CITY OF LIBERTY LAKE
SPOKANE COUNTY, WASHINGTON
ORDINANCE NO. 215

AN ORDINANCE OF THE CITY OF LIBERTY LAKE, WASHINGTON ADOPTING A SOLID WASTE MANAGEMENT PLAN

WHEREAS, RCW 70.95.020 provides for adequate planning for solid waste handling by local government; and

WHEREAS, the City of Liberty Lake is exercising its authority to develop and implement a Solid Waste Management Plan ("Plan") independent of Spokane County's comprehensive solid waste management plan; and

WHEREAS, the City of Liberty Lake's Plan is consistent with Spokane County's solid waste management plan; and

WHEREAS, the City of Liberty Lake's Plan meets the planning criteria outlined in RCW 70.95.080; and

WHEREAS, RCW 70.95.110 requires each city to review and revise, if necessary, the comprehensive solid waste management plan at least once every five (5) years; and

WHEREAS, an extensive public participation program was followed and all publication requirements were met and accomplished; and

WHEREAS, a Determination of Nonsignficance (DNS) was issued; and

WHEREAS, the development of the Plan will contribute to the health and safety of all City of Liberty Lake residents;

NOW, THEREFORE, the City Council of the City of Liberty Lake, Washington, do ordain as follows:

Section 1. Adopt the Solid Waste Management Plan. The City of Liberty Lake Solid Waste Management Plan attached hereto is hereby adopted.

Section 2. Severability. If any section, sentence, clause or phrase of this Ordinance shall be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this Ordinance.

Section 3. Effective Date. This Ordinance shall be in full force and effect five (5) days after publication of this Ordinance or a summary thereof in the official newspaper of the City as provided by law.

PASSED by the City Council this 16th day of December, 2014.

Mayor, Steve Peterson

ATTEST:

City Clerk, Ann Swenson

APPROVED AS TO FORM:

City Attorney, Sean P. Boutz

* *

CERTIFICATION

I, Ann Swenson, the undersigned City Clerk of the City of Liberty Lake, of Spokane County, Washington, HEREBY CERTIFY that the foregoing Ordinance is a full, true, and correct copy of Ordinance No. 215 duly adopted at a regular meeting of the City Council of said City, duly and regularly held at the regular meeting place thereof on December 16, 2014 of which meeting all members of said City Council had due notice and at which a majority thereof were present; and that at said meeting said Ordinance was adopted by the following vote: Unanimous.

AYES, and in favor thereof: Mayor Pro Tem Kaminskas, Council Members Brickner, Langford, Moore, Severs, Dunne, and Kopelson.

NAYS: None.

ABSENT: None.

ABSTAINED: None.

CITY OF LIBERTY LAKE

Ann Swenson

CITY CLERK

LIBERTY LAKE

SOLID WASTE MANAGEMENT PLAN

NOVEMBER 2014

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GREEN SOLUTIONS

ENVIRONMENTAL CONSULTING

LIBERTY LAKE

SOLID WASTE MANAGEMENT PLAN

NOVEMBER 2014

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INTRODUCTION

The *Liberty Lake Solid Waste Management Plan* (the "Plan") is intended to provide guidance for the solid waste system in the City of Liberty Lake. The solid waste system includes garbage collection and disposal, and programs for waste reduction, recycling, organics, special wastes and the administration of these programs. This Plan is intended to provide guidance on program development and implementation for these activities for the next ten years, while also attempting to anticipate the needs of the solid waste system 20 years from now.

State law (Chapter 70.95 RCW) provides the authority for the City to adopt this Plan and also lists the requirements for the contents of the Plan. In preparing this Plan, the City is exercising its authority to "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" (RCW 70.95.080).

OVERVIEW OF RECOMMENDATIONS

The most significant recommendations in this Plan deal with the new programs and activities that will be necessary for the City of Liberty Lake to create an independent solid waste system. New programs and activities include:

- An annual bulky waste cleanup event
- Grant applications to fund recycling education
- Evaluation of all City facilities and open space to reduce solid waste while increasing recycling and composting practices
- Promotion of composting at all community gardens

Prior to creating this plan, Liberty Lake was part of the Spokane Regional Solid Waste System. On September 16th, 2014, City Council approved a contract with Waste Management of Washington, Inc. to provide Residential Solid Waste Collection and Disposal Services. The term of that contract is ten years, with an option to extend up to an additional six years. This contract commenced on November 17, 2014, at which time Waste Management's G-237 Certificate was no longer applicable in the City of Liberty Lake.

All of the recommendations made in this Plan are listed below and are also summarized in Table E-1. The recommendations are not listed in any particular order within each group (for instance, the three high-priority recommendations shown for waste reduction are not listed in any order, such as schedule or cost, within that group).

WASTE REDUCTION RECOMMENDATIONS

The following recommendations are being made for waste reduction programs (see Chapter 3 of the Plan for more details):

High-Priority Recommendations

WR1) The City of Liberty Lake will develop a five-year work plan to annually monitor waste reduction alternatives and implement priorities. The work plan will leverage other programs, collaborate with other agencies, and participate in regional programs to ensure Liberty Lake is partnering for efficient and best management practices of industry standards.

WR2) The City of Liberty Lake will evaluate product stewardship programs as these are proposed on a statewide or national level, and support those if appropriate to the interests of their citizens and the business community.

WR3) The business community in Liberty Lake may be encouraged to reduce waste through a recognition program that publicizes success stories.

WR4) The City of Liberty Lake will adopt policies and practices to encourage City departments to reduce waste.

Medium-Priority Recommendations

WR5) Public education materials distributed by the City of Liberty Lake will include information on alternative handling methods for yard waste, the value of "smart shopping" methods, how to avoid wasting food, and the availability of volume-based garbage collection fees.

WR6) The City of Liberty Lake will continue to promote the citywide garage sale as a community event.

RECYCLING AND ORGANICS RECOMMENDATIONS

The following recommendations are being made for recycling and organics collection programs (see Chapter 4 for more details):

High-Priority Recommendations

R1) City residents and businesses will be encouraged to use the designated transfer station for yard waste and organics ("Clean Green") drop-off services.

R2) The City will evaluate the best approaches for increased diversion of yard and food waste in the future, if necessary.

SOLID WASTE COLLECTION RECOMMENDATIONS

The following recommendations are being made for waste collection programs (see Chapter 5 for more details):

Medium-Priority Recommendations

C1) Educate the public on the benefits and options of curbside collection services.

C2) The need for mandatory garbage collection services may be evaluated in the future.

TRANSFER AND DISPOSAL RECOMMENDATIONS

Pursuant to the City's agreement with Waste Management, the following recommendation is being made for transfer and disposal programs (see Chapter 6 for more details):

High-Priority Recommendations

D1) The Sunshine Transfer Station has been designated as the disposal system for all solid waste from Liberty Lake, effective November 17, 2014.

SPECIAL WASTE RECOMMENDATIONS

The following recommendations are being made for special waste programs (see Chapter 7 for more details):

High-Priority Recommendations

SW1) Proper disposal options for residential sharps (syringes) will be promoted through a cooperative effort between the City of Liberty Lake, the Spokane Regional Health District ("Health District"), and the waste collectors.

