# Whitman County

# *Solid Waste Management Plan*

***June 2011***



Prepared for:

Whitman County Public Works
Solid Waste Division

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# 0. 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.

**E-Waste**

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**

Means 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 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 such techniques 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, producer responsibility, citizen involvement, supporting local economy 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".

## 1.3 Plan Goals and Objectives

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

## 1.4 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 Solid Waste Advisory Committee 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 Solid Waste Advisory Committee 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 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.

## 1.5 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 (the 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 Solid Waste Advisory Committee (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 has adopted resolutions of concurrence stating their intended participation with or adoption of the Plan.

### 1.5.1 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 | |

## 1.5.2 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, 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 |
|---|---|
| Dave Patterson | Empire Disposal/Waste Connections |
| Devon Felsted | Pullman Disposal |
| Mary Carol Sauve | Town of Uniontown |
| Rick Finch | Washington State University |
| Nick VanArsdel | Carlton Builders |
| Dick Brown | Town of Oakesdale |
| Dan Brown | Town of Rosalia |
| Pete Hertz | City of Palouse |
| Bill Paul | City of Pullman |
| Shelly Quinton | Town of St. John |
| Dave Tysz | City of Tekoa |

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.

## 1.6 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.

## 1.7 History of Solid Waste Planning in Whitman County

Whitman County's Solid Waste Management Plan was completed in September 1971, making it one of the first in the State to be completed, submitted, and accepted by the newly formed Washington State Department of Ecology. 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.

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 Carothers Road Solid Waste Facility. 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, CH2M HILL 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 Carothers Road Solid Waste Facility is the most feasible and viable option for the County with the potential to reduce overall disposal costs. A subsequent study by CH2M HILL, completed in February 2010, provided an overview of the engineering concepts that were prepared for the possible development of a new municipal solid waste (MSW) landfill cell (South Landfill Cell) at the existing Carothers Road Solid Waste Facility. 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.

### 1.7.1 Previous Goals of Solid Waste Management Plan

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

1. Receive approval of the Solid Waste Management Plan from all sixteen incorporated communities in the County.
2. Prepare a closure/post closure plan for the Limited Purpose Landfill.
3. Conduct a study of transport and disposal alternatives for Whitman County solid waste.
4. Improve measurement to evaluate waste reduction.
5. Improve waste reduction/re-use programs available to the public.
6. Add recycling programs in communities, schools and public buildings.
7. Enhance recycling programs in businesses.
8. Promote recycled content product purchasing.
9. Evaluate need for auto salvage operations.

### 1.7.2 Discussion of Previous Goals

Tasks completed:

- Tasks 1 through 3 have been completed.

Tasks currently being pursued:

- Task 4 - 8: Programs for community and academic recycling education are conducted annually. The Cities and Towns of Pullman, Colfax, Albion, Lacrosse, and Palouse received assistance to maintain recycling and source reduction programs. Nine of thirteen school districts also receive assistance for their waste reduction, recycling, composting, and related curriculum enhancement. Tekoa and St. John would like to develop a community recycling center. Recycling programs in businesses has diminished due to lack of funding.

Tasks remaining:

- Task 9: There may be a need an opportunity for auto salvage operations within the County. Abandoned cars has not seem to be a problem, but some analysis should be made to verify. This task will be coordinated with the Whitman County Environmental Health Department, who has jurisdiction over the issue.

## 1.8 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 Washington State University and associated support services. Tenth largest of the state's 39 counties, Whitman County has an area of 2,153 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 Washington State University. 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.

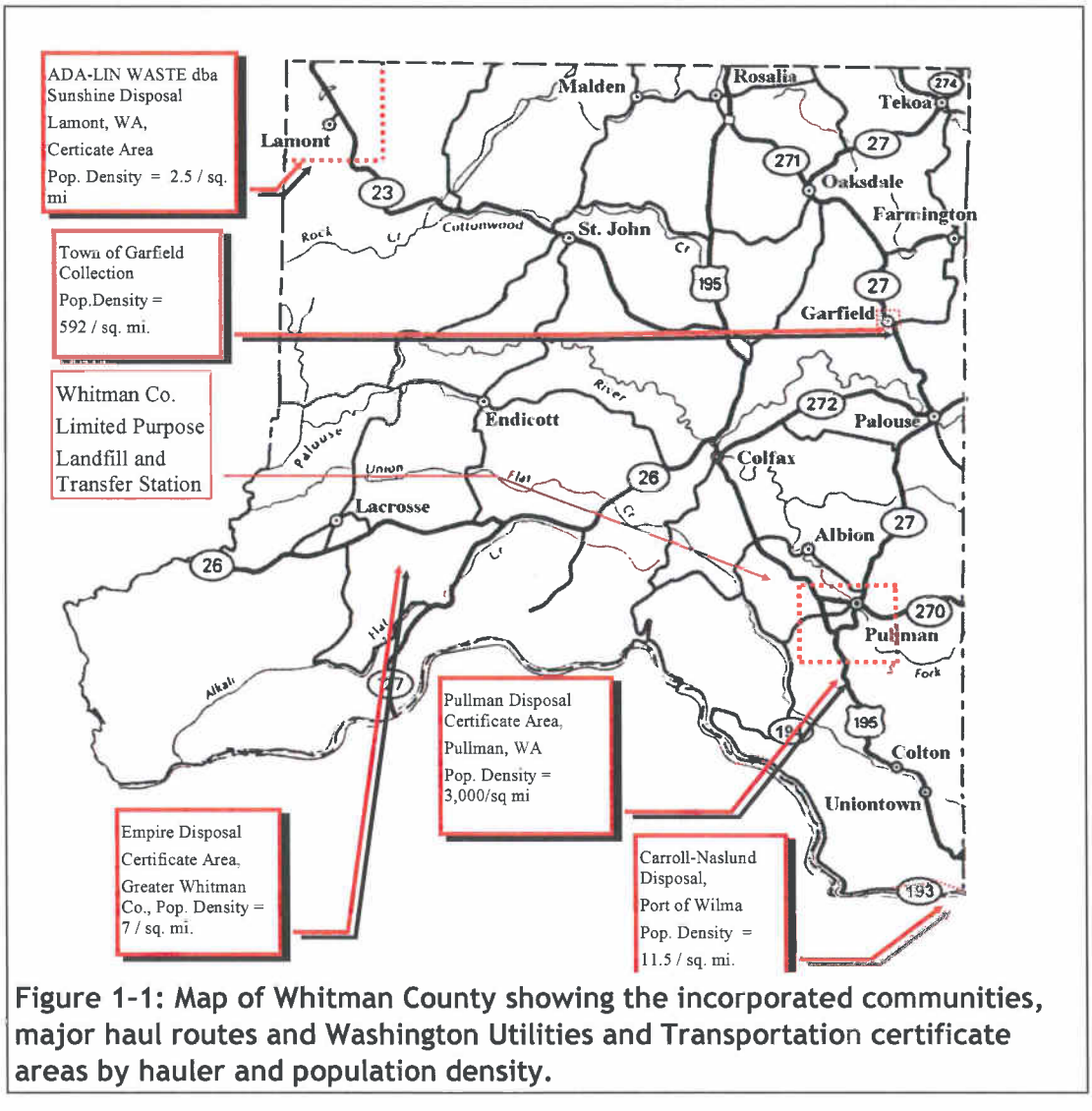


**Figure 1-1: Map of Whitman County showing the incorporated communities, major haul routes and Washington Utilities and Transportation certificate areas by hauler and population density.**

## 1.8.1 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.

## 1.8.2 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.

## 1.8.3 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.

## 1.8.4 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.

## 1.8.5 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. Portions of this information are presented in Table 1-3 and Table 1-4.

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

| Month | Lacrosse | Pullman |
|---|---|---|
| January | 1.84 | 2.67 |
| February | 1.37 | 2.10 |
| March | 1.33 | 2.12 |
| April | 0.96 | 1.49 |
| May | 0.96 | 1.46 |
| June | 1.13 | 1.56 |
| July | 0.28 | 0.39 |
| August | 0.36 | 0.52 |
| September | 0.68 | 1.08 |
| October | 1.35 | 1.91 |
| November | 1.74 | 2.47 |
| December | 2.05 | 2.74 |
| **Total** | **14.05** | **20.49** |

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

| Month | Maximum | Minimum |
|---|---|---|
| January | 33.6 | 21.1 |
| February | 38.3 | 24.5 |
| March | 46.1 | 30.0 |
| April | 56.5 | 36.0 |
| May | 65.2 | 41.4 |
| June | 71.2 | 46.1 |
| July | 82.5 | 49.5 |
| August | 81.3 | 48.3 |
| September | 73.0 | 44.4 |
| October | 60.2 | 38.3 |
| November | 44.2 | 30.0 |
| December | 37.1 | 26.4 |
| **Average** | **57.4** | **36.3** |

## 1.8.6 Population Data

Whitman County's population has slowly increased to the current population of 43,600. This was an 11.8-percent increase over the 1970 census figure of 39,000 which is an average of 0.29% increase each year. 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.

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. The pattern of dwindling rural population and increasing urban numbers is expected to continue. The 2010 population estimate shows nearly 64% (27,920) of the County's residents reside in Pullman, the site of Washington State University. The 2010 enrollment was 18,232 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.

**Table 1-5: Whitman County Population Distribution**

| Element | 1995 Population | 1995 % of total | 2000 Population | 2000 % of total | 2010 Population | 2010 % of total |
|---|---|---|---|---|---|---|
| Whitman County | 40,500 | 100.0% | 40,740 | 100.0% | **43,600** | 100.0% |
| Unincorporated | 6,704 | 16.6% | 6,298 | 15.5% | 6,246 | 14.3% |
| Incorporated | 33,796 | 83.4% | 34,442 | 84.5% | 37,354 | 85.7% |
| Albion | 670 | 1.7% | 616 | 1.5% | 620 | 1.4% |
| Colfax | 2,820 | 7.0% | 2,844 | 7.0% | 2,915 | 6.7% |
| Colton | 360 | 0.9% | 386 | 0.9% | 425 | 1.0% |
| Endicott | 345 | 0.9% | 355 | 0.9% | 305 | 0.7% |
| Farmington | 130 | 0.3% | 153 | 0.4% | 135 | 0.3% |
| Garfield | 619 | 1.5% | 641 | 1.6% | 630 | 1.4% |
| Lacrosse | 407 | 1.0% | 380 | 0.9% | 345 | 0.8% |
| Lamont | 93 | 0.2% | 106 | 0.3% | 81 | 0.2% |
| Malden | 225 | 0.5% | 215 | 0.5% | 205 | 0.5% |
| Oakesdale | 435 | 1.1% | 420 | 1.0% | 420 | 1.0% |
| Palouse | 975 | 2.4% | 1,011 | 2.5% | 1,015 | 2.3% |
| Pullman | 24,360 | 60.0% | 24,948 | 61.2% | 27,920 | 64.0% |
| Rosalia | 643 | 1.6% | 648 | 1.6% | 640 | 1.5% |
| St. John | 529 | 1.3% | 548 | 1.3% | 543 | 1.2% |
| Tekoa | 880 | 2.2% | 826 | 2.0% | 815 | 1.9% |
| Uniontown | 305 | 0.8% | 345 | 0.8% | 340 | 0.8% |

## 1.8.7 Land Use Summary

Table 1-6 summarizes land use in Whitman County as a percentage and by acreage in 2003 (Source, Whitman County Planning Department). The table shows that land use in Whitman County is predominantly agricultural.

Information in Table 1-5 and Table 1-6 can be used to calculate average population densities, with the following results:

Average densities of incorporated areas: 1,494 people per square mile

Average densities outside incorporated areas: 3 people per square mile

These densities emphasize the rural nature of the County. Such low densities increase effort and costs for any programs sponsored outside of the incorporated areas.

**Table 1-6: Land Use in Whitman County**

| Use | Acres | Percent |
|---|---|---|
| Agricultural | 1,303,362 | 94.08% |
| Forest | 10,000 | 0.72% |
| Recreation | 5,130 | 0.37% |
| Incorporated Areas | 12,553 | 0.91% |
| Unincorporated Areas | 1,062 | 0.08% |
| County Zoned Areas | 2,063 | 0.15% |
| Transportation | 33,691 | 2.43% |
| Unclassified Areas | 11,470 | 0.83% |
| Surface Water | 6,038 | 0.44% |
| **Total** | 1,385,369 | 100.00% |

# 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 transported to the Whitman County Carothers Road Solid Waste Facility 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.

Individual sources usually generate distinctively different waste. As the individual sources are collected together, material characteristics becomes less distinctive, and intermingling of wastes leads to degradation of their original character.

This is 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.

Solid waste characteristics may also change with time. 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. One waste that is increasingly posing a 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 electronic waste stream which will 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 (PDS) paid by the state and through cooperative agreements with businesses (i.e. Goodwill Industries) to act as collection points for these items. The addition of an e-waste collection point at the north end of the county will facilitate the collection process in that part of the county.

