shall govern.

E. The remedies set forth herein for violations of this chapter are not exclusive. Violations of this chapter may be enforced through County Code section 8.13.270, and/or through any other applicable enforcement provisions.

(Ord. No. 73385, 9-17-2012)

G. Solid Waste Plan Matrix

Appendix G. Solid Waste Plan Matrix

Required SWMP Elements (per RCW 70.95.090)	Location in SWMP
Detailed inventory of all solid waste handling facilities, including deficiencies in the handling of solid waste.	**Section 3**, Description of Existing Solid Waste Programs, Facilities and Systems **Section 4**, Analysis of Existing Solid Waste Programs, Facilities and Systems
20-Year solid waste handling projection (facility needs).	**Section 4.7**, Compliance in Meeting WAC Standards, and Possible Enhancements **Section 5.4.2**, Twenty Year Schedule
Meets the minimum functional standards for solid waste handling in Washington State	**Section 4.7,** Compliance in Meeting WAC Standards, and Possible Enhancements
Addresses the relationship to other plans.	**Section 1.7**, Relation of the Solid Waste Management Plan to Other Plans
6-Year capital and acquisition projection.	**Table 5-1**, Synopsis of Solid Waste Issues and Their Corresponding Proposed Enhancements **Table 5-2**, Tabulation of Estimated Cost and Diversion Rate for Proposed Programs in 2017 **Appendix A**, WUTC Cost Assessment A Capital Facilities Plan and a Capital Financing Plan were developed separately from the SWMP by Great West Engineering.
Financing plan for capital and operational costs for the proposed programs.	**Section 1.8**, History of Solid Waste Planning in Whitman County **Table 5-2**, Tabulation of Estimated Cost and Diversion Rate for Proposed Programs **Appendix A**, WUTC Cost Assessment
Clearly defined permitting and enforcement program.	**Section 3.6**, Existing Enforcement Program
Current inventory of all solid waste collection programs (G-certified and City-operated) – includes population densities served, address and name of all G-certified haulers and projected solid waste collection needs for the next 6 years.	**Figure 1-1**, Map of Whitman County showing the incorporated communities, major haul routes and Washington Utilities and Transportation certificate areas by hauler and population densities **Figure 2-1**, Existing Solid Waste System Flow Schematic **Appendix A**, WUTC Cost Assessment
Waste Reduction Strategies	**Section 5.2**, Analyses and Recommendation of Reduction, Reuse and Recycling Enhancement Programs
Source Separation Strategies	**Section 2**, Waste Stream Description **Section 5.2.3.8**, Commingled Recycling
Inventory of recycling programs.	**Section 4**, Analysis of Existing Solid Waste Programs, Facilities and Systems
Current and projected recovery rates through the current and proposed recycling programs.	**Section 3.3**, Recycling **3.3.10.12**, Summation of Recyclable Material Diverted in 2017 **Table 3-5**, Estimated Recycled Material Quantity Expressed as a Calculated Percentage of the Waste Stream for 2017

Appendix G. Solid Waste Plan Matrix

	Section 4.4, Recycling Programs **Appendix A**, WUTC Cost Assessment
Programs to monitor commercial and industrial recycling where there is sufficient density to sustain a program.	**Section 3.3.10.12**, Summation of Recyclable Material Diverted in 2017
Waste reduction and recycling outreach and education program.	**Section 3.3.1**, Community Recycling Education and Outreach **Section 3.3.2**, School Recycling and Curricula Programs
Recycling strategies, a discussion on existing markets, characterization of the waste stream and a description of existing programs and deficiencies.	**Section 2**, Waste Stream Description **Section 3**, Description of Existing Solid Waste Programs, Facilities and Systems **Section 4**, Analysis of Existing Solid Waste Programs, Facilities and Systems **Table 5-1**, Synopsis of Solid Waste Issues and Their Corresponding Proposed Enhancements
Programs to assist the public and private with recycling and an implementation schedule for those programs.	**Section 5.4**, Implementation Schedules **Table 5-1**, Synopsis of Solid Waste Issues and Their Corresponding Proposed Enhancements
List of designated recyclables.	**Section 4.8.1**, Designation of Recyclable Materials
WUTC cost assessment questionnaire.	**Appendix A**, WUTC Cost Assessment
SEPA checklist and necessary SEPA documents.	**Appendix B**, SEPA Checklist
Evidence of SWAC participation (SWAC meeting minutes, signed roster, etc.).	**Section 1.6.2**, SWAC's Ongoing Involvement in Implementation of the Plan **Appendix D**, SWAC Meeting Minutes
Interlocal agreement(s).	**Appendix E**, Interlocal Agreement
Resolution(s) of adoption.	**Appendix C**, Resolutions of Adoption

Recommended SWMP Items	**Location in SWMP**
Locally defined amendment process.	**Section 1.5**, Revision and Amendment Procedure
Contingency plan for the list of designated recyclables in the case markets collapse, and a process to easily modify the list of designated recyclables.	
A discussion of how the plan supports the state's solid waste management plan and solid waste priorities.	**Section 4.8.3**, Criteria for Selection of Applicable Options
SWAC bylaws included as an appendix.	