SW2) Green building practices will be promoted by distributing brochures and publicizing other sources of information.

ADMINISTRATION RECOMMENDATIONS

The following recommendations are being made for administration programs (see Chapter 8 for more details):

High-Priority Recommendations

A1) The City will provide a solid waste system that is in compliance with applicable laws and regulations, and that is responsive to the needs of City residents and businesses. A part-time staff person may be hired to help ensure the solid waste system is implemented properly.

A2) The City will enact a covered-load law by adopting an Ordinance in 2015.

Medium-Priority Recommendations

A3) The additional expenses incurred to implement the City's solid waste system will be funded by a surcharge on waste collection fees and grant funds.

IMPLEMENTATION DETAILS FOR THE RECOMMENDATIONS

Table E-1 shows a summary of the recommendations, including the following information:

- **Lead agency (or company)**: each recommendation requires a lead agency or company to ensure that it is implemented in a timely fashion. The City of Liberty Lake is the lead agency for most of the recommendations, but in some cases this responsibility is shared with other parties.
- **Priority**: the level of priority is shown for each recommendation in case limited resources should prevent the implementation of all of the recommendations in the future.
- **Cost**: cost information is shown where available, and the cost figures shown are only the costs to the City. In some cases, there may be additional costs to others in terms of user fees and other expenses. For many of the recommendations, the primary expense is staff time, which in some cases also includes existing expenses for newsletters and other materials.

- **Funding sources**: the proposed source(s) of the funds to pay for recommended activities is shown in the last column of Table E-1. The funding source for several of the recommendations is shown as "Fee/CPG," which is an abbreviated way of saying that the funds would come from the administrative fee paid by Waste Management to the City, and/or Coordinated Prevention Grant ("CPG") funds when those become available to the City in mid-2015.

Additional details for most of the recommendations can be found in the appropriate chapters of this Plan. The recommendations are numbered according to the chapter where they are discussed for easier cross-referencing to other parts of the Plan. Recommendation #WR1, for instance, is the first recommendation shown in the Waste Reduction chapter (Chapter 3). Note that many of the recommendations are shown in an abbreviated form in Table E-1 due to space constraints.

Table E-1
Implementation Summary for Recommendations

Recommended Activity	Lead Agency	Priority	Annual Cost	Funding Source
Chapter 3, Waste Reduction				
WR1) Develop a five-year work plan to annually monitor waste reduction alternatives and implement priorities.	City	High	Staff Time	NA
WR2) Support product stewardship programs as appropriate	City	High	Staff time	NA
WR3) Business waste reduction recognition program	City	High	$15K	Fee/CPG
WR4) Adopt city waste reduction policies	City	High	Staff time	NA
WR5) Promote waste reduction and other programs	City, Waste Management	Medium	$25 to $50K*	Fee /CPG
WR6) Promote citywide garage sale as a community event	City	Medium	Staff time**	Fee /CPG
Chapter 4, Recycling and Organics				
R1) Encourage use of Sunshine Transfer Station for Clean Green	City	High	Staff time**	Fee /CPG
R2) Evaluate yard and food waste diversion	City	Medium	Staff time	NA
Chapter 5, Solid Waste Collection				
C1) Educate public about benefits of waste collection services	City, Waste Management	Medium	Staff time**	NA
C2) Evaluate need for mandatory collection at later date	City	Medium	Staff time	NA
Chapter 6, Transfer and Disposal				
D1) Designate Sunshine Transfer Station as the disposal site for all waste from Liberty Lake	City	High	NA	NA
Chapter 7, Special Wastes				
SW1) Promote proper disposal of residential sharps	Health District	High	$10-$20K	NA
SW2) Promote green building	City	High	$5K	Fee /CPG
Chapter 8, Administration				
A1) Manage solid waste system	City	High	Staff time	NA
A2) Enact a covered-load law by adopting an Ordinance in 2015	City	High	Staff Time	NA
A3) Fees and grants for funding sources	City	Medium	Staff time	NA

Notes: NA = Not Applicable.
*The cost shown for Recommendation WR4 also includes public education for other programs.
** Includes expenses for public education, the cost of which are included in the cost shown to Recommendation WR4.

CHAPTER 1
INTRODUCTION

1.1. PURPOSE

This Plan is intended to guide the solid waste system in the City of Liberty Lake. The City's solid waste system (the "City's System") includes garbage collection and disposal, as well as programs for waste reduction, recycling, organics, special wastes, and for the administration of these programs. This Plan is intended to guide the implementation of the City's System for the next ten years, while also attempting to anticipate the needs of the City's System for the next 20 years.

1.2. PLANNING AREA

This Plan primarily addresses programs and activities for the incorporated area of the City of Liberty Lake, although a few of the activities extend beyond City limits. There are no known Tribal properties in the City, and there are no large federally-owned properties that could potentially choose to manage their solid waste separately from the City's System. Figure 5-1 shows a map of Liberty Lake.

1.3. PLANNING AUTHORITY

State law (Chapter 70.95 RCW) provides the authority for the City to develop and implement this Plan. In preparing this Plan, the City is exercising its authority to "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" (RCW 70.95.080(3)(a)).

1.4. REQUIRED PLAN ELEMENTS

RCW 70.95.090 establishes requirements for solid waste management plans. These requirements include the following elements:

- An inventory and description of existing solid waste handling facilities including any deficiencies in meeting current needs.
- The projected 20-year needs for solid waste handling facilities.
- A program for the development of solid waste handling facilities that meets all laws and regulations, takes into account comprehensive land use plans, contains a six-

year construction and capital acquisition program, and contains a plan for financing the capital costs and operational expenses of the proposed solid waste system.

- A program for surveillance and control (to avoid or mitigate the negative impacts of improper waste handling).
- An inventory and description of solid waste collection operations, including the identification of collection franchise holders, municipal operations, population densities by service area, and the projected waste collection needs for six years.
- A comprehensive waste reduction and recycling element that provides programs to reduce the amount of wastes generated, provides mechanisms and incentives for source separation, and establishes recycling opportunities.
- A review of potential areas that meet the criteria for land disposal facilities (RCW 70.95.165).

1.5. PLANNING GOALS

Vision and Mission Statements

The City's vision statement and mission statement provide the context for this Plan:

Community Vision Statement: The Liberty Lake community will maintain an environment that preserves and enhances natural surroundings through the harmony of planned architectural design and green space. Our community will achieve its quality of life by creating a safe, friendly environment in which community involvement promotes recreational opportunities and civic pride. Liberty Lake encourages and supports leading-edge technology and a progressive business environment, which ensures a diverse, prosperous and financially secure community.

Mission Statement: Provide services with integrity by developing a partnership with residents and businesses, which focuses on quality of life, environment, and economic vitality.

Planning Goals

The overall goal of this Plan is to develop and maintain a solid waste management system that protects public health and the environment in a cost-effective manner. The specific goals of this Plan are to:

- Ensure convenient and reliable services for managing solid waste.
- Promote the use of innovative and economical waste handling methods.
- Encourage public-private partnerships where possible.
- Emphasize waste reduction as a fundamental management strategy.