Food wastes, paint, and fluorescent bulbs are challenges which will need to be addressed in the near future. A composting facility in Whitman County would facilitate the reuse of the food wastes. Disposal of paint and fluorescent bulbs is being considered on a state-wide 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.

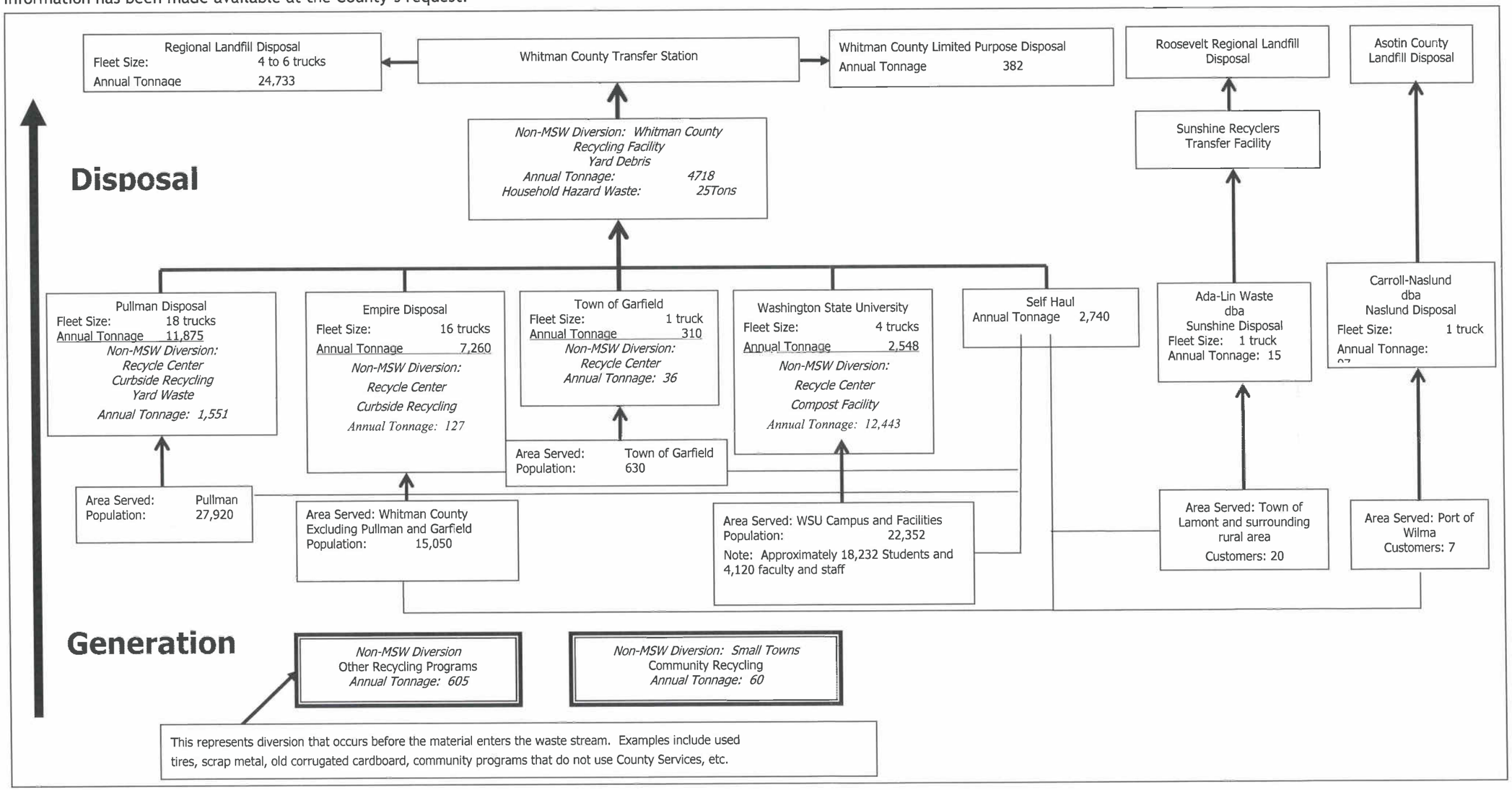


**Figure 2-1: Existing Solid Waste System Flow Schematic.**

## 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. The landfill began weighing and recording waste in 1976.

Note that the waste stream quantity has varied over the years. Analysis of the available data suggest that closure of the local area dumps in the 1980's caused the sudden increase in flow around 1984.

For the period 1984 to 2010, 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 27,000 tons per year in the past 10 years), not including recyclables.

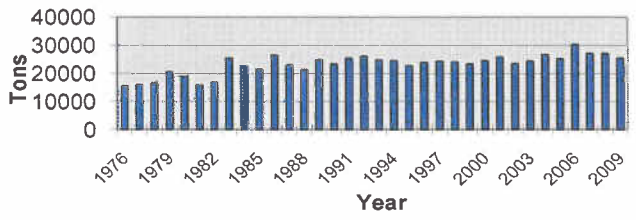


**Figure 2-2: Annual tonnage accepted at the Whitman County Carothers Road Solid Waste Facility**

Whitman County participated in a waste-stream analysis as part of a best-management-practices study conducted in 1988 by the Department of Ecology. The results were combined with analyses done in other southeastern Washington counties. Another study performed by Washington Department of Ecology 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, Department of Ecology 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 and 2009. Table 2-1 summarizes the various waste stream compositions.

| Table 2-1: Waste Composition as Determined by Department of Ecology | | |
|---|---|---|
| Categories | Ecology | Ecology |
| | 2003 | 2009 |
| Paper | 23.7% | 21.9% |
| Plastic | 11.6% | 10.7% |
| Glass | 4.0% | 2.2% |
| Ferrous Metals | 6.5% | 6.0% |
| Non-Ferrous Metals | 1.0% | 0.9% |
| Consumer Products | 7.6% | 6.6% |
| Organics | 25.1% | 25.1% |
| Wood | 8.6% | 9.2% |
| Construction Debris | 4.9% | 8.5% |
| Residuals | 6.1% | 5.3% |
| Other Wastes | 0.0% | 0.0% |
| Hazardous/Special Waste | 0.9% | 3.6% |
| Other | 0% | 0% |
| Total Waste Stream | 100% | 100% |

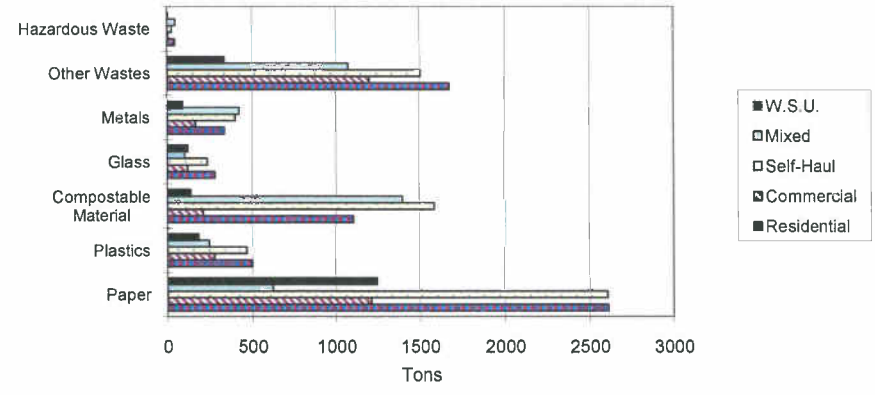


**Figure 2-3: Whitman County waste composition by substream based on Ecology composition**

# 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 comes 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. 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 Carothers Road Solid Waste Facility; and
- By grants made available by the State through the Department of Ecology and WSDOT (tire collection/recycling).

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 Department of Ecology. 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 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 to the use of grants and local match described above, could be to 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 (CH2M HILL, February 2009). Based on the results of that study, the current 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.

## 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 Garfield operates a compost facility for its citizens and offers free compost to their residents. The City of Palouse operates a composting facility and chipper program since no burning is allowed in the City. Palouse accepts yard debris from permitted residents at a cost of $25.00 per year. The communities of Oakesdale, Colton/Uniontown, and Malden also operate composting facilities. Washington State University (WSU) also operates a facility. This facility is described in further detail below. Although composting is not economical for Whitman County on a county wide basis, the Whitman County Solid Waste Facility does have 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

Home composting is strongly encouraged as a means of waste reduction. 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 Washington State University's (WSU) 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 Coordinator 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.) 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.

## 3.2.3 Waste Reduction/Prevention Programs

A 'Recycled Art Competition' is held at the Palouse Empire Fair each year, which promotes the re-use 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). Prizes are awarded, but due to the guidelines of the event, prizes must be provided by the sponsors.

## 3.3 Recycling

### 3.3.1 Community Recycling Education and Outreach

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 Carothers Road Solid Waste Facility. 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 $99.00/ton to $35.00/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 Carothers Road Solid Waste Facility. The public can also learn about other services at the Solid Waste Facility, including the recycling drop-off, Household Hazardous Waste 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 and prizes are given to winners.

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.

## 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 currently assists 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 it 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 CPC 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 serviced from the county road personnel proved to be challenging and the recycling coordinator rents a truck from motor pool (CPG funded) to collect the rural area schools' paper. With some of the schools an active PTO parent or teacher brings the paper into the Landfill/Transfer Station. The program from the outlying schools collects approximately 1 ton of paper monthly from the schools.

### 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 coordinator encourages schools to adopt this partnership. Washington Green Schools is a collaborative partnership of agencies and organizations, grant-funded by the

Washington State Department of Ecology. Web site is: http://www.wagreenschools.org/31about-us.html.

Due to lack of funding, Whitman County has suspended two program previously used in schools, including "The Magic of Recycling program and support for the Nike Re-use a Shoe program. The County continues to sponsor outreach programs including pancake feeds, pizza feeds, and root beer float events and to award certificates and awards to schools that are contributing to recycling education efforts.

#### 3.3.2.3 Printed Resources and Materials

There was a program the provided Waste Reduction, Recycling, Public Information and Education brochures, campaign materials for household hazardous waste, 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 Coordinator 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 Coordinator 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.

Composter programs, Tire Amnesty Day, upcycling/less stuff campaign, get off the bottle, Earth Day, and America Recycles are a few of the interactive programs supported by the county. Coordination of these programs with "A Greener Palouse" allows Whitman County to coordinate with Latah County and other local, regional, and state campaigns to ensure a uniform message and maximize resources.

#### 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. 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.

#### 3.3.2.6 Prescription Drug Drop Off

Medication drop off locations are located 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.

## 3.3.3 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 Coordinator upon request by the business. 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.

## 3.3.4 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. 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. Trustees under the supervision of the maintenance staff collect the full bags and place them in storage. They are transported to the landfill/transfer station via maintenance staff. All materials are weighed. Messages for waste reduction and campaigns are posted in different halls throughout the Court House.

Approximate quantities of recyclables collected through the in-house program are shown in Table 3-1 below:

**Table 3-1: Quantities Recycled by County In-House Program**

| | Commodity | | | |
|---|---|---|---|---|
| Year | Mixed Paper (lbs) | Corrugated Cardboard (lbs) | Aluminum Cans) (lbs) | Total |
| 2009 | 4,000 | 2,500 | 1,100 | 7,600 pounds, 3.8 tons |

## 3.3.5 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.

## 3.3.6 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.

## 3.3.7 Disposal Bans

There are no disposal bans, per se, in the County at this time. Current disposal contract requirements do name tires, pathological and medical waste as unacceptable waste. Alternative disposal/recycle methods have been established for these materials.

## 3.3.8 Private Recycling Centers

Both private haulers 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. Table 3-2 shows the categories and that approximately 516 tons of material was handled by the centers in 2003.

## 3.3.9 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.

### 3.3.9.1 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. Collections are made once every two weeks. Each customer is given three stacking plastic recycling bins with stickers indicating which items are to be recycled and how those items are to be prepared.

| Table 3-2: Commodities and Quantities Recycled At Private Recycling Centers in 2009 | | |
|---|---|---|
| **Commodity** | **Empire Disposal** | **Pullman Disposal** |
| White, Copy & Ledger Paper | | |
| Computer Paper | | |
| Newspaper | x | x |
| Magazines & Phone Books | | |
| Mixed Paper | | 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)** | **227 tons recycled** | **550 tons recycled** |

Participation in the program has been high. For the last several years, the participation rate has been estimated at 75% of eligible customers. As customers must pay the $2.59 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 2009, there were 3,859 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.