- Encourage the recovery of marketable resources from solid waste.
- Assist the State in maintaining its goal of a 50 percent recycling rate.
- Ensure compliance with state and local solid waste regulations.
- Provide customers information and education to promote recommended waste management practices.
- Support the State's Beyond Waste goals, especially for the five key initiatives: increased diversion of organic materials; increased use of green building methods; improved management of small-volume hazardous wastes; improved management of industrial wastes; and measuring progress.

1.6. SOLID WASTE PLANNING HISTORY

The City of Liberty Lake was incorporated on August 31, 2001. Since that time, the City has participated in the Spokane County solid waste plan through an Interlocal Agreement effective September 24, 2003 through November 16, 2014. Since 2001, the City has participated in planning efforts through membership on the Spokane County Solid Waste Advisory Committee ("SWAC") and the Spokane Regional Solid Waste Liaison Board. Both of these groups were instrumental in the review and adoption of the *Spokane County 2009 Comprehensive Solid Waste Management Plan*.

1.7. RELATIONSHIP TO OTHER PLANS

This Plan is designed to be consistent with a number of other plans. The most significant of these plans are described below.

Spokane County Solid Waste Management Plan

To date, the City of Liberty Lake has participated in the development of the *Spokane County 2009 Comprehensive Solid Waste Management Plan* and has implemented programs consistent with that plan. Hence, the City is starting this planning process from a point that is consistent with the Spokane County plan. While future programs in the City may diverge from the County programs, the use of regional service providers and facilities will help ensure consistency for most programs.

Washington State Solid Waste Management Plan

In 2004, the Washington State Department of Ecology ("Ecology") prepared a statewide solid waste management plan, commonly referred to as the "Beyond Waste Plan." The Beyond Waste Plan adopted a vision that states that society can transition to a point where waste is viewed as inefficient and most wastes have been eliminated. This transition is expected to take 20 to 30 years or more. In the short term, the Beyond

Waste Plan recommends actions that can be undertaken to achieve specific goals in five areas:

- Increased diversion of organic materials;
- Increased use of green building methods;
- Improved management of small-volume hazardous wastes;
- Improved management of industrial wastes; and
- Measuring progress.

The Beyond Waste Plan was updated in 2009 to refine the goals and recommendations of the 2004 plan. The 2009 update also addressed additional solid and hazardous waste issues. The Beyond Waste Plan is discussed in greater detail in several sections of this Plan as appropriate to the topics in each chapter.

City Comprehensive Plan

The *Liberty Lake Comprehensive Plan* ("LLCP") provides a 20-year vision for the future of Liberty Lake. The LLCP was adopted September 16, 2003, and revisions to the LLCP are considered annually. The LLCP provides a significant amount of detail for policies and programs for related topics (land use, transportation, utilities, etc.), and as such it should be considered to have precedence over this Plan in those matters. Programs proposed in this Plan, especially those that might impact capital facilities, land use, and transportation, will be checked against the LLCP to ensure consistency. The City will be updating its LLCP in 2015 and 2016 for adoption in March 2017. The LLCP update will include Solid Waste Services and Programs and will be reviewed for consistency.

1.8. PUBLIC PARTICIPATION IN THE PLANNING PROCESS

The City conducted a public input process for the review of this Plan that provided a number of opportunities for public comment. The Plan was discussed at a City Council meeting in November 2014 and an opportunity for public comment was allowed at that meeting. In addition, a digital copy of the Plan was placed on the City's website and hard copies were placed at the City Clerk's office and at the Liberty Lake Municipal Library. Notices were published to inform City residents and businesses as to the availability of the draft Plan and the process for providing comments. The public also had an opportunity to comment on this Plan through the SEPA review process.

The City used its standard adoption process for the final Plan. This process included three steps: an informational memo to the City Council, an administrative report , and a formal meeting where the Plan was adopted. The City provided additional opportunity for public comment prior to adoption of the Plan by City Council in December, 2014.

CHAPTER 2
BACKGROUND OF THE PLANNING AREA

2.1. INTRODUCTION

This chapter of the Plan provides basic information that is used in later chapters, including information on demographics, economic factors, and the amount and composition of waste generated in the City. It also discusses the criteria for siting disposal facilities (such as a landfill or incinerator) in the City.

2.2. DEMOGRAPHICS

Total Population

The population of Liberty Lake has increased steadily since the City's incorporation in 2001 (see Table 2-1).

Table 2-1
Population of Liberty Lake

Year	Total Population	Annual Increase
2002	4,480	
2003	4,640	3.6%
2004	4,950	6.7%
2005	5,255	6.2%
2006	5,805	10.5%
2007	6,580	13.4%
2008	6,980	6.1%
2009	7,270	4.2%
2010	7,591	4.4%
2011	7,705	1.5%
2012	7,900	2.5%
2013	8,190	3.7%
2014	8,675	5.9%
Projected Figures		
2015	8,987	3.6%
2020	10,726	3.6%
2025	12,800	3.6%
2030	15,277	3.6%

Source: Data for 2002-2014 is from the Washington Office of Financial Management (OFM). Figures for 2015 through 2030 are based on the average growth rate (3.6%) for the previous five years (2010-2014). The projections will be modified at the time the City of Liberty Lake updates its Comprehensive Plan.

The City is a planned community and has no anticipation of future annexations that will affect the population projections in Table 2-1.

Housing

Based on the most recent estimates from the Washington Office of Financial Management (OFM), in 2014 the 8,675 people living in Liberty Lake occupied an estimated 3,837 housing units, including 2,448 single-family homes, 1,256 units in duplexes and larger buildings, and 133 mobile homes and special units.

2.3. ECONOMY

The City of Liberty Lake has a stable business environment and recognizes the importance of businesses in providing a strong local economy. Tables 2-2 and 2-3 show basic information about businesses in Liberty Lake. For Table 2-3, this information is organized according to Standard Industrial Classification ("SIC") codes, which is a federal system of organizing businesses by type of activity.

Table 2-2
Size of Businesses in Liberty Lake (2013)

Business Size	Number of Businesses	Percentage
1-4 Employees	171	56.3%
5-9 Employees	56	18.4%
10-19 Employees	39	12.8%
20-49 Employees	22	7.2%
50-99 Employees	8	2.6%
100-249 Employees	5	1.6%
250-499 Employees	3	1.0%
500-999 Employees	1	0.3%
1,000+ Employees	0	0.0%
Total	305	

Source: Data is from the Spokane Regional Site Selector and is for 2013.

Table 2-3
Types of Businesses in Liberty Lake (2013)

Business Type	Number of Employees	Percentage
Agricultural, Forestry and Fishing (SIC 1-9)	29	0.7%
Mining (SIC 10-14)	0	0.0%
Construction (SIC 15-17)	691	15.7%
Manufacturing (SIC 20-39)	518	11.7%
Transportation and Communications (SIC 40-49)	52	1.2%
Wholesale Trade (SIC 50-51)	62	1.4%
Retail Trade (SIC 52-59)	1,443	32.7%
Finance, Insurance, and Real Estate (SIC 60-69)	519	11.8%
Services (SIC 70-89)	965	21.9%
Public Administration (SIC 90-98)	117	2.7%
Unclassified (SIC 99)	24	0.5%
Total	4,420	

Source: Data is from the Spokane Regional Site Selector and is for 2013.
SIC = Standard Industrial Classification.

2.4. CRITERIA FOR SITING DISPOSAL FACILITIES IN THE PLANNING AREA

The minimum required contents for a solid waste management plan include "a review of potential areas that meet the criteria for land disposal facilities" (RCW 70.95.090). These criteria are listed in a different section of State law, RCW 70.95.165, which refers to solid waste disposal facility siting, and include:

(a) Geology
(b) Groundwater
(c) Soil
(d) Flooding
(e) Surface water
(f) Slope
(g) Cover material
(h) Capacity
(i) Climatic factors
(j) Land use
(k) Toxic air emissions
(l) Other factors determined by Ecology

Reviewing the siting factors in a solid waste management plan being prepared for a county, which would have a larger land area and potential landfill sites located away from urban areas, is more meaningful than addressing these criteria in this Plan. The area addressed by this Plan consists of only 5.52 square miles and has a population density of 1,572 people per square mile, making it highly unlikely that a solid waste disposal facility would be sited in the area. In addition, one of the standards adopted by Ecology prohibits the siting of MSW or limited purpose landfills over federally-designated sole source aquifers. The City of Liberty Lake is located over the Liberty

Lake-Rathdrum Aquifer, which has been designated as a sole source aquifer. Hence, no new or expanded MSW or limited purpose landfills may be sited in Liberty Lake.

Other types of land disposal facilities, such as land application sites, piles, and surface impoundments, might be possible in the planning area, but the specific factors that affect the siting of these types of facilities vary widely and will need to be reviewed at the time a specific proposal is considered.

2.5. CURRENT WASTE GENERATION

The current amount of waste generated in the City of Liberty Lake is estimated at 4,122 tons per year. This estimate includes residential and commercial waste quantities collected by the two waste collection companies currently active in the City, but does not include the amounts "self-hauled"[1] by residents and businesses to a transfer station. There is no data specific to Liberty Lake for the composition of this waste or for the amounts of recyclable and compostable materials that are collected from the City, but the following sections describe the best available information for these.

Composition of Liberty Lake's Solid Waste

Table 2-4 shows the estimated composition of the solid wastes disposed from Liberty Lake. These figures are provided for planning purposes and are based on data developed for a 12-county area in eastern Washington State. These figures can be used together with the waste disposal estimate of 4,122 tons per year to provide estimates for the amounts of specific materials disposed annually (as shown in the last column of Table 2-4).

Amount of Recyclable Materials Collected from Liberty Lake

Ecology conducts an annual survey of the amount of materials collected for recycling and composting in Washington State. This survey includes amounts collected through curbside recycling programs and also commercial and special collections for a wide variety of materials. Ecology can provide this data for each county, but the data is not available on a city-by-city basis. Prorating the data for Spokane County appears to be the best available source of data on how much recycling is currently conducted in Liberty Lake.

Since 1999, Ecology has also collected data on the amount of "diverted" materials, which are materials that are diverted from disposal to beneficial uses that are not defined as recycling. Examples of diverted materials include asphalt and concrete that

[1] "Self-haul" is the term used for the practice of a waste generator (the person or company that created the waste) to haul their own waste to a transfer station or other disposal facility. This is a common practice for construction contractors, for instance.

Table 2-4
Estimated Composition of Solid Waste Disposed in Liberty Lake

Materials		Percent of Total (by weight)	Amount Disposed (tons per year)
Paper	Newspaper	1.8	74
	Cardboard	4.7	194
	Other Recyclable Paper	9.5	392
	Compostable Paper	4.4	181
	Remainder/Composite	1.5	62
	Total Paper	21.9	903
Plastics	PET Bottles	0.8	33
	HDPE Bottles	1.0	41
	Other Plastic Pkg.	1.9	78
	Film and Bags	4.2	173
	Other Products	1.3	54
	Remainder/Composite	1.4	58
	Total Plastics	10.7	441
Glass	Clear Glass Containers	0.8	33
	Green Glass Containers	0.4	17
	Brown Glass Containers	0.6	25
	Stoneware, Ceramics	0.2	8
	Remainder/Composite	0.3	12
	Total Glass	2.3	95
Metals	Aluminum Cans	0.4	17
	Tin Cans	0.7	29
	Other Non-Ferrous Metals	0.5	21
	Other Ferrous Metals	2.6	107
	Mixed Metal & Other	2.7	111
	Total Ferrous Metals	6.9	284
Organics	Food	10.8	445
	Yard Wastes	9.8	404
	Manures	2.8	115
	Other Organics	2.4	99
	Total Organics	25.8	1,064
Consumer Products	Textiles	2.0	82
	Furniture, Mattresses	2.7	111
	All Other	2.1	87
	Total Consumer Products	6.8	280
Other	Wood	9.0	371
	Construction	11.3	466
	Hazardous/Special Wastes	3.7	153
	Residues	1.5	62
	Total Other	25.5	1,051
Totals		100.0%	4,122

Source: *2009 Washington Statewide Waste Characterization Study*, Ecology 2010. Percentage figures are for the Eastern region (as defined by that study), which includes Spokane and 11 other counties. Figures may not add up exactly due to rounding.

are recycled (these materials are not included in the definition of recycling) and wood waste burned for energy (incineration is also not defined as recycling).

Table 2-5 shows the most recent recycling data for Spokane County (2012) and prorated figures for Liberty Lake based on the City's share of the County's population (1.7% in 2012). Table 2-5 uses a prorated share (4,853 tons) of the County's solid waste amount instead of the 4,122 tons discussed earlier in this section in order to provide a consistent analysis here. This figure is often called "MSW" (municipal solid waste), which does not include some types of industrial and other wastes. Construction and demolition ("C&D") wastes are also not generally included in MSW, although some amount of this is actually included in the MSW figures (to the extent that these materials are being handled as part of the regular waste stream and not being disposed at special facilities such as inert waste or limited purpose landfills). Industrial and C&D wastes are the primary sources of the amounts shown as "non-MSW disposed" in Table 2-5.

As indicated in Table 2-5, the amount of waste "generated" includes both the waste disposed plus the amount recycled or diverted. Figures are provided in Table 2-5 for both MSW and also for the broader waste stream that includes non-MSW materials. The last two rows of Table 2-5 show per capita figures for recycling, disposal and waste generation. These figures are expressed in terms of pounds per person per day.