### 3.3.9.2 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.

Flexibility is a hallmark of the multi-family recycling program. Landlords were given a number of choices on how to implement the recycling program at their properties. If a landlord did not express a preference, dark gray plastic roll carts were used. 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 and glass bottles or the removal of labels from tin cans) for that item. Recycling pamphlets were produced and made available to tenants. Those pamphlets are made available annually to any landlords or tenants that request them. The recycling 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. Landlords could also specify exactly which recyclable items would be taken at their buildings. Thus, if a landlord wanted to continue to recycle aluminum cans on his own, he could tell Pullman Disposal not to bring a roll cart for aluminum cans to his building. Landlords continue to have the right to change which items they want collected on their premises, or to even 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 12.9% 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 $12.90. 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 2009, 555.51 tons of recyclable material was recycled through the single-family and multi-family recycling program. See the chart below for a breakdown of tonnage per commodity.

| Table 3-3: Commodities Collected And Recycled in the Pullman Single and Multi-Family Recycling Program | | | | | | |
|---|---|---|---|---|---|---|
| Commodity | Tons in 2004 | Tons in 2005 | Tons in 2006 | Tons in 2007 | Tons in 2008 | Tons in 2009 |
| Newspaper | 293.88 | 11.70 | 242.56 | 6.74 | 15.57 | 10.97 |
| OCC | 35.75 | 50.45 | 28.54 | 97.91 | 33.21 | 55.20 |
| Aluminum | 12.35 | 272.82 | 14.95 | 238.30 | 224.20 | 260.18 |
| Tin Cans | 16.66 | 11.21 | None Sold | 18.46 | 4.48 | 177.98 |
| Glass | 149.97 | 11.86 | 197.20 | 211.53 | 20.49 | 24.86 |
| #1 Plastic | 13.36 | 37.38 | 12.14 | 17.97 | 25.17 | 9.03 |
| #2 Plastic | 4.55 | 148.74 | 14.43 | 7.68 | 245.53 | 17.29 |
| Total | 526.53 | 544.16 | 509.82 | 598.59 | 568.66 | 555.51 |

| Table 3-4: Pullman Yard Waste Tonnages | |
|---|---|
| Year | Tons |
| 2006 | 367.97 |
| 2007 | 457.18 |
| 2008 | 401.66 |
| 2009 | 396.31 |

### 3.3.9.3 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 1300. 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. Collection schedule calendars are delivered in February to subscribers. The total tonnage collected has grown, as more people subscribe and utilize the program. In 2009, 396.305 tons were collected through the Pullman Yard Waste Program.

### 3.3.9.4 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 all seven items accepted by the County. 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 one 32-gallon bin of office paper will cost $15.00 per month; 3) weekly collection of one 68-gallon cart of glass bottles (commonly collected from local bars) will cost $12.00 per month.

Corrugated cardboard (OCC), glass jars and bottles, and mixed paper are the most popular items recycled under the business recycling program. As of the end of 2009, the number of businesses/organizations recycling OCC through the Pullman Disposal Program was 138. Also at the end of 2001, there were 53 customers that recycled a commodity other than OCC through the business recycling program.

#### 3.3.9.5 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 cardboard, newspaper, mixed paper, glass bottles, tin cans, aluminum cans, #1 PETE plastic bottles, clear #2 HDPE plastic bottles, and colored #2 HDPE plastic bottles (e.g. bleach bottles). 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 Tuesday through Thursday afternoons. 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 Avista Utilities Company to provide for their customers Compact Fluorescent Light (CFL) bulb collection. CFL bulbs are accepted during office hours, Monday through Friday 8am to 5pm. The CFL bulbs are sent to a facility where the hazardous mercury in the bulbs is safely removed.

Other services available include; wood waste recycling, pre-paid overflow bags, and document destruction service. 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.

### 3.3.9.6 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, yard waste, and trash to Pullman Disposal for a token fee. Since 2004, the annual event has grown. In 2009, an "Overhead Vegetation Pruning Weekend" was added. On this weekend, there are drop box containers placed on each hill in Pullman in which any Pullman resident may dispose of their yard waste.

### 3.3.9.7 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 recycling program was supported by a subscription fee of $3.10 per residence per month which was approved by the Washington Utilities and Transportation Commission (WUTC). Those subscribing households were provided with 14-gallon bins owned by Empire Disposal. The recycling bins were collected on the same day as the garbage collection service. The service is currently offered for a fee of $7.98/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 20 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 9 tons annually.

### 3.3.9.8 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 2009, the drop-off center processed over 227 tons of commodities (see Table 3-2, previous section), as compared to 100 tons in 2003.

### 3.3.9.9 Town of Garfield Curbside Recycling

Town crews and equipment provide mandatory garbage service to residents of the Town of Garfield. In 2011, for $25.44 per month plus a 6% utility tax customers will

get a 65 gallon roller cart plus $6 per week for a second 65 gallon roller cart, citizens have access to curbside garbage service, curbside recycling and other special waste services that may have an additional charge. The Garfield Town Council voted to adopt an amendment to the ordinance for a voluntary recycling bag curbside recycling program. The recycling bag program provides weekly pick-up, same day as garbage, with no additional fee. 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. A curbside recycling summary for the Town of Garfield is presented in the table below.

**Table 3-5: Garfield Recycling Summary 2004-2010**

| Year | Tons |
|---|---|
| 2004 | 52.05 |
| 2005 | 42.3175 |
| 2006 | 64.715 |
| 2007 | 46.32 |
| 2008 | 45.42 |
| 2009 | 36.4 |
| 2010 | 28.728 |

## 3.3.10 Rural Community Recycling Programs

Approximately 23% of Whitman County's population live in fifteen 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: Albion, LaCrosse, Palouse each received $2,500 during the 1992-93 period, and Albion received an additional $400.00 in the year 2002; Uniontown received $3,500 in the 1994-95 period. Garfield received $3,500 in 1994-95, $9,000 in 1998-99, $6,000 in 2000-01, $2,500 in 2002 and $1,500 in the year 2003, Colton received $11,000 in 2001 for establishment of a new facility and Rosalia receive $13,500 in 2003 to construct a Community Recycling Drop-off Center Building. In 1994, Palouse sold its non-profit recycling program to B & M Recyclers, Inc. and the program was discontinued in 2000 when B & M went out of business. However, all towns are encouraged to apply for CPG funding which is offered each 2-year grant cycle, and future funding would enable Palouse to re-establish its program and help to maintain its stability.

## 3.3.11 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 Carothers Road Solid Waste Facility, located between Colfax and Pullman. 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.

## 3.3.12 Summation of Recyclable Material Diverted in 2009

Previous sections have described various elements of recycling programs and systems. Table 3-5 summarizes 2009 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 24,733 tons of material was disposed as waste and 16,977 tons were diverted for recycling in 2009. Addition of the two result in 41,710 tons, which is the "as generated", or total amount. The total recycling rate found in the table shows that Whitman County diverted approximately 41% of the waste stream for recycling.

| Table 3-6: Estimated Recycled Material Quantity Expressed as a Calculated Percentage of the Waste Stream for 2009 | | |
|---|---|---|
| **Program** | **Total tons** | **Percent of total waste stream** |
| **Community Recycling Programs** | | |
| Albion Recycling Drop-off | 0.8 | <0.01% |
| Colton Recycling Drop-off | 4.7 | .03% |
| Garfield Recycling Drop-off & Curbside | 36.4 | .21% |
| LaCrosse Recycling Drop-off & Curbside | 10.7 | .06% |
| Rosalia Recycling Drop-off | 2.9 | .02% |
| **Recycling Centers** | | |
| Empire Recycling Center - Colfax | 175 | 1.03% |
| Pullman Disposal Recycling Center - Pullman | 550 | 3.25% |
| Whitman County Recycling Center - Carothers Road | 1,196 | 7.06% |
| WSU Recycling | 1,949 | 11.50% |
| **Curbside Recycling** | | |
| Colfax Curbside Recycling | 9 | .05% |
| Pullman Curbside Recycling | 556 | 3.28% |
| **School Districts** | | |
| Pullman Public Schools | 0.5 | <.01% |
| **Regional Composting /Yard Debris** | | |
| WSU Composting (includes steam plant ash/clinkers) | 10,494 | 61.92 % |
| Whitman County Yard Debris | 954 | 5.63% |
| **Community Yard Debris Programs** | | |
| Pullman Yard Debris Collection | 396 | 2.34% |
| **Office Recycling** | | |
| Whitman County Office Recycling | 6.9 | 0.04% |
| **Other Programs** | | |
| Businesses and Private Recycling | 605 | 3.57% |
| **Total Recycling Rate for 2009** | **16,946.9** | **100%** |

## 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

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, historically the University has operated their own programs, other than some collection services, which are provided by the local certificated hauler, Pullman Disposal Inc.

#### 3.4.1.1 WSU Recycling Facility

Washington State University (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 2010.

**Table 3-7: WSU Recycled Material Composition for 2010**

| *Commodity* | *Tons* | *Commodity* | *Tons* |
|---|---|---|---|
| **Old Corrugated Containers** (Cardboard) | 296 | **Wood** | 708 |
| **Co-mingled Recycling** | 170 | **Household Surplus** (from campus move out) | 21.7 |
| **Mixed Grade Paper** | 386 | Appliances-White | 9.2 |
| **Coated Book Stock Paper** | 2.1 | **Computer Scrap** | 33.3 |
| **Used Beverage Cans** (Aluminum Cans) | 3.4 | **Scrap Metal** | 125 |
| **Total** | | | **1754.7** |

### 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/recycle/recycle.asp) lists the currently available chemicals which are stored in a secure chemical storage room maintained by EH&S.

#### *3.4.1.3WSU Composting Facility*

The WSU Compost Facility opened in 1994 under the WAC 173-304-300 criteria. In 2010, more than 12,000 tons of material was processed at the facility (includes steam plant ash and clinkers). 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 3-8: Feed Stock Inputs To The Compost Facility 2010(Tons) | |
|---|---|
| **Feed Stock Inputs** | **Total (in tons)** |
| Animal Manure and Bedding | 8335 |
| Laboratory Animal Waste | 88 |
| Dining Center Food Waste | 210 |
| Soil, | 72 |
| Wood | 612 |
| Liquid Whey (Cheese Processing) | 396. |
| Animal Tissue (Carcass and Slaughter Offal) | 80 |
| **Total** | **9793** |

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

| Table 3-9: Uses For WSU Compost Facility Output 2010 (tons) | | |
|---|---|---|
| Use of Compost Product | Tons | Percent |
| Land Application | 0 | 0 |
| Bedding | 1600 | 28.5% |
| Commercial Sales | 2849 | 50.7% |
| Chipped Wood (Hog Fuel) | 669 | 11.9% |
| Storage | 758 | 8.9% |
| **Total** | **5618** | **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. WSU incinerated 24 tons of medical waste, 0.5 tons of LLRW, for a total of 24.5 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. The total volume of Medical, Pathological and LLRW for 2010 is 51.8 tons.

#### 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 2,204 gallons of used motor oil, pump and other oils in 2010 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 Washington State Department of Ecology 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 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 Carothers Road Solid Waste Facility accepts and disposes of asbestos. Acceptance and disposal follows federal and state regulations. A form 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 2004-2009.

**Table 3-10: Asbestos Received at Whitman County Landfill**

| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|
| Tons Asbestos | 141.70 | 53.70 | 164.29 | 76.54 | 168.99 | 46.03 |

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.

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 Service 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, monitors), packages them on pallets and shrink wraps the pallets for transport. Pullman Disposal then contacts the state Ecycle 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 picked up by Inland Retech of Spokane for recycling. The public has responded well to the program. In the second half of 2004, 3470.5 pounds (1.73 tons) of eWaste was processed in the program. In 2010, Pullman Disposal processed 44 tons of eWaste under the E-cycle Washington, and approximately 4 tons of non-qualifying waste. This represents a dramatic increase in the use of this program.

Compact 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 Avista for proper disposal. Additionally, rechargeable batteries are collected and turned over to a state contractor (PBRC) for recycling.

Whitman County continues to educate the public about the availability of e-waste 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 company's Greater Wenatchee Regional Landfill and Recycling Center, but the tires will soon be hauled to the Graham Road facility in Airway Heights. In 2009, approximately 112 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 Carothers Road Solid Waste Facility 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. This program has become an annual event. Grant funding (separate from the CPG funds) was recently obtained from Ecology for this program.

### 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. In 2003, a total of 59 tons of yard waste was collected at the Whitman County Carothers Road Solid Waste Facility. In 2006, 2106 tons of yard waste was received. In 2009, 2350 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 ($10/ton minimum up to 960 lbs, $20/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 Potlatch 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 which is located at the Whitman County Carothers Road Solid Waste Facility located on Carothers Road. The waste accepted includes asbestos, inert waste, asphaltic shingles, demolition wood waste, and clean fill soil materials. In 2009, approximately 382 tons were buried at the site. Based on current projections, the disposal cell will be full in 2012. The County is in the process of evaluating the future disposal alternatives for these wastes.

## 3.4.12 Other Waste Handling Facilities

In addition to the Whitman County Carothers Road Solid Waste Facility, there is one privately owned inert waste handling facility that is permitted by the Whitman County Health Department. The facility is presented in Table 3-9:

**Table 3-9: Waste Handling Facilities In Whitman County**

| FACILITY NAME | WASTE TYPE |
|---|---|
| Clark's Inert Waste Landfill (permitted) | Concrete, Asphalt and Clean Earth |

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 Carothers Road Solid Waste Facility 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 Carothers Road Solid Waste Facility 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 Washington Utilities and Transportation Commission'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.

Table 3-10 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 3-10: 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 | $12.21 | $15.5 | $22.05 | $27.22 | $7.98 |
| Pullman Disposal (G-42) | $10.21 | $12.08 | $14.84 | $20.56 | $26.28/ 4 yd. pickup | incl. in garbage rates) |
| Ada-Lin Waste Systems dba Sunshine Disposal & Recycling (G-104) | n/a | n/a | n/a | n/a | $25.00 | n/a |
| Carroll-Naslund Disposal dba Naslund Disposal (G-37) | n/a | n/a | n/a | n/a | n/a | n/a |
| Note: Carroll-Naslund Disposal serves the Port of Wilma with six 2-cu.yd. containers picked up weekly for $73.99/month and one 20-cu.yd. container for $55/month container rental plus $75/haul. | | | | | | |

## 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 Carothers Road Solid Waste Facility is placed in trailers and moved over county and state roads to a facility in Arlington. Oregon. Current disposal fees for solid waste are shown in Table 3-11. Transfer and disposal services are currently being provided by Waste Management of Washington, Inc., a solid waste services contractor. The current contract is in effect until 2012. 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 3-11: 2003 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 < 280 lb. | Set Fee | 15.00 | 15.00 |
| | wt > 280 lb | Per Ton | 99.00 | 99.00 |
| 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 < 960 lb. | Set Fee | 10.00 | 10.00 |
| | wt > 400 lb | Per Ton | 75.00 | 75.00 |
| Used Tires | | | | |
| | car tires, if weighed with load of garbage, up to 10 tires | Per Tire. | 0.81 extra | 1.81 extra |
| | 10<car tires | Per Tire | 1.50 | 1.50 |
| | 10> car tires | Per Ton | 90.00 | 90.00 |
| | Truck tires, if weighed with load of garbage, up to 5 tires | Per Tire | 1.55 extra | 1.55 extra |
| | 5< truck tires | Per Tire | 5.00 | 5.00 |
| | 5> truck tires | Per Ton | 100.00 | 100.00 |
| | Tractor tires, if weighed with load of garbage, up to 2 tires | Per Tire | .60 | .60 |
| | 2< Tractor tires | Per Tire | 7.50 | 7.50 |
| | 2> Tractor tires | Per Ton | 100.00 | 100.00 |
| 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, plastic milk jugs and pop bottles, metal appliances, scrap metal, glass bottles, tin/steel cans, newspaper) | | | | |
| | None | | No charge | No charge |
| | | | | |
| | | | | |

## 3.6 Existing Enforcement Program

The Environmental Health Section of 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 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 responds to all complaints of illegal solid waste handling with a site inspection. If a complaint is found to be valid, the responsible person(s) are verbally ordered to correct the problem within a specified period of time. During the site visit, the investigator also notes his/her observations and takes photographs to document the nature and extent of the violation. A correction notice is sent out immediately following the site inspection. A follow-up inspection is conducted after the compliance deadline specified in the written notice has been reached. If the violation has not been corrected, the process is repeated. If not corrected after the second compliance deadline, a notice of civil infraction is issued requiring a court appearance. Fines of up to $250.00 per day can be assessed.

# 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 Carothers Road Solid Waste Facility 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 Solid Waste Management Plan 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 Department of Ecology 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 such 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

Several reduction and/or reuse programs are available to the public. In October, an annual book exchange is held for County employees. This exchange has been well received by employees, and possible expansion of this program has been suggested by employees, which would allow for the re-use of videos, magazines and CDs.

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.

A Greeting Cards collection is also held in the winter around the holidays, which encourages County employees to bring in old greeting cards to send to a monastery in Cottonwood, Idaho for re-use. However, the relatively low participation level for the greeting card program is possibly due to employees concern that turning in cards with handwritten messages on them invades privacy, and the fact that many may not realize the value of re-using the card. Improvement of this program may allow for an increased number of cards recycled each year.

The practice of waste exchange has routinely occurred at the county Moderate Risk Waste facility, particularly for water base 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 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 source separated (curbside) 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. 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 City of Garfield also operates a curbside collection service, as well as a drop-off recycling center. The Town of Lacrosse has a subscription curbside recycling program coordinated and operated through the students in the local 4-H club. WSU has recycle

collection areas throughout the campus and a drop-off recycling center. The communities of St. John and Tekoa are currently in the process of implementing drop-off recycling centers in these communities. The schools in each of these communities will also process their recyclables through these centers. Palouse will also soon be establishing a drop-off recycling center. 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 Coordinator 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

Although no disposal bans exist, Whitman County might consider them, 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. Disposal of e-waste in municipal solid waste has been banned state-wide. Consequently, Whitman County has not needed to ban "e-waste", but supports the drop-off programs set up by the State. Given the increased awareness and use of e-waste drop-off through Pullman Disposal and Goodwill, it appears that the public is increasingly aware of the systems in place to dispose of e-waste and a ban will likely not be needed.

### 4.6.1 Special Waste

Review of existing special waste programs and systems reveal that, except for automobile salvage, 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

The current facility is of adequate capacity to meet current and near term needs. Improvements to equipment and structure modification will be required to meet the changing needs for waste and resource handling. The conveyor which lifts MSW from the tipping floor into the transport trailer has become aged. The conveyor capacity and the floor area is, at times, not large enough to handle the rate at which inflow occurs. One modification that has been considered for the system is 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. Self haulers could be given a stall to unload into the trailer directly. Eliminating the convey will reduce costs related to equipment maintenance.

The County has also completed a study to consider development of a new MSW landfill cell at the Carothers Road site. A new cell will eliminate the need for a long haul disposal contract. The current Limited Purpose cell, which is very near capacity, will be closed when full. The Limited Purpose waste would be placed in the new MSW cell. The County will also encourage development of facilities to process demolition waste for reuse.

The current tipping fee is adequate for maintaining the current program. 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.

## 4.7 Compliance in Meeting the Minimum Functional Standards (MFS), and Possible Enhancements

Whitman County has closed the original MSW portion of the landfill at their solid waste facility on Carothers Road which was the only permitted MSW landfill in the County. Closure was completed on August 8, 1995. Additional environmental sampling sites have been installed and are being monitored. The groundwater monitoring program at the closed landfill is for the detection of groundwater contaminants. There are a total of nine active groundwater monitoring wells on the site. It has been determined that six of these wells be used to collect quarterly samples. These wells include MW-5, MW-8, MW-10, MW-11, MW-12 and MW-13. These wells consist of one up-gradient and five down-gradient wells around the closed landfill area. The wells used are tested for NH3-N, conductivity, PH, temperature, TOC, COD, Nitrite/N, Nitrate/N, chloride, sulfate, dissolved iron, manganese, zinc and fecal coliform. Water levels and temperature 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 activities, should 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 has made improvements to meet the requirements of WAC 173-350 for the solid waste facilities at their Carothers Road Solid site. Facility components include:

1. Intermediate solid waste handling (transfer station and compaction),
2. Yard debris and mulch piles,
3. Clean wood waste reprocessing,
4. Water impoundment,
5. Moderate Risk Waste facility (household hazardous waste),
6. Limited purpose landfill

The County completed the reconstruction of a water impoundment used to dispose of wash water produced on the tipping floor. The project entailed installation of a double lined impoundment with leak detection to meet current standards. The County also recently installed a new scale and scale house to serve the facility.

Documents developed for the site include an Operations and Maintenance Plan and a Closure/Post-Closure plan for the facility components. The limited purpose landfill is

anticipated to have a remaining life of five to ten years. When full, the landfill will be closed and a replacement cell may be developed within the facility boundaries.

The closure plan contains a section on financial assurance. This section identifies the funds necessary to complete closure of the limited purpose landfill and other facilities within the site.

### 4.7.1 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,
3. Criteria for selection of applicable programs.

## 4.8 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. 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 Carothers Road Solid Waste Facility. 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 WSU and the certificated haulers, who also process and market materials on their own. The Whitman County Carothers Road Solid Waste Facility is used for process and storage until enough material is accumulated to transport efficiently. The material is then delivered to a recycling facility or broker, who pays the County directly for the commodity. The revenue received by the County is returned to the haulers with the County retaining a percentage 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.

## 4.9 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 27,920 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.

## 4.10 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. Elimination of waste wherever possible;
2. Movement of responsibility for the waste stream toward the producer for recycle or reuse;
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 technologies such as electronic communication which are bio-compatible and may help control the spread of the solid waste stream.

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

1. Support of Solid waste programs support and conform with state regulations;

2. Outside financial assistance first be considered for program capitalization and startup costs;
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 regards 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.

### 4.10.1 Applicable Reduction, Reuse and Recycling Enhancement Programs

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

## 4.11 Waste Reduction

### 4.11.1 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. There are no disposal bans currently in Whitman County.

### 4.11.2 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.

### 4.11.3 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 environmentally preferable purchasing (EPP).

## 4.12 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.

## 4.13 Recycling

### 4.13.1 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.

#### 4.13.1.1 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 them 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.

#### 4.13.1.2 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 policy of purchasing items with a minimum recycled content of 40% whenever possible.

## 4.13.2 Infrastructure Assistance

Analysis of existing programs has led to the conclusion 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 can 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 may be through 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.

## 4.13.3 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.

## 4.13.4 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 Carothers Road Solid Waste Facility 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 Potlatch Cogeneration facility for power

production. Participation has increased significantly since the program was started, with current annual tonnage at 2,350 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.

### 4.13.5 Co-mingled Recycling Program

As a new pilot program WSU will accept co-mingled recyclables from the campus waste stream that will be baled and shipped to a regional Material Recovery Facility (MRF) in Tacoma, WA. Cardboard is collected and baled separately. 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. This program might also reduce the material and revenue from the County's current recycling program.

Both the City of Pullman and Empire Disposal are interested in a co-mingled approach to managing recyclables. Waste Management is currently constructing a MRF in the Spokane area. This facility is projected to provide a more cost effective opportunity for the collection and processing of mixed recyclables in the region.

## 4.14 Transportation

The service provided by the transport and disposal contractor has been satisfactory. Consequently, Whitman County has renewed the contract for transfer and disposal until 2012. Staff should, on an annual basis, review and evaluate the viability of continuing the current trucking system as opposed to either alternative modes of transportation or disposal within county borders.

The Transfer Facility at Carothers Road is nearing its capacity which is 30,000 tons per year. Improvements to the facility and or changes in operation will be required to keep pace with the growing waste stream.

Whitman County has recently completed a study to consider constructing a new MSW landfill cell at their Carothers Road site. Conclusions of the analysis are that a new Carothers Road landfill cell is the most feasible and viable option for the County with the potential to reduce overall transport and disposal costs.

## 4.15 Disposal

### 4.15.1 General

Whitman County has several disposal options available. For the purposes of this document they have been evaluated according to five different models:

- **Local Landfill Disposal** includes 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; and

  Case Two: Private firm constructs and operates landfill.

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

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

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

Estimates of costs per ton are included for each option or program. County capitalization costs are included where applicable. These preliminary estimates are 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 Carothers Road Solid Waste Facility New Landfill Feasibility Study was completed in February 2010 and the Phase 2 Field Investigation Workplan for the South Landfill Cell, Carothers Road Solid Waste Facility was completed in September 2010. Portions of these plans are summarized in the section which follow.

## 4.15.2 Local Landfill Disposal

### 4.15.2.1 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 will initially be constructed. The cell will be the first phase of a 50 acres total MSW landfill which will 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 will most probably require bonds be sold for a major portion of the funding. The initial cell will cost approximately $5.2 million dollars (2009). A new cell is planned every five years. The levelized tipping fee for this alternative over a period of time which ends in 2023 is $92 per ton. Consideration in recent studies has also considered adding Latah County (Moscow ID) waste stream to the new landfill which provides some reduction in cost, but also shortens the life of the landfill by approximately half.

### 4.15.2.2 Construct a New Landfill within Whitman County

*CASE ONE: COUNTY CONSTRUCTS AND OPERATES LANDFILL*

This option evaluates 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 the present transfer station site. This option assumes that the Carothers Road facility will 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 are even greater than utilizing the existing site at the Whitman County Carothers Road Solid Waste Facility because of added facilities and land acquisition. Initial cell capital cost is approximately $7 million. The levelized tipping cost for this alternative is $176 per ton.

*CASE TWO: PRIVATE FIRM CONSTRUCTS AND OPERATES LANDFILL*

No recent proposals to handle MSW have been generated within Whitman County. If this program were desired, a request for proposals could be 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 along with county, state, and federal highways,
- Continued disposal within the county, and
- Greater local employment.

The program cost is unknown at this time. All initial capital costs would be absorbed by the owner.

## 4.15.3 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 is $139 per ton. This is greater than the existing long haul and disposal arrangement due to a high tipping surcharge at the Asotin Co facility

## 4.15.4 Long Haul and Landfill Disposal

This is the current status quo alternative. Export and regional disposal costs based on the current contract (with Waste Management of Washington) is $62/ton. This case represents the current transportation and disposal system and is 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. The long haul alternative will continue to increase in cost with time, especially during times of high fuel price. The levelized tipping rate for continuing this alternative is $113 per ton.

## 4.15.5 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 present, costs are unknown for this possible alternative.

## 4.15.6 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 Facility, Whitman County would need an estimated waste flow of between 1,500 and 2,200 ton/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 is not practical to purse without a much greater waste volume.

## 4.15.7 Regional Incineration/Landfilling (Spokane Waste to Energy Facility)

This proposal is to transfer and ship Whitman County solid waste to the City of Spokane Waste to Energy Incinerator (WTE) Plant. Currently the tipping fee at the WTE

facility is $98.00 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 is higher than other options considered. The WTE facility has 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

## 4.16 Analysis of Transfer and Disposal Programs

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

1. The level and certainty of local employment is maximized with local programs.
2. Major capitalization would be required if the County chooses to construct new landfills.
3. The current method of disposal, namely transportation to a regional facility for disposal, meet the current needs of this Plan.
4. Development of a new landfill at the County's Carothers Rd appears 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<br>Recycled Product Purchasing<br>Home Composting Workshops and Education |
| Whitman County has a number of recycling programs in place. | Community Recycling Education<br>School Recycling Programs/Green Schools<br>Whitman County In-House Recycling<br>Open a Recycling Center in Tekoa (June 2011)<br>Open a Recycling Center in St. John (2011)<br>Open a Recycling Center in Palouse<br>Composting Facility for Food Scraps<br>Evaluate 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 ("A Greener Palouse")<br>Pullman/Colfax Business Recycling<br>Recycling Program<br>Infrastructure assistance<br>Tire Collection Recycling |
| Effort to "close the loop", i.e. facilitate purchasing recycled content products need additional support. | Recycled Product Purchasing<br>Whitman County Purchasing Program<br>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 2017 when the current disposal contract expires. An option exists for an early out in 2012. |
| Limited Purpose Landfill is nearly full. Anticipated time frame: 2012-2015 | 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 | | | |
|---|---|---|---|
| **Reduction** | **Unit Cost** | **Tons** | **Total Costs** |
| 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 | 2500 | $85,000,000 |
| School Programs | $24 | 45 | $1,080 |
| Business Assistance | $26 | 45 | $1,170 |
| | | | |
| | | | |
| **Totals** | | **2,262** | **$131,790** |
| | | Avg cost/ton | $58 |

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.

## 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. It was suspended due to a shortage for funding which was formerly from 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 e-waste in municipal solid waste and educates the public on where to dispose of these wastes. Current items of interest for state-wide bans include paint and fluorescent bulbs. 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.

#### 5.2.2.4 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 request for proposals (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

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 number of schools participating in the County recycling program has increased by 6 schools since the previous update of this solid waste plan. The existing program elements include financial assistance, outreach presentations, and assistance in establishing a recycling program. With the addition of recycling centers, schools will have an easier location for recyclables to be collected, which will additionally encourage the school recycling program.

The program should be considered as having 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 Co-Mingled Recycling

It is recommended that the County evaluate the concept of collecting co-mingled recyclable in the larger communities such as Pullman and Colfax. Interest has been expressed by citizens and haulers to pursue this recycling program. As a new pilot, WSU will accept co-mingled recyclables from the campus waste stream that will be baled and shipped to a regional Material Recovery Facility (MRF) in Tacoma, WA. Cardboard is collected and baled separately. 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 the City of Pullman and Empire Disposal are interested in a co-mingled approach to managing recyclables. Pullman Disposal and Empire Disposal, as the primary haulers in the County, will be the key decision-makers in determining whether to handle co-mingled recyclables. It is anticipated that the County will continue to provide bailing 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 development of a 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 are presented in Table 5-3. 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 new site within the County, disposal at an existing landfill owned by Asotin County and continuation of current 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. Added in this plan to the options considered in the study is disposal through incineration.

Costs are reported in terms of a levelized cost per ton over a period of time ending in 2023. For some options implementation will 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 has the lowest long-term cost. It is slightly better than the current long haul and regional disposal and better than the transport and dispose option at the Regional Incinerator in Spokane. The landfill in Asotin County and a new landfill to be developed at a new site in the county are much higher cost. Another opportunity may present itself with the regional landfill in Adams County if it were to begin accepting wastes.

## 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. This current contract with Waste Management has provided adequate levels of service for transportation and disposal.

The County completed a study in 2009 which indicates development of a new MSW landfill at the Carothers Road site will provide disposal at the lowest cost over the long term considered, a period of time ending in 2023. The County will need to give careful consideration to this option as plans for future disposal progress. Other close options include long haul and disposal at a regional landfill.

| Table 5-3: Tabulation of Estimated Cost of Disposal Through Various Systems for the Period ending 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

Based on maximizing the number of local jobs and businesses, cost of program, and capitalization requirements, the following options 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 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.

### 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: Whitman County Six Year Implementation Schedule

| ID | Task Name | Duration (Hours) | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|
| 1 | **Plan Adoption** | 200h | **200** | | | | | |
| 2 | **Waste Reduction/Prevention** | **240** | **50** | **190** | | | | |
| 3 | Preliminary Analysis | 100 | 10 | 90 | | | | |
| 4 | Program preparation | 75 | 25 | 50 | | | | |
| 5 | Program implementation | 65 | 15 | 50 | | | | |
| 6 | **County Procurement Policy** | **15** | **2** | **5** | | | | |
| 7 | Evaluate existing structure | 8 | 8 | | | | | |
| 8 | Create guidelines | 2 | 2 | | | | | |
| 9 | Implement program | 5 | 0 | 5 | | | | |
| 10 | **Sustainable Projects** | **25** | **15** | **20** | | | | |
| 11 | Preliminary Analysis | 25 | 15 | 10 | | | | |
| 12 | Program preparation | 0 | 0 | 10 | | | | |
| 13 | Program implementation | 0 | 0 | 10 | | | | |
| 14 | **Community Recycling Events (education/collection)** | **3600** | **600** | **600** | **600** | **600** | **600** | **600** |
| 15 | Administration | 3600 | 600 | 600 | 600 | 600 | 600 | 600 |
| 16 | **School Programs** | **780** | **130** | **130** | **130** | **130** | **130** | **130** |
| 17 | Program review | 180 | 30 | 30 | 30 | 30 | 30 | 30 |
| 18 | Program implementation | 600 | 100 | 100 | 100 | 100 | 100 | 100 |
| 19 | **Disposal** | **1,940** | **200** | **1,080** | **660** | | | |
| 20 | Implementation Plan - New County Landfill | 200 | 200 | | | | | |
| 21 | Design/Permitting | 1000 | | 1000 | | | | |
| 22 | Selection and Award | 160 | | 80 | 80 | | | |
| 23 | Construction | 500 | | | 500 | | | |
| 24 | Startup | 80 | | | 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 - 2011 to 2030 (in year 2011 dollars)**

| Program | Activity | Year | County Cost/Yr. | Annual Revenue | Total Cost per Year |
|---|---|---|---|---|---|
| Recycling | Carothers Road Recycling Facility | 2011-2030 | $80,000 | $80,000 | 0 |
| Limited Purpose Landfill | Closure Cost | 2015 | $776,000 | $0 | $776,000 |
| | Post Closure Monitor | 2016-2029 | $28,000 | $0 | $28,000 |
| | Post Closure Maint. | 2016-2029 | $4,500 | $0 | $4,500 |
| MRW | HHW Education | 2011-2030 | $3,000 | $0 | $3,000 |
| | HHW Collection | 2011-2030 | $30,000 | $1,000 | $29,000 |
| Waste Reduction & Recycling Programs | Community, School, Business Audits, Procurement Policy | 2011-2030 | $54,000 | $0 | $54,000 |
| New County Landfill | Design Construction Startup Cell One | 2012-2014 | $5,200,000 Total | T.B.D. | $92/Ton |

# 6. MODERATE RISK WASTE MANAGEMENT

## 6.1 Introduction and Background

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 Household Hazardous Waste (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 Carothers Road Solid Waste Facility and has continuously operated since completion. An operations plan was developed for the facility in April 1994.

This chapter is prepared as a part of the Whitman County Solid Waste Management Plan to address management of 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.

## 6.2 Current MRW Management Conditions

Whitman County has continuously operated, since opening, their MRW facility at Carothers Road 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 to a qualified facility for disposal.

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.

| Year | Antifreeze | Oil Non-Contaminated | Acids | | Pesticide/Poison Liquids | Pesticide/Poison Solids | Loose Misc. | Total |
|---|---|---|---|---|---|---|---|---|
| 2010 | | 17,612.00 | 127.00 | 1 | 705.00 | 282.00 | 24.00 | 46,872.00 |
| 2009 | 2,184.00 | | 220.00 | 2 | 660.00 | 220.00 | 93.00 | 49,256.00 |
| 2008 | | | 456.5 | 4 | 1,540.00 | 1,155.00 | 67.00 | 31,085.75 |
| 2007 | 880.00 | | 913.00 | 9 | 3,465.00 | 385.00 | 532.00 | 49,181.00 |
| 2006 | 1,600.00 | 18,448.00 | 456.50 | | 1,540.00 | | 190.00 | 67,511.50 |
| 2005 | 1,852.00 | 21,171.00 | 456.5 | 9 | 3,080.00 | | | 59,393.50 |
| 2004 | 1,680.00 | 28,209.00 | 456.50 | | 3,080.00 | | | 60,763.00 |
| 2003 | 1,000 | 15,740.00 | 456.50 | 4 | 1,540.00 | | | 42,294.50 |
| 2002 | 2,120.00 | 19,928.00 | 456.50 | | 770.00 | | 175.00 | 52,383.50 |
| 2001 | 1,424,00 | 18,862.80 | 466.5 | 4 | 7,132.00 | | 78.00 | 48,161.20 |
| **Total** | | | **4,465.00** | **3,** | **18,112.00** | **2,042.00** | **1,159.00** | **506,903.15** |

The cost for operating the program have been born by Whitman County tipping fees and supplemented by any funding received from State sources. 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 on HHW. Printed materials are distributed at events within the County. Educational programs are offered in schools and County staff provides ongoing technical assistance for households with questions regarding HHW. County staff also provides technical assistances to businesses relating to identifying, collecting and properly handling for disposal, hazardous waste that might be produced by CESQG.

The MRW facility is open the same hours as the transfer facility receives municipal solid waste. 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 accordingly 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 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 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 Department of Ecology. Small quantity generators are provided assistance by providing 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.

## 6.3 MRW Management Goals

MRW management goals for Whitman County are as follows:

- To meet the State requirements in providing a facility for the safe disposal of HHW.
- 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.
- In alignment with the Beyond Waste goals, Whitman County encourages 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.
- The goal for Whitman County with regard to HHW is to reduce creation whenever possible, 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.
- Continue public outreach and education regarding MRW re-use and reduction.
- 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.

## 6.4 Alternatives and Implementation

For MRW management in Whitman County, education is key for its citizens in this effort. 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. Whitman County is active in sponsoring/arranging for collection events within the county and communities which includes HHW collection. It may also involve collection events like those arranged by the Department of Agriculture for specific agricultural business waste such as pesticides and herbicides. 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. Where possible, the handling of MRW is encouraged to be provided by the private collection companies who handle municipal solid waste instead of expanding the role of government in this area. Ongoing business and small quantity generator education is

encouraged to provide technical assistance, help reduce the amount of MRW generated and facilitate the means for efficient and cost-effective disposal of waste they create. Education specifically targeting reduction in the generation of MRW is a key area in which Whitman County wishes to focus. A preferred method to accomplish this is environmentally preferred purchasing.

# APPENDICES

# 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:** **David Nails & Mark Storey**

CONTACT TELEPHONE: **(509) 334-2400** DATE: **03-10-05**

## 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 **2011**.
YR.3 shall refer to **2013**.
YR.6 shall refer to **2016**.

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 **45,190** YR.3 **46,050** YR.6 **47,370**

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

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 **19,809** YR.3 **20,610** YR.6 **21,871**

### 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 **24,888** YR.3 **25,893** YR.6 **27,487**

## 2.3 References and Assumptions

***Assumes a total tonnage increase of 2% and meeting the waste reduction goals outlined in the 2011 Solid Waste Management Plan***

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 & Public Composting, pg 27 SWMP*** | _____ |
| ***Home Composting, pg 28 SWMP*** | _____ |
| ***Recycled Art, pg 28 SWMP*** | _____ |

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

IMPLEMENTED

***YR.1 $58,830___ YR.3 $61,207___ YR.6 $64,953___***

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.

IMPLEMENTED

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

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:

***Christmas Tree Recycling, pg 29 SWMP***
***Fairs/Events, pg 29 SWMP***
***Upcycling Workshops, pg. 29 SWMP***
***School Programs, pg. 29-30 SWMP***
***Education Programs, pg 30-31 SWMP***
***Business Programs, pg 32 SWMP***

IMPLEMENTED

| PROGRAM | COST | FUNDING |
|---|---|---|
| ***Total Programs*** | ***$58,830*** | |
| | | |
| | | |

PROPOSED

| PROGRAM | COST | FUNDING |
|---|---|---|
| | | |

## 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 #** ***G-75***

| | YR1 | YR. 3 | YR. 6 | |
|---|---|---|---|---|
| **RESIDENTIAL** | | | | |
| - # of Customers | ***5936*** | ***6176*** | ***6554*** | |
| - Tonnage Collected*** | ***4208*** | ***4378*** | ***4646*** | *** Estimated |
| **COMMERCIAL** | | | | |
| - # of Customers | ***1126*** | ***1171*** | ***1243*** | |
| - Tonnage Collected*** | *2266* | *2357* | *2502* | *** Estimated |

**WUTC Regulated Hauler Name** ***Pullman Disposal***
**G-permit #** ***G-42***

| | YR 1 | YR. 3 | YR. 6 | |
|---|---|---|---|---|
| **RESIDENTIAL** | | | | |
| - # of Customers | ***4173*** | ***4342*** | ***4607*** | |
| - Tonnage Collected*** | ***3585*** | ***3730*** | ***3958*** | *** Estimated |
| **COMMERCIAL** | | | | |
| - # of Customers | ***1077*** | ***1121*** | ***1189*** | |
| - Tonnage Collected*** | ***8365*** | ***8703*** | ***9236*** | ***Estimated |

**WUTC Regulated Hauler Name** _____
**G-Permit #**_____

| | YR. 3 | YR. 6 |
|---|---|---|
| **RESIDENTIAL** | | |
| - # of Customers | | |
| - Tonnage Collected | | |
| **COMMERCIAL** | | |
| - # of Customers | | |
| - Tonnage Collected | | |

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 ***Estimated | ***250*** | ***260*** | ***276*** | |
| Tonnage Collected | ***313*** | ***326*** | | ***346*** |

**Hauler Name** ***Washington State University (MRS)***

| | YR. 1 | YR. 3 | YR. 6 |
|---|---|---|---|
| # of Customers | ***341*** | ***354*** | ***376*** |
| Tonnage Collected | ***1611*** | ***1676*** | ***1778*** |

**Hauler Name** _____

| | YR. 1 | YR. 3 | YR. 6 |
|---|---|---|---|
| # of Customers | | | |
| Tonnage Collected | | | |

### 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:** _____
**Location:** _____
**Owner:** _____
**Operator:** _____

3.4.2 What is the permitted capacity (tons/day) for the facility? _____

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

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

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

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

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

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

3.4.6 What are the expected costs of ash disposal?

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

3.4.7 Is ash disposal to be:

_____ on-site?
_____ in county?
_____ long-haul?

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

## 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]

tonnage YR.1 *300* YR.3 *318* YR.6 *338*

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.

tonnage YR.1 *700* YR.3 *742* YR.6 *788*

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.

Estimated YR.1 *$28,154* YR.3 *$29,291* YR.6 *$31,084*

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

***Tipping Fees***

## 3.6 Administration Program

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

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

Budgeted Cost

YR.1 ***$243,861*** YR.3 ***$253,713*** YR.6 ***$269,242***

Funding Source

YR.1 _____ YR.3 _____ YR.6 _____
***Tipping Fees and CPG Grant Funding***

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***

## 3.7 Other Programs

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

3.7.1 Describe the program, or provide a page number reference to the plan. ***N/A***

3.7.2 Owner/Operator: ***N/A***

3.7.3 Is WUTC Regulation Involved? If so, please explain the extent of involvement in section 3.8. ***N/A***

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

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

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

*N/A*

**3.8 References and Assumptions** (attach additional sheets as necessary)

***Assumes tonnage and population growth of 2% annually.***
***Whitman County Solid Waste Management Plan, 2011.***

**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 | 99.00 | 67.28 | Whitman County | Arlington, Oregon | 23,400 | $2,316,600 |
| Landfill & Transfer Sta. | L1 | 75.00 | N/a | Whitman County | Whitman County | 391.48 | $29,361 |
| Landfill & Transfer Sta. | L2 | 100.00 | N/a | Whitman County | Whitman County | 516.79 | $51,679 |
| | | | | | | | |
| | | | | | | | |
| L1 = Limited Purpose Landfill | | | | | | | |
| L2 = Asbestos | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

## 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) | 99.00 | | | 67.28** | 19.22 | 10.00 | 2.50 |
| Asbestos | 100.00 | | | 0 | 93.00 | 7.00 | 2.50 |
| LPL | 75.00 | | | 0 | 65.50 | 7.00 | 2.50 |
| | | | | | | | |
| ** Incl. Disposal | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

## 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 & Waste Reduction | na | na | na | na | CPG | $117,661 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

## 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) | 99.00 | 100.98 | 100.98 | 103.00 | 103.00 | 105.06 |
| Limited Purpose L.F. | 75.00 | 76.50 | 76.50 | 78.03 | 78.03 | 79.59 |
| Asbestos | 100.00 | 102.00 | 102.00 | 104.04 | 104.04 | 106.12 |
| | | | | | | |
| | | | | | | |

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

**Table 4.2.1 Funding Mechanism by Percentage**

**YEAR ONE**

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

**Table 4.2.2 Funding Mechanism by Percentage**

**YEAR THREE**

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

| Table 4.2.3 Funding Mechanism by Percentage<br>YEAR SIX | | | | | | |
|---|---|---|---|---|---|---|
| Component | Tip Fee % | Grant % | Bond % | Collection Tax Rates % | Other % | Total |
| Waste Reduction | 25 | 75 | | | | 100% |
| Recycling | 25 | 75 | | | | 100% |
| Collection | 100 | | | | | 100% |
| ER&I | | | | | | 100% |
| Transfer | 100 | | | | | 100% |
| Land Disposal | 100 | | | | | 100% |
| Administration | 100 | | | | | 100% |
| Other | | | | | | 100% |

## 4.3 References and Assumptions

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

***Refer to the 2011 Solid Waste Management Plan 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 the 2011 Solid Waste Management Plan for details of financial surety, and other information regarding the annual budget.***

# B. SEPA Checklist

# Whitman County Solid Waste Management Plan
# Environmental Checklist
# October 31, 2005

A. BACKGROUND

1. Name of proposed project, if applicable:

   **2011 Whitman County Solid Waste Management Plan (2011 SWMP)**

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:

   **May, 2011**

5. Agency requesting checklist:

   **Whitman County Planning Department**

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

   **Proposed implementation of the 2011 SWMP is from 2011 to 2016.**

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

   **Yes, the plan is reviewed every 5 years and updated if necessary.**

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

   **Washington State Law requires local governments to develop a local solid waste management plan and to update it regularly.**

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

   **There are no specific properties covered in the 2011 SWMP.**

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

    **SWMP approvals are required from the Whitman County Board of Commissioners, participating municipal jurisdictions in the county, and the Washington State Department of Ecology. All solid waste, moderate risk waste and recycling facilities require a permit from the Whitman County Health Department.**

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.

    **The 2011Whitman County SWMP addresses the management and disposal of municipal solid wastes currently generated in the county. The plan identifies types and quantities of wastes currently generated in the county, identifies current solid waste handling, develops goals for solid waste management and proposes alternatives for management of and disposal of these wastes. The plan, goals and objectives on waste reduction, moving responsibility for wastes for producers, citizen involvement, keeping economic activity local and improving handling deficiencies.**

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 jurisdiction of the plan will include all incorporated and unincorporated areas within Whitman County, Washington. This includes Washington State University.**

EVALUATION FOR
AGENCY USE ONLY

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site: (circle one)

☐ Flat ☐ Rolling ☐ Hilly ☐ Mountainous ☐ Steep Slopes ☐ Mountainous ☒ Other: **Terrain in Whitman County contains a variety of all the above topographic features except mountainous.**

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

**Does not apply.**

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

**Does not apply. See Section 1.8.4 Solid Waste Management Plan for Whitman County for soils description.**

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

**Does not apply.**

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

2. Air

a. What types of emissions to the air would results from the proposal (i.e., dust, automobile, odors, or industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

**Unknown. There will be some emissions to the air from the Carothers Road Solid Waste facility, the WSU compost facility, and from motor vehicles transporting solid waste. These source emissions are expected to be only a small percentage of total air emissions generated in the county.**

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

**None known.**

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

**Emissions are controlled and regulated, particularly for transport vehicles.**

3. Water

a. Surface

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

**The surface waters of Whitman County include the Snake and Palouse Rivers and their tributaries, Rock Creek and smaller streams. The largest lake is Rock Lake located in north western portion of Whitman County. None of the operating facilities are in the immediate vicinity of surface waters.**

2) Will the project require any work over, in, or adjacent to (within 200 feet) of the described waters? If yes, please describe and attach available plans.

**Does not apply (non-project action).**

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

**Does not apply.**

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

**Does not apply**

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

**All existing solid waste facilities are located outside the 100-year floodplains.**

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

**Does not apply.**

b. Ground

1) Will ground water be withdrawn, or will water be discharged to ground water: Give general description, purpose, and approximate quantities, if known.

**No.**

2) Describe waste materials that will be discharge 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 systems(s) are expected to serve.

**A small on-site septic disposal system (1,000 gallon size) is in operation at the Carothers Road Solid Waste Facility.**

c. Water Runoff (including storm water):

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.

**All existing solid waste facilities have runoff control and stormwater management.**

2) Could waste materials enter ground or surface waters: If so, generally describe.

**No.**

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

**System controls are in place to prevent waste materials from entering ground or surface water at the Carothers Road Solid Waste facility. These controls include run-on diversions, covers, caps, liners, leachate control systems and water monitoring.**

4. Plants

   a. Check or circle types of vegetation found on the site:

      ☐ deciduous tree: alder, maple, aspen, other
      ☐ evergreen tree: pine, other
      ☐ shrubs/brush
      ☐ upland grasses
      ☐ pasture
      ☐ crop or grain
      ☐ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
      ☐ water plants: water lily, eelgrass, milfoil, other
      ☐ other types of vegetation/brush, sagebrush, dryland vegetation

      **Does not apply.**

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

      **Does not apply.**

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

      **Does not apply.**

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

      **Does not apply.**

5. Animals

   a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

      birds: ☐ hawk ☐ heron ☐ eagle ☐ songbirds ☐ other: seagulls, pheasants, quails, and sparrows.
      mammals: ☐ deer ☐ bear ☐ elk ☐ beaver ☐ other: skunks and field mice.
      fish: ☐ bass ☐ salmon ☐ trout ☐ herring ☐ shellfish
      ☐ other: No fish habitat present.

      **Does not apply.**

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

      **Does not apply.**

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

      **Does not apply.**

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

**Implementation of the 2011 SWMP may contribute to the protection of existing wildlife and their habitats by improving management and disposal methods for solid waste which in turn reduces the potential for contamination of water and soil.**

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

**Does not apply.**

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

**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:

**Does not apply.**

7. Environmental Health

**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.

**The Carothers Road Solid Waste Facility receives household hazardous wastes. The facility's operating plans address personnel procedures for handling these toxic substances. The Moderate Risk Management Plan has been prepared to provide additional waste management guidance.**

1) Describe special emergency services that might be required.

**Personnel at the solid waste handling facility are trained in emergency procedures, and emergency alarm systems are present. In the unlikely event of an emergency, County fire and emergency services are available.**

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

**The Carothers Road Solid Waste Facility has a Fire and Emergency Response Plan, Hazardous Spills Plan, Emergency Procedures and Directory, and Safety programs.**

b. Noise

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

**Does not apply.**

2) What types and level of noise would be created by or associated with the project on a short-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

**Solid waste handling processes have low noise levels and short term highway vehicle noise.**

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

**Does not apply.**

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties:

**Does not apply.**

b. Has the site been used for agriculture? If so, describe.

**Does not apply.**

c. Describe any structures on the site.

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

9. Housing

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

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

10. Aesthetics

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

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

11. Light and Glare

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

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

12. Recreation

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

**Does not apply.**

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

**No.**

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

**Does not apply.**

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state or local preservation registers known to be on or next to the site? If so, generally describe.

**Does not apply.**

b. Generally describe any landmarks or evidence of historic archaeological, scientific, or cultural importance known to be on or next to the site.

**Does not apply.**

c. Proposed measures to reduce or control impact, if any.

**Does not apply.**

14. Transportation

**a.** Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans if any.

**Solid waste is transported throughout Whitman County on major roads and highways.**

b. Is site currently served by the public transit: If not, what is the approximate distance to the nearest transit stop?

**Does not apply.**

c. How many parking spaces would the completed project have? How many would the project eliminate:

**Does not apply.**

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

**Does not apply.**

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

**Does not apply.**

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

**The number of vehicles using existing solid waste facilities varies.**

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

**Does not apply.**

15. Public Services

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

**Does not apply.**

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

**Does not apply.**

16. Utilities

a. Circle utilities currently available at the site:

☐ electricity ☐ natural gas ☐ water ☐refuse service
☐ telephone ☐ sanitary sewer ☐ septic system ☐ other:

**Does not apply**

b. Describe the utilities that are proposed for the project, the utilities providing the service, and the general construction activities on the site or in the immediate vicinity that might be needed.

**Does not apply.**

C. SIGNATURE

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:_____ Date: _____

**Mark Storey**

## D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

**Implementation of the proposed plan should result in decreased discharges to the environment as a result of improved management for handling and disposing of solid waste.**

Proposed measures to avoid or reduce such increases are:

**The proposed 2011 SWMP includes the following solid waste management strategies which may avoid or reduce such an increase:**

- **Education Initiatives**
  - **Demonstration projects**
  - **Business workshops**
  - **School and Public Education**
  - **Technical support**
- **Waste Reduction**
  - **Waste reduction programs**
- **Recycling**
  - **New recycling programs**
  - **Yard debris grinding and energy conversion**
  - **Construction materials and wood waste recovery**
- **Landfilling in compliance with Solid Waste Handling Standards**
  - **Asbestos disposal**
  - **Construction, demolition and landclearing waste disposal**
- **Public Health**
  - **Animal manure control**
  - **Dead animal disposal**
  - **Tire pile control**
  - **Septage disposal**
  - **Household hazardous waste programs**
  - **Health and safety training**

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

**Implementation of the 2011 SWMP should result in improved quality of habitat for plant and animal species in the county by reducing pollution to lakes and streams and contamination of groundwater through proper management, source reduction, recycling, and disposal methods for solid waste.**

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

**Implementation of the 2011 SWMP should decrease pollution in surface and ground water, which will result in improved environmental quality for plants, animals, and fish.**

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

**The 2011 SWMP will result in preservation of natural resources and reduced use of energy.**

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

**Implementing new management practices for waste reduction/waste minimization and recycling will result in conservation of energy and natural resources through recycling and reuse of products, such as glass, paper, metals, and plastics.**

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 plan supports protection of water quality and encourages the public who use these areas to properly manage and dispose of solid waste.**

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

**No adverse impacts are anticipated as a result of this plan.**

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

**The 2011 SWMP would not encourage land and shoreline use that would be incompatible with existing plans.**

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

**No impacts anticipated.**

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

**No impacts anticipated.**

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

**Does not apply.**

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

**The 2011 SWMP intent is to have all solid waste handling facilities conform with all applicable local, state, and federal regulations.**

# C. Resolutions of Adoption

# D. SWAC Meeting Minutes

**WHITMAN COUNTY**
**SOLID WASTE ADVISORY COMMITTEE**
**Minutes**
**November 17, 2010**

**MEMBERS:**

| | |
|---|---|
| **Dave Patterson, Chairman** | **Devon Felsted** |
| **Pete Hertz** | **Mary Carol Sauve** |
| **Keith Oney (Unexcused)** | **Nick VanArsdel** |
| **Rick Finch** | **Bill Paul** |
| **Shelly Quinton** | **Dick Brown** |

**Others in audience:** Mark Storey, Whitman County Engineer/Director; David Nails, Whitman County Solid Waste; Ken Gimpel, Waste Management; Dennis McLaughlin, Regional Disposal Company; James Thompson, Pullman Disposal; Jim Wavada, Department of Ecology; Dave Kliewer, JUB Engineers; Layne Meritt, JUB Engineers; Judi Gray, Whitman County Recycling; Elinor Huber, Clerk.

**1:30 p.m.** – The meeting was called to order by Chairman Dave Patterson. Introductions were held around the room.

Dave Patterson introduced the newest member of the Solid Waste Advisory Committee, Dick Brown from the Town of Oakesdale.

**MOTION** by Mary Carol Sauve and seconded by Devon Felsted to approve the minutes of July 21, 2010. Motion passed.

Judy Gray handed out information regarding prescription drug return. The Whitman County Sheriff's office and the Pullman Police Department are now accepting return of unused prescription drugs. They have drop off locations so you won't have to dispose of them in the garbage.

She also handed out information on the tipping fees for Whitman County and the results of the survey she had at the Palouse Empire Fair. Many people didn't know that our garbage was being transferred to Arlington, Oregon.

She gave a handout for 2009 Recycling & Diversion Data. The total of the overall diversion rate for Whitman County was 26.67% which was up from the 2008 total.

Judi Gray announced there are a couple of webinars coming up on December 8th and 9th. If anyone is interested in viewing them you can access that from your home or office.

Mark Storey presented a power point on the Regional Environment of Whitman County. The Board of County Commissioners asked him to study the solid waste issue for the future. CH2MHill was hired to review and validate current system

operations and rate structure and the total alternatives. They are in the middle of their feasibility study. The biggest issue is groundwater and that is not solved yet.

Dave Kliewer from J.U.B. Engineers, Inc., talked about the Solid Waste Management Plan. Basically, we want to update the plan to satisfy the current ecology guidelines and your goals in the future with educational programs, special waste, yard waste and recycling.

Jim Wavada from the DOE stated that the solid waste system hasn't changed a lot in five years. The availability of ewaste and recycling is the big thing. Ecology will be looking at how you have addressed synchronizing with the Beyond Waste Plan.

It was suggested that each Solid Waste Advisory Committee member go through the Solid Waste Plan and make their comments for updating the plan for discussion at the next meeting on January 19, 2011.

Bill Paul stated that the City of Pullman is very happy with the service from Pullman Disposal and they were recognized at the council meeting as being a second generation business.

Rick Finch thanked David Nails for helping them when their baler was down for three weeks.

Ken Gimpel announced that they are in the process of building a comingled recycling processing facility in Spokane in about 12-15 months. It will be built adjacent to the waste energy plant next to the airport. It will be a 42,000 square foot facility that will handle 55,000 tons of mixed recyclables a year with a mechanical sorting system so that recyclables can be collected and comingled and sorted out.

**MOTION** by Mary Carol Sauve and seconded by Pete Hertz to adjourn. Motion passed.

**3:09 p. m. – Adjourned**

**WHITMAN COUNTY**
**SOLID WASTE ADVISORY COMMITTEE**
**Minutes**
**January 19, 2011**

**MEMBERS:**

| | |
|---|---|
| **Pete Hertz, Vice Chairman** | **Devon Felsted** |
| **Dick Brown** | **Rick Finch** |
| **Dave Patterson - Excused** | **Nick VanArsdel, Excused** |
| **Bill Paul, Excused** | **Shelly Quinton, Excused** |
| **David Tyze, Excused** | **Mary Carol Sauve, Excused** |

**Others in audience:** Mark Storey, Whitman County Engineer/Director; Nancy Lucas, DOE; Douglas Ensor, JUB Engineering; Layne Merritt, JUB Engineering; Dan Brown, Rosalia; Judi Dunn-Gray, Whitman County Recycling; Elinor Huber, Clerk.

**1:43 p.m.** – The meeting was called to order by Vice-Chairman Pete Hertz. Introductions were held around the room.

Dan Brown was introduced as the prospective new member from the Town of Rosalia. He is on the Rosalia city council and is interested in contributing to the Solid Waste Advisory Committee.

**MOTION** by Devon Felsted and seconded by Rick Finch to recommend to the Board of County Commissioners to approve the application for Dan Brown to the Solid Waste Advisory Committee. Motion passed

**MOTION** by Devon Felsted and seconded by Rick Finch to approve the minutes of November 17, 2010. Motion passed.

Judi Dunn-Gray reported on upcoming events. Whitman County is sponsoring workshops on "Tossed and Found Upcycling," "Fashion and Apparel," and "Hop to Shop." There will be a brochure available listing all the thrift stores in the area for a Greener Palouse.

We had a workshop on Monday with about six children and they learned about recycling and zero waste. We are offering these workshops to 4-H clubs in the smaller rural communities. Our recycled art show at the Palouse Empire Fair will be geared around fashion and art.

The new Whitman County Recycling Directory is available with the changes in all the cities and towns.

Currently, we are working on the St. John WEBB races, the 4th of July picnic in Pullman, the Colton Uniontown Fair 4-H event, the Lentil festival and concerts in the park. Any time you are having an event in your town, try to make it a zero waste event. Whitman County can supply the bags and containers for your event.

Layne Merritt and Doug Ensor from J.U.B. Engineering discussed the Solid Waste Management Plan update. There was discussion on the goals and issues on page 19 of the Solid Waste Management Plan.

Nancy Lucas stated she was involved in the original CPG funding for the Litter grant. Ecology has presented a budget for 28 million for CPG to the Legislature and there is two million in there for Alternatives to Burning. The offset cycle money is there, too, so we are trying to get some of those programs funded so we can go back into the communities. The City of Palouse and the Town of Garfield are good examples of composting and we were able to hold three workshops in composting with that grant for the County.

Judi Dunn-Gray said the smaller towns in the County are actually composting. With the CPG funding we have been able to set up workshops and training from the Rural Community Assistant programs on site. The rural community chipping program has become cost prohibitive without the grant funding for some of the smaller communities but the program is still going on.

Pete Hertz said that the County came up with the chipper program and now we charge $25 a year for a permit to use our composting facility in Palouse. Everyone who has a permit can have all the wood chips they want for their yard and it has been a successful program.

Rick Finch mentioned food waste collections and studies for the future.

Judi Dunn-Gray stated that Moscow is looking at a joint venture and they have a feasibility study and numbers on food waste and tonnages. Judi has been to BarrTech in Lincoln County and toured the composting/food waste facility. If anyone is interested she can arrange for the Solid Waste Advisory Committee to tour the facility.

The state had a campaign on E-waste and Pullman Disposal and the Goodwill are collecting E-waste. The program is well known and very successful.

Mark Storey stated that we will be bidding for a new building for recycling and the drop off facility for mixed paper and Household Hazardous Waste will be closer together. He said that maybe some of the citizens in the County don't realize they can take House Hazardous Waste for their own use to recycle at home. There is also a collection for Small Quantity Generators.

Devon Felsted asked if single stream recycling will be included in the Solid Waste Management Plan because when there is a facility in Spokane will we as a county be participating?

Rick Finch said regarding the facility in Spokane that there will be a $40 tipping fee and then they will deduct the tonnage and any payment for the commodity out of that. He doesn't know how they can have much business at that rate. He just shipped baled comingled for $80 a ton. Our prices have been between $30-55 a ton. He isn't dealing

with S & P; he shops around every month and is getting three quotes. Smurfit is big right now. They are doing it to generate fiber for paper mills for recycling. It is FOB to our warehouse store. They send the trucks and arrange all the transportation but it is baled by WSU. It is used in the U.S.; not overseas.

The recyclables at WSU are up; newspaper is up to $108 a ton, cardboard is $140-150, and we are basically getting office pack price of about $90-100 for high grade mixed paper.

Judi Dunn-Gray stated that most companies have been shipping comingled recyclables to China and overseas and they are now building their own infrastructure. Soon the U.S. will be left with materials and the market will dry up for export. Do we build businesses that sustain our country or do we support other countries? We have feasibility studies for goals for the next 20-25 years for garbage and it is important to look down the road for recycling commodities as well as for garbage. When the prices of these commodities start to come back up for the co-mingled, single stream is feasible but when we can still get market prices by source separating, I cannot see the prospect with the cost of hauling.

Rick Finch said the recyclers in Coeur d'Alene just launched a new single stream program and within two weeks they had a 200% increase. They attributed it to not having to sort commodities. They just had one big 64-gallon container.

Judi Dunn-Gray said the residents love it but we haven't seen the numbers of what is being pulled out from the single source as actual waste. Glass is also an issue.

Rick Finch said there is a lot going on in the U.S. as far as reusing pulp and so the demand is pretty strong. In Spokane, once they invest millions of dollars into a plant to process this material, if their economic model doesn't work they will change that. They will have to be competitive.

Layne Merritt stated that they wanted to have a section in the plan for each community with updates so that each community will be represented. He encouraged the Solid Waste Advisory Committee to check with the citizens for their input and then email Judi with their suggestions.

The deadline for the comments is February 4, 2011, so they can compile the information into the Solid Waste Management Plan and it will also be available on the Whitman County website.

It was determined that Keith Oney's position on the Solid Waste Advisory Committee ended on December 31, 2010.

It is important for everyone on the committee to notify Judi regarding their attendance at each meeting. A quorum of 50% is needed for each meeting.

The next meeting will be on March 16, 2011.

**MOTION by** Devon Felsted and seconded by Dick Brown to adjourn. Motion passed.

**3:19 p.m.** – Meeting adjourned

**WHITMAN COUNTY**
**SOLID WASTE ADVISORY COMMITTEE**
**Minutes**
**March 16, 2011**

**MEMBERS:**

**Dave Patterson, Chairman**
**Devon Felsted, Excused**
**Mary Carol Sauve**
**David Tyze**
**Dick Brown, Excused**
**Bill Paul, Unexcused**
**Pete Hertz**
**Rick Finch**
**Shelly Quinton**
**Dan Brown,**
**Nick VanArsdel, Excused**

**Others in audience:** Mark Storey, Whitman County Engineer/Director; Judi Dunn-Gray, Whitman County Recycling Coordinator; Ken Gimpel, Waste Management; Paul Burns, Waste Management; David Nails, Whitman County; Michael Baker, Whitman County Environmental Health; Layne Merritt, JUB; Larry Condon, Barr-Tech; Doug Ensor, JUB; Elinor Huber, Clerk

**1:44 p.m.** - The meeting was called to order by Chairman Dave Patterson. Introductions were held around the room.

**MOTION** by Rick Finch and seconded by Dan Brown to approve the minutes from January 19, 2011. Motion passed.

Dave Patterson announced that Nick VanArsdel and he have renewed their application for the Solid Waste Advisory Committee. Others on the committee whose terms will be up in December of 2011 are Devon Felsted, Mary Carol Sauve, and Shelly Quinton.

Larry Condon, the general manager and co-founder from Barr-Tech gave a power point presentation on his compost facility in Spokane. Barr-Tech processes a regional waste stream in a facility that creates zero-waste of its own.

The Solid Waste Advisory Committee decided to tour the Barr-Tech facility on April 27, 2011. Judi Dunn-Gray will make the arrangements and email everyone the information. She needs a response from as soon as possible so she can arrange transportation.

Judi Dunn-Gray handed out a list of events for March and April. We will be participating in the SEL Inland Northwest Green Fair and sharing a booth with Moscow Recycling on March 25-26.

Earth Day is April 22, 2011, and there are several workshops listed for March and April on the hand-out.

Layne Merritt from J.U.B. Engineers handed out draft copies of the Solid Waste Management Plan.

Doug Ensor from J.U.B. reviewed Chapters 4 and 5 of the Plan on waste reduction and recycling in the future and also disposal options for solid waste. There was discussion regarding those chapters.

It was suggested to use the word "comingled" consistently throughout the document instead of "single stream" since comingled is the industry terminology.

Dave Nails stated it was okay for hard back books to go into the mixed paper. He also stated that in January 2013 lights containing mercury must be recycled and will not be accepted for disposal.

Rick Finch stated that all state agencies are under state mandates to buy recycled content paper.

Doug Ensor thanked the members who contributed information and encouraged them to continue to contact him with suggestions and corrections. All of the changes need to be compiled within a couple of weeks so he can have it ready for the next Solid Waste Advisory Committee meeting.

The next meeting will be May 18, 2011.

**MOTION** by Pete Hertz and seconded by Rick Finch to adjourn. Motion passed.

**3:36 p.m.** – Meeting adjourned.

**WHITMAN COUNTY**
**SOLID WASTE**
**ADVISORY COMMITTEE**
**May 18, 2011**

**MEMBERS:**

**Dave Patterson, Chairman**
**Pete Hertz**
**Shelly Quinton**
**Dan Brown**
**Nick VanArsdel, Unexcused**
**Mary Carol Sauve, Unexcused**
**Devon Felsted**
**Bill Paul**
**David Tysz**
**Rick Finch**
**Dick Brown, Excused**

**Others in audience**: Mark Storey, Whitman County Public Works Director/Engineer; David Nails, Whitman County Landfill; Judi Dunn-Gray, Recycling Coordinator, Layne Merritt, J-U-B Engineering; Doug Ensor, J-U-B Engineering, Elinor Huber, Clerk.

**1:38 p.m.** – Dave Patterson called the meeting to order. Introductions were made around the room.

**MOTION** by Rick Finch and seconded by Dan Brown to approve the minutes from March 16, 2011. Motion passed.

Judi Dunn-Gray reported on the small town recycling. Empire Disposal is working with Whitman County and the rural towns and they will be implementing two roll off dumpsters at Tekoa and possibly St. John.

Judi will present recycling at the Palouse City Council meeting and we will be discussing sites and various places to put containers. We also will have school participation in St. John and they will be allowed to collect paper from the shed. The school will participate in the town's mixed paper and cardboard.

We will also have participation from Tekoa as they are setting up groups to do training for citizens to make sure there is no contamination. It will be a good program and hopefully we can more towns on board.

Doug Ensor from J-U-B reviewed Chapter 5 of the Solid Waste Management Draft. It is very close to being finished and they would like to finish up this month. He encouraged the members to contact him with any changes or suggestions.

Mark Storey thanked Doug Ensor and Layne Merritt from J-U-B for putting this plan together and doing a great job.

Judi Dunn-Gray stated the Solid Waste Advisory Committee will again be sharing a booth at the Palouse Empire Fair with Avista. She will be busy with the Recycled Art booth and needs volunteers to man the booth for September 8-11, 2011. She will send out a sign-up sheet to everyone.

Pete Hertz reported on the Solid Waste Advisory Committee tour to Barr-Tech. They have only been in operation for a few months and it is a very impressive operation. They have

cameras set up and they can see what is happening and can control it anywhere there is a computer.

Mark Storey added that they have modern technology working for them and it might be something that we could try in the future but it isn't cost effective at this time. They have a captive audience for their materials at their large property of 8500 acres. Their tipping fee is $60-65 a ton so you have to add transportation on top of that. On further review it was discovered that the tipping fee is $55.00 a ton. (Due to the many variables Larry Condon from Bar-Tech is willing to work with any town or community on a case by case basis.)

Shelly Quinton from the Town of St. John stated she was excited to get started with recycling for the town.

Bill Paul from the City of Pullman reported that the city council was very pleased with the Pullman Disposal Service in doing an excellent job in cleaning up after the students at the end of the school year. He felt that the education of recycling with the students has helped.

Dan Brown from the Town of Rosalia said he appreciated the email from Judi regarding the check-out of recycling containers. They are hoping to take advantage of the containers with Battle Days coming up in June. It is a good program.

Devon Felsted from Pullman Disposal stated they are going to be delivering roll carts to College Hill to make it look more presentable instead of all the garbage can lids rolling around in the streets.

Dave Patterson from Empire Disposal said this is always a busy time of year and the volume is up at the Transfer Station with the students leaving town. We are hoping that the recycling programs can be a model for the other communities when people realize that it is a successful program.

Pete Hertz from the Town of Palouse stated that he will be at the Palouse City Council meeting to hear Judi speak about the recycling program. He said that the city park was flooded last month so bunch of us went over and helped the city crew clean up the playground.

David Tysz from the City of Tekoa said they have the old County shop building converted over to the recycling center. It is all enclosed and it will hold the 40-yard container. Judi was present at the City Council on Monday and they are excited to get this going right away.

Rick Finch from WSU said they are waiting on the Legislature with state budgets. He expects the waste volume to increase by 5-6% because of an anticipated larger student population next year.

**MOTION** by Pete Hertz and seconded by Devon Felsted to adjourn. Motion passed.

The next meeting is July 20, 2011.

**2:44 p.m. – Meeting adjourned.**

# E. Interlocal Agreements

INTERLOCAL AGREEMENT BETWEEN
THE CITY OF PULLMAN AND WHITMAN COUNTY--
SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the city of Pullman (City) and Whitman County (County), (herein jointly referred to as "the parties"); and,

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and,

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various cities and towns within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the following three planning options:

(1) Prepare and deliver to the county auditor of the county in which it is located its plan for its own solid waste management for integration into the comprehensive County Plan;
(2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or,
(3) Authorize the county to prepare the plan for the city's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the City recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

DATED this _____ day of _____, 2011.

City of Pullman

Mayor Glenn A. Johnson

Attest:

Finance Director William F. Mulholland

Approved as to Form

City Attorney Laura D. McAloon

Whitman County Public Works

Director/County Engineer W. Mark Storey, P.E.

Approved as to Form

Prosecuting Attorney Denis Tracy

# INTERLOCAL AGREEMENT BETWEEN THE TOWN OF GARFIELD AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of Garfield (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 15th day of December, 2010.

Town of Garfield

Mayor

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

City Attorney

Approved as to Form

Denis Tracy
Prosecuting Attorney

DEC 28 2010

# INTERLOCAL AGREEMENT BETWEEN THE TOWN OF OAKESDALE WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of Oakesdale (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 17 day of December, 20 10

Town of Oakesdale

Mayor

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

~~City~~ Attorney
Town

Approved as to Form

Denis Tracy
Prosecuting Attorney

DEC 2 2010

# INTERLOCAL AGREEMENT BETWEEN THE TOWN OF MALDEN AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of Malden (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this ____ day of _____, 20___.

Town of Malden

Mayor

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

City Attorney

Approved as to Form

Denis Tracy
Prosecuting Attorney

# INTERLOCAL AGREEMENT BETWEEN THE TOWN OF FARMINGTON AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of Farmington (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 27th day of December 2010.

Town of Farmington

Mayor

Approved as to Form

City Attorney

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

Denis Tracy
Prosecuting Attorney

# INTERLOCAL AGREEMENT BETWEEN THE TOWN OF ~~ALBION~~ LAMONT AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of ~~Albion~~ Lamont (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 8 day of March, 2011.

Town of ~~Albion~~ Lamont

Richard Buckenmyer
Mayor

Approved as to Form

City Attorney

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

Denis Tracy
Prosecuting Attorney

MAR 1 1 2011

# INTERLOCAL AGREEMENT BETWEEN THE CITY OF COLFAX AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the City of Colfax (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 20th day of Dec, 2010.

City of Colfax

Mayor

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

City Attorney

Approved as to Form

Denis Tracy
Prosecuting Attorney

DEC 2 2010

# INTERLOCAL AGREEMENT BETWEEN THE CITY OF TEKOA AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the City of Tekoa (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 3rd day of January, 2011.

City of Tekoa

Mayor

Approved as to Form

City Attorney

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

Denis Tracy
Prosecuting Attorney

JAN 04 2011

# INTERLOCAL AGREEMENT BETWEEN THE CITY OF PALOUSE AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the City of Palouse (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 28 day of Dec, 2010.

City of Palouse

Mayor

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

City Attorney

Approved as to Form

Denis Tracy
Prosecuting Attorney

# INTERLOCAL AGREEMENT BETWEEN THE TOWN OF ENDICOTT AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of Endicott (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 15 day of DEC., 2010.

Town of Endicott

Mayor

Approved as to Form

City Attorney

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

Denis Tracy
Prosecuting Attorney

# INTERLOCAL AGREEMENT BETWEEN THE TOWN OF COLTON AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of Colton (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 3 day of Jan., 2011.

Town of Colton

Mayor

Approved as to Form

City Attorney N/A

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

Denis Tracy
Prosecuting Attorney

# INTERLOCAL AGREEMENT BETWEEN
# THE TOWN OF ST. JOHN
# WHITMAN COUNTY
# SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of St. John (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 10 day of Jan., 2011.

Town of St. John

K. B. Crowley

Mayor

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

City Attorney

Approved as to Form

Denis Tracy
Prosecuting Attorney

# INTERLOCAL AGREEMENT BETWEEN
# THE TOWN OF ROSALIA
# WHITMAN COUNTY
# SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of Rosalia (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 28 day of DEC, 2010.

Town of Rosalia

Mayor

Approved as to Form

City Attorney

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

Denis Tracy
Prosecuting Attorney

# INTERLOCAL AGREEMENT BETWEEN THE TOWN OF LACROSSE AND WHITMAN COUNTY SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of LaCrosse (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 5 day of Jan, 20 11.

Town of LaCrosse

Larry Burgess
Mayor

Approved as to Form

City Attorney

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

Denis Tracy
Prosecuting Attorney

# INTERLOCAL AGREEMENT BETWEEN
# THE TOWN OF UNIONTOWN
# WHITMAN COUNTY
# SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of Uniontown (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 18 day of Jan. 2011.

Town of Uniontown

Mayor

Approved as to Form

City Attorney

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

Denis Tracy
Prosecuting Attorney

# INTERLOCAL AGREEMENT BETWEEN
# THE TOWN OF ALBION
# WHITMAN COUNTY
# SOLID WASTE MANAGEMENT PLAN (2010/2011 UPDATE)

THIS AGREEMENT is made and entered into by and between the Town of Albion (Town) and Whitman County (County), (herein jointly referred to as "the parties"); and

WHEREAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010/2011 update to the Whitman County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provision of RCW 70.95.080, each county within the state, with various towns located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the town's solid waste management for inclusion in the comprehensive County Plan.

THEREFORE, the town recognizes the County as the lead agency responsible for completing the plan with input from the Solid Waste Advisory Committee and select city representatives, and the parties agree to have the County prepare the plan pursuant to RCW 70.95.080 (2).

Dated this 7 day of June, 2011.

Town of Albion

Mayor

Approved as to Form

City Attorney

Whitman County Public Works

W. Mark Storey, P.E.
Director/County Engineer

Approved as to Form

Denis Tracy
Prosecuting Attorney