Table 2-5
Recycled and Diverted Materials (2012)

	Spokane County	Liberty Lake
Recycled Amount	352,913	5,858
MSW Disposed	292,337	4,853
Total MSW Generated	645,250	10,711
Recycling Rate	54.7%	54.7%
Diverted Amount (Non-MSW)	231,863	3,849
Non-MSW Disposed	147,711	2,452
Total Non-MSW Generated	379,573	6,301
Recycling Rate, Non-MSW Only	61.1%	61.1%
All Recycling and Diversion	584,776	9,707
All Wastes (MSW and Non-MSW)	440,048	7,305
Total Generation, All Wastes	1,024,823	17,012
Diversion Rate	57.1%	57.1%
Pounds per Capita (MSW Only)		
Recycled	4.07	4.07
Disposed	3.37	3.37
Generated	7.43	7.43

Source: Data for Spokane County is from the Spokane Regional Solid Waste System webpage. Figures for the City of Liberty Lake are prorated from County data based on City's 1.7% of population in 2012.

Municipal Solid Waste Planning Projections

Table 2-6 shows figures for the amount of solid waste projected to be recycled, disposed and generated in Liberty Lake for the next 20 years. These figures do not include the diverted and disposed amounts of non-MSW wastes. These figures were derived using the per capita figures shown in Table 2-5 and the population projections shown in Table 2-1. In other words, these projections assume that the recycling rate and disposal rates will remain constant over the next 20 years (which is an unlikely scenario). It should also be noted that recycled and disposed quantities vary throughout the year. The lowest amounts of recycling and waste disposal generally occur in the winter months (but typically with a spike in waste quantities after Christmas), and the greatest amounts often occur in the spring and fall. Recent data for the Valley Transfer Station (2012) shows the greatest amounts of solid waste were received in May and August, and the greatest amounts of Clean Green were received in May and November.

Table 2-6
Projected Solid Waste and Recycling Quantities for Liberty Lake

	2012	2020	2030
Population	7,900	10,726	15,277
Recycled Amounts, tons/year	5,862	7,959	11,336
Disposed Amounts, tons/year	4,856	6,593	9,390
Total Waste Generated, tons/year	10,718	14,552	20,726

Source: Based on the per capita figures shown in Table 2-5 and population figures shown in Table 2-1.

A review of the current programs operating in Liberty Lake concluded that they are fully capable of handling current disposed and recycled quantities, and that these programs will be able to continue handling future quantities (for the next 20 years) as well.

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CHAPTER 3

WASTE REDUCTION

3.1. EXISTING WASTE REDUCTION ACTIVITIES

Waste reduction refers to any action that avoids the generation of waste or reduces the toxicity of waste before it reaches the waste stream. Washington State law designates waste reduction as the highest priority waste management strategy. Examples of waste reduction methods include:

- Reduce materials used in product manufacturing.
- Increase the useful life of a product through durability and reparability.
- Decrease the toxicity of products.
- Reuse a product.
- Reduce consumer use of materials and products.

Existing waste reduction activities in Liberty Lake include public education, participation in regional programs, volume-based garbage fees, spring and fall clean green/leaf pickup, and backyard composting. These program elements are discussed below.

Public Education

To date, the City has distributed brochures developed by the Spokane Regional Solid Waste System (the "Regional System"). These brochures address waste reduction, reuse, mulching, composting, and household hazardous waste.

Other Regional Programs

The City has participated in regional programs to encourage waste reduction. These programs have included school and youth education, public education, coalitions with other entities, business and institution education, and home composting. More information about these programs can be found in the *Spokane County 2009 Comprehensive Solid Waste Management Plan*.

Volume-Based Garbage Collection Fees

Volume-based collection fees provide important feedback to residents and businesses and help educate them to the idea that there is a cost associated with the amount of waste they produce. In Liberty Lake, garbage collection costs vary according to the size of the container and frequency of collection for both residential and commercial customers. For residential customers, current garbage collection charges range from $7.89 per month for a 35-gallon cart emptied monthly to $29.14 for a 96-gallon cart emptied weekly (for carts provided by the waste hauler, Waste Management). Waste

Management's website points out the potential for cost savings and provides tips for reducing the amount of garbage.

Private and Personal Reuse Efforts

The reuse and other waste reduction efforts conducted by residents, businesses and non-profit groups in Liberty Lake should not be overlooked. Although many of these are individual efforts that only deal with a small amount of products, altogether these activities provide a huge benefit to the local economy and avoid additional waste generation. Examples of these activities include garage sales, donations to charitable and for-profit organizations, the use of Craigslist and eBay, collection and reuse of building materials by Habitat for Humanity, and many other related activities. In Liberty Lake, these efforts are aided by the annual citywide garage sale event.

Backyard Composting

Backyard composting is addressed here (instead of in the next chapter) because it is considered a waste reduction method. The City has promoted backyard composting through local public education efforts and also through regional efforts. The City of Liberty Lake will also be promoting backyard composting at community gardens.

City Code

The Liberty Lake City Code does not specifically encourage or discourage waste reduction activities, but does provide a mechanism for controlling potential problems that could result from junk vehicles. The City Code requires that these be stored indoors or covered, or that good-faith efforts to restore a vehicle are evident.

3.2. WASTE REDUCTION PLANNING ISSUES

Waste reduction is the highest priority waste management strategy because it conserves resources, reduces waste management costs, and minimizes pollution. Waste reduction programs can be the most difficult to implement, however, because these programs may require changes in production methods and consumption patterns, and are influenced by national/global economies and other factors that are typically beyond the control of local government. Specific waste reduction issues are discussed below.

Food Waste

Food waste is one of the largest components of the waste stream (see Table 2-4) and as such deserves attention as to the waste reduction possibilities for it. At the same time, there is increasing national awareness as to the amount of edible food that is going to waste. According to a recent report by the Natural Resources Defense Council,[2] 40% of

[2] From "Wasted: How America is Losing up to 40 Percent of its Food from Farm to Fork to Landfill," by Dana Gunders, staff scientist with the Natural Resources Defense Council, August 2012.

edible food is wasted as it travels from farms to kitchen tables. According to the USDA, a family of four could save $2,275 per year by making simple changes in the way they handle food purchases and storage.

Implementation Difficulty

Despite its high priority, waste reduction is a difficult topic for municipalities to address because it often requires changing people's behavior or business practices, through either additional public education efforts or mandatory requirements. The City must remain sensitive to the needs of local businesses, so product bans and other mandatory measures must be evaluated carefully.

Measuring and Evaluating Waste Reduction Activities

Measuring waste reduction is also difficult because the amount of waste generated in a specific area fluctuates with many variables, including economic conditions, seasonal changes and local weather. Hence, it can be difficult to demonstrate the cost-effectiveness or productivity of specific waste reduction techniques.

3.3. ALTERNATIVE WASTE REDUCTION STRATEGIES

Many of the potential waste reduction methods, especially those regarding reductions in the degree of toxicity of specific products and waste reduction for manufacturing in general, are beyond the scope of what a single city can accomplish. Many of these are also beyond the scope of what a county or even a state can accomplish, but instead require action on a federal or international level. Perhaps the one exception to this principle is the idea of banning specific products, which can be done on a city or county level in order to force the use of a different product that has better waste reduction potential.

The following alternatives were considered for new or expanded waste reduction activities. The listing of an alternative in this section does not mean that it is considered feasible or desirable, nor that is recommended (see Section 3.5 for waste reduction recommendations).

Alternative A – Develop a Five-Year Work Plan to Monitor Waste Reduction
The City of Liberty Lake will develop a five-year work plan to annually monitor waste reduction alternatives and implement priorities. The work plan will leverage other programs, collaborate with other agencies, and participate in regional programs to ensure Liberty Lake is partnering for efficient and best management practices of industry standards.

Alternative B – Support New Product Stewardship Programs

Product stewardship is a concept designed to alleviate the burden of end-of-life product management on local governments. Product stewardship programs typically address a specific type of product and provide an alternative collection or disposal system. One of the principles that this approach is based on is that the manufacturers of a product should bear the cost of collecting and recycling (or disposing of) that product, and that this will create an incentive for them to reduce the weight and/or toxicity of their products. Retailers, if they are involved in a program, would have an incentive to carry products that are easier (and so less expensive) to collect and recycle.

Developing new product stewardship programs is beyond the scope of a city, but Liberty Lake could participate in such programs developed by others. Any new product stewardship proposals at the county, state or federal levels could be evaluated and supported as appropriate to the City's interests. The cost for implementing this alternative would primarily be a small amount of staff time.

Alternative C – Ban Specific Products or Materials

The City could consider banning specific products that are difficult to recycle and/or causing problems such as litter. Examples of such bans include single-use plastic bags and Styrofoam carry-out containers, both of which have been banned by other cities (such as Seattle, Portland, and Issaquah). Implementing this approach could potentially require a substantial amount of staff time to research and defend, plus additional staff time and outreach costs for informing the affected parties and possibly enforcing a ban.

Alternative D – Promote Smart Shopping

The City could conduct more promotion on the subject of smart shopping, such as using durable grocery bags and buying in bulk. Businesses could be encouraged to promote the use of durable grocery bags and to offer durable bags for customer use (as many grocery stores are already doing). The City could conduct a campaign that encourages:

- Buying in bulk.
- Buying concentrates.
- Purchasing reusable products.
- Buying secondhand items.
- Avoiding over-packaged items.
- Avoiding products containing hazardous ingredients.
- Borrowing or renting when possible.
- Purchasing durable and repairable products.
- Using reusable shopping bags.

Another idea that is gaining in popularity is the use of fix-it workshops, where people can bring items in need of repairs and knowledgeable volunteers show them how to fix

the item. Organizing this type of workshop is probably better accomplished by a non-profit group, but the City could help promote the workshops, provide space for the events, and possibly assist in other ways.

Alternative E – Focus on Food Waste

Food waste can be recycled through the yard waste collection program (see Chapter 4 for more details about that approach), but this does not address the fact that a substantial amount of edible food waste is unnecessarily discarded. A public education campaign could be used to inform residents of the meaning of expiration dates, opportunities to donate food, and other steps that could be taken to reduce food waste.

Alternative F – Promote Volume-Based Collection Fees

Waste Management already provides a system of volume-based fees for residential customers in Liberty Lake and surrounding areas, and rates charged by both haulers for commercial customers are also based on volumes. The availability of volume-based rates for residential customers could be publicized more to highlight the potential cost savings from waste reduction. The success of this approach could be monitored by the number of people who are signed up for the lower service levels. Furthermore, the City could require a rate system that provides greater incentive by reducing the cost for lower levels of service and increasing the cost of higher levels of service. For instance, the rate for a 64-gallon can emptied weekly could be set at an amount that is twice that of a 35-gallon can emptied weekly, and the rate for a 96-gallon can could be triple that of a 35-gallon can. This appr oach provides greater incentive for waste reduction and is used by many cities. Collection rates are discussed more thoroughly in Chapter 5.

Alternative G – Business Waste Reduction Activities

Business waste reduction programs are typically custom designed for each specific operation. Hence, this type of program is generally beyond the scope of a single city (to date, this approach has been conducted on a regional basis in the Spokane area). The City could, however, encourage businesses to examine their own wastes to look for ways to reduce the amounts of wastes, and to look for ways to recycle more (including the use of alternative products and materials that would be more recyclable). Business waste reduction programs typically include the following components:

- Support and policy directives from upper management.
- A waste reduction team or coordinator.
- An inventory of materials purchased and waste produced.
- A reduction plan targeting specific materials or practices.
- Employee education.
- Ongoing feedback (to employees and others as appropriate) and evaluation.

The City could request that the Chamber of Commerce or another group help promote

these ideas and institute a recognition program for businesses that successfully reduce the amount of their wastes. With the Chamber's assistance, the cost for this program would be minimal, limited perhaps to only $15,000 for outreach materials, awards or plaques, and related expenses.

Alternative H – Government Sector Leading by Example

The City could set an example for local businesses and organizations, and become an even greater force in the marketplace, by broadening and upgrading procurement policies. The City could target products that:

- Can be reused, such as washable plates and glasses.
- Allow for greater waste reduction, such as purchasing copy machines that make double-sided copies more easily and setting duplex copying as default.
- Require replacement or repair less often, such as rechargeable batteries and durable furniture.
- Are easily repaired, such as machinery with standardized and replaceable parts.
- Are nontoxic or less toxic, such as many cleaning agents and solvents now available.

The City could also develop a more comprehensive in-house waste prevention program. By monitoring and reporting on effectiveness, costs, avoided costs, and program revenues for various waste reduction activities, the City could provide a model for local businesses and schools. In-house waste prevention programs could include:

- Double-sided copying.
- Routing slips instead of circulating multiple copies.
- Electronic mail for intra-office messages.
- Scrap pads from used paper.
- Reusing large envelopes.
- Use of very small cans for trash in individual offices, with larger containers provided for recycling.

To ensure the program's continued success, employees need to receive regular updates about new waste reduction techniques. This information could be provided by informational notices or newsletters that are routed electronically on a regular basis.

Alternative I – Monitoring Waste Prevention Results

It would be useful to have a mechanism for monitoring the results of waste prevention programs in order to provide feedback to participants and to provide a basis for future adjustments in the approaches being used. For many communities, this is typically

done by periodically calculating the waste generation rate on a per capita basis. Unfortunately, changes in the generation rate due to waste prevention programs are typically very small in a given time period and so are easily masked or overwhelmed by other factors, such as economic problems or natural disasters. In the latter case, floods and storms can create large amounts of waste and it can be difficult to fully identify and separately account for these amounts.

One alternative to calculating per capita rates is to periodically conduct surveys of residents or businesses about their activities to reduce waste, or to conduct waste stream surveys for specific materials, products or packaging. Both of these activities can be expensive and may still lead to ambiguous results, and so should be considered carefully and designed properly to achieve the desired measurement goals.

Another approach is to gauge success using a "performance-based standard." This is where waste prevention activities are presumed to be successful based on achieving a specific level of effort or other criteria. An example of this approach is to use the number of backyard composting bins that are distributed as a measure of the amount of yard debris that may be kept out of the waste stream. Other criteria can be used and these need to be tailored to each specific waste prevention activity. This method also has its drawbacks but can still provide viable data in some cases.

Alternative J – Promote Reuse and Recycling through Citywide Garage Sale

An annual event in the City of Liberty Lake is the citywide garage sale. The annual citywide garage sale takes place the second Saturday of June and draws thousands of people to the community. The City can partner with major sponsors and event organizers to promote recycling during and after the event. Promotion of reuse and recycling could be advertised in the Official Event Guide. Additional recycling receptacles could be provided throughout the City on event day. Regional local charity trucks can be utilized to pick up unsold garage sale items to transport them to donation centers.

3.4. EVALUATION OF WASTE REDUCTION ALTERNATIVES

Review of Rating Criteria

The above alternatives can be evaluated according to several key criteria, including consistency with solid waste planning goals, technical and political feasibility, and the relative cost-effectiveness of the alternative. Based on the ratings for these criteria, each alternative can be given an overall rating and a decision can then be made as to whether to pursue it or not.

Consistency with Solid Waste Planning Goals: All of these alternatives support the goal of emphasizing waste reduction as a fundamental management strategy, and support other planning goals as well.

Feasibility: In judging the alternatives for technical and political feasibility, most of the alternatives can be adopted without controversy or legal issues. Alternative B may have potential issues with public acceptability and impacts to business practices and so is rated low for this criterion as a result of those questions. Monitoring the results of waste reduction programs could be technically challenging, and so this alternative is rated medium for feasibility.

Cost Effectiveness: Several of the waste reduction alternatives can be implemented without a significant investment in staff time or other resources, and so are rated high for cost-effectiveness. Alternative B would require significant amounts of staff time and other expenses such as outreach and enforcement, while possibly only affecting a small portion of the waste stream, and so this alternative is rated low for cost-effectiveness. Monitoring the results of waste prevention programs has an uncertain return for the investment that could be necessary for this activity but can yield important data, so this alternative has a medium rating for cost-effectiveness. Promoting the citywide garage sale as a community event will require staff time and other City resources, with an uncertain return on this investment. However, this provides a high level of service to City residents and so merits a medium rating for cost-effectiveness.

Rating of Alternatives

The evaluation of the alternatives is summarized in the following table.

Table 3-1
Rating of the Waste Reduction Alternatives

Alternative	Consistency with Planning Goals	Feasibility	Cost-Effectiveness	Overall Rating
A, Develop a Five-Year Work Plan to Monitor Waste Reduction	H	H	H	H
B, Support product stewardship programs	H	H	H	H
C, Ban specific products	H	L	L	L
D, Promote smart shopping	H	H	H	H
E, Focus on food waste	H	H	H	H
F, Promote volume-based fees	H	H	H	H
G, Business waste reduction	H	H	H	H
H, Government sector leading by example	H	H	H	H
I, Monitoring waste prevention	H	M	M	M
J, Citywide garage sale	H	H	M	M

Rating Scores: H – High, M – Medium, L – Low

3.5 WASTE REDUCTION RECOMMENDATIONS

The following recommendations are being made for waste reduction programs. For the proposed measures to monitor waste prevention (and other programs), see Recommendation A1 (Chapter 8).

High-Priority Recommendations

WR1) The City of Liberty Lake will develop a five-year work plan to annually monitor waste reduction alternatives and implement priorities. The work plan will leverage other programs, collaborate with other agencies, and participate in regional programs to ensure Liberty Lake is partnering for efficient and best management practices of industry standards.

WR2) The City of Liberty Lake will evaluate product stewardship programs as these are proposed on a statewide or national level, and support those if appropriate to the interests of their citizens and the business community.

WR3) The business community in Liberty Lake may be encouraged to reduce waste through a recognition program that publicizes success stories.

WR4) The City of Liberty Lake will adopt policies and practices to encourage City departments to reduce waste.

Medium-Priority Recommendations

WR5) Public education materials distributed by the City of Liberty Lake will include information on alternative handling methods for yard waste, the value of "smart shopping" methods, how to avoid wasting food, and the availability of volume-based garbage collection fees.

WR6) The City of Liberty Lake will continue to promote the citywide garage sale as a community event.

The lead agency responsible for implementing and funding these recommendations will be the City, with assistance from Waste Management for Recommendation WR5. Funds are expected to come from a surcharge (administrative fee) on waste collection fees, other available City funds, and the CPG grant program administered by Ecology.

The costs for three of these recommendations (WR1, WR2, and WR4) consist primarily of staff time. Recommendation WR3 could cost about $15,000, depending on how it is actually implemented. The cost for Recommendation WR5 is not high if waste reduction tips and information are included in general public education efforts. Since the City is creating its own solid waste system, it will need a broad public education effort to inform residents and businesses about waste collection services, self-haul

options, and recycling and yard waste programs as well as waste reduction. Since WR5 is the only recommendation that addresses public education, the full costs of those efforts is shown here and are estimated at $25,000 to $50,000 per year. These costs are reduced somewhat by the fact that this responsibility is shared with Waste Management, per the City's contract with them. The funding for Recommendations WR1, WR2 and WR4 will initially come from the collection surcharge and other available City funds, and then be at least partially covered by CPG funds when the City becomes eligible for that grant in mid-2015.

Recommendation WR1 should be implemented annually. Recommendation WR2 should be implemented on an as-needed basis. The implementation of recommendations WR1, WR3, WR4, WR5, and WR6 should begin next year (2015).

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CHAPTER 4
RECYCLING AND ORGANICS COLLECTION

4.1. EXISTING RECYCLING AND ORGANICS PROGRAMS

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

Organics (Clean Green) are also addressed in this chapter of the Plan. In the past, programs addressing organics have largely focused on yard debris (grass clippings, leaves and brush), but now these programs often include food waste and food-soiled paper. Previous processing methods for organics have consisted primarily of composting, but the addition of food waste is increasingly leading to the use of anaerobic digestion and other processing methods. The State's definition of composting is "composting means the biological degradation and transformation of organic solid waste under controlled conditions designed to promote aerobic decomposition. Natural decay of organic solid waste under uncontrolled conditions is not composting" (Chapter 173-350 WAC).

Existing recycling and organics programs in Liberty Lake are primarily directed at the collection and transfer of these materials to facilities outside of the City. While the curbside and commercial collection programs operated by local haulers are the most visible examples of these programs, there is also a significant amount of other activities being conducted in the City. These activities are described in more detail below.

Drop-Off and Buy-Back Programs

The "typical" recyclables can be dropped off at several locations in and near the City for recycling, including the Sunshine Transfer Station and various other locations. Many of the other private companies and non-profit groups collect only a limited number of materials, but three such facilities in Spokane collect the full range of materials (Du-Mor Recycling, Earthworks Recycling, and Pacific Recycling).

Examples of other drop-off activities include:

- Ink cartridges can be returned for recycling at several local stores, or sent back to manufacturers through the mail.
- Rechargeable batteries can be dropped off at certain hardware stores and other locations (depending on the type of battery).
- Clothing can be dropped off at collection kiosks.

Options for dropping off yard debris and food scraps are less common and only two of these are known to exist currently near Liberty Lake (the Sunshine Transfer Station and the County-owned Valley Transfer Station). The Sunshine Transfer Station accepts Clean Green (including mixed yard debris, food scraps and food-soiled paper) for a fee ($50 per ton as of November 2014, with a minimum charge of $10).

Curbside and Commercial Collection Programs

Residents in Liberty Lake are provided with recycling collection services by Waste Management. Until recently, the types of materials, collection frequency and other details for the curbside recycling program in Liberty Lake (and other urban areas) have been guided by a service level ordinance adopted by Spokane County. This ordinance has been codified as Chapter 8.58 of the Spokane County Code. As of September, 2014, a similar level of service was written into a contract between the City and Waste Management. Among other provisions, this contract requires that all subscribers to garbage collection services in Liberty Lake receive (and pay for) curbside recycling services. At the subscriber's option, they can also sign up for yard waste collection service. The materials currently collected by Waste Management in Liberty Lake are listed in Table 4-1.

The curbside recycling program is currently conducted on an every-other-week basis. For the mixed organics collection program (yard debris and food waste), the collection frequency is weekly from March through November and monthly from December through February. For the curbside recycling program, there is no extra charge for additional amounts of recyclables placed in paper bags or cardboard boxes next to the recycling cart. For the mixed organics collection program, there are extra charges levied for additional amounts placed outside of the cart. Both the recycling and mixed organics carts are 96-gallon carts provided by Waste Management.

Multi-family buildings (apartments) in Liberty Lake are also provided with recycling and mixed organics collection services by Waste Management. These services are provided on a subscription basis, meaning that the manager or owner of an apartment building may choose to subscribe to one or both of these services and thus make them available to their tenants. Materials collected for multi-family buildings are the same as for the residential curbside program (see Table 4-1). The size and number of containers, collection frequency and other details depend on the subscription level for the multi-family building.

Table 4-1
Materials Collected for Recycling by Waste Management

Program	Acceptable Materials	Unacceptable Materials
Residential Curbside, Multi-Family and Commercial Recycling Programs	Clean paper and cardboard (including office paper, magazines, paperback books, mail and food boxes) Clean glass bottles and jars Aluminum and tin/steel cans, scrap metal, aluminum food containers, and empty/non-hazardous aerosol cans Plastic bottles, jars and tubs	Laminated and food-soiled papers Light bulbs, window and mirror glass, and ceramics Sharp metals and batteries Electronics Styrofoam Plastic bags Garbage (including diapers, syringes and hazardous waste containers)
Mixed Organics	Yard debris (leaves, grass clippings and small branches) Food scraps (fruits, vegetables, bread, grains, meat, dairy, and coffee grounds) Food-soiled paper (paper towels, food-soiled paper bags, and greasy pizza boxes)	Diapers Pet waste and litter Plastics Foil Liquids Shredded paper Other types of non-compostable materials

Source: Waste Management website, 2/24/14.

Note: See http://wmnorthwest.com/spokane/index.html for complete list of acceptable and unacceptable materials, and other important details.

Businesses in Liberty Lake are provided with recycling collection services by the two certificated haulers, Sunshine Disposal and Waste Management, and several other companies. In November, 2014 the City of Liberty Lake entered into an Agreement with Sunshine Disposal for a ten-year contract similar to the contract the City has with Waste Management. Since recycling by and for commercial and industrial companies is defined as a "free market" system by law, a variety of additional private companies can provide collection services for these businesses. Companies such as Earthworks Recycling, Diversified Wood Recycling, American Recycling Corporation, Baker Commodities, Dickson Iron and Metal, Pacific Steel Hide and Recycling, Action Recycling, Du-Mor Recycling, Clark's Recycling and others provide pickup and drop-off services for materials such as metals, paper, and grease in commercial quantities. It is difficult to adequately describe all of these activities here, and such a description would also quickly become outdated and hence would not be useful in a long-term document such as this Plan. Current information on these activities can be obtained from other sources, such as Ecology's 1-800-recycle website.

Recycled Tonnages

It is currently not feasible to precisely quantify the tonnages collected by the many companies involved in recycling and organics collection in the City. Although Ecology collects data on current recycling amounts on an annual basis, that data is only available on a county level. Pro-rating the amount of recycling occurring in Spokane County, however, provides an estimate of 5,858 tons recycled and composted in 2012 in Liberty Lake (see Table 2-5). This is equivalent to a recycling rate of 54.7%. If "diverted materials"[3] are also included in this analysis, the amount of recycled and diverted materials increases to 9,707 tons per year (in 2012). Including diverted materials means that additional types of wastes must also be included, and so the diversion rate only increases slightly to 57.1%.

Recycling Markets

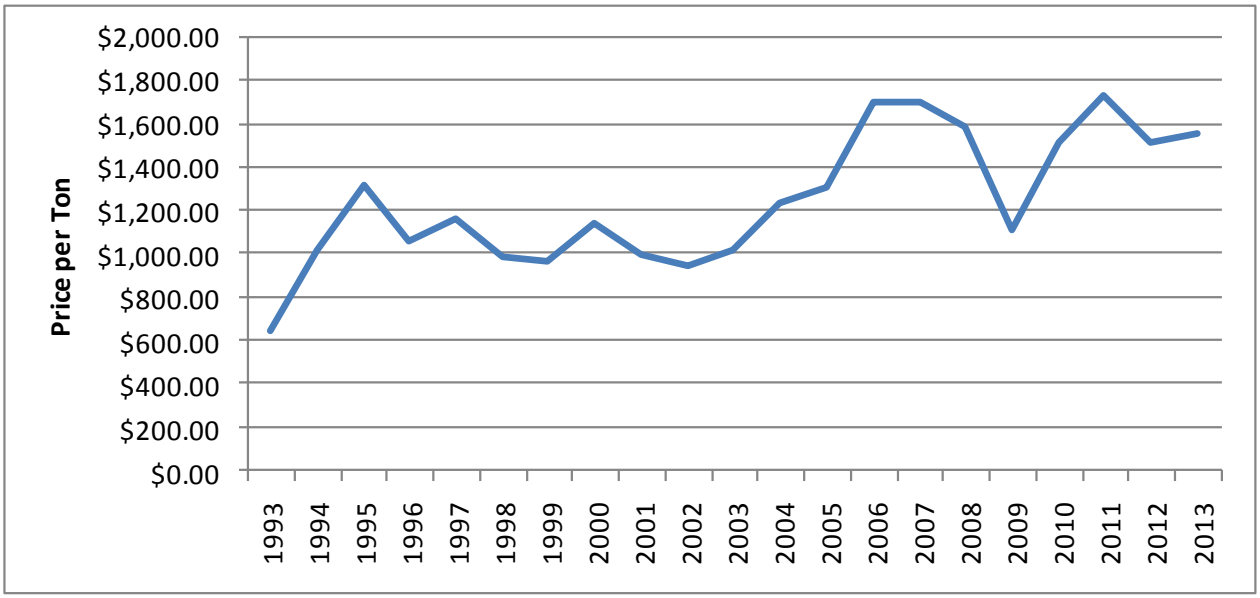
State regulations (RCW 70.95.090(7)(c)) require "a description of markets for recyclables," hence a description of the markets for recyclable materials collected in Liberty Lake is provided below. This is intended to be only a brief report of current conditions, and it should be noted that market conditions for recyclables can undergo substantial changes in a short amount of time.

Market demand and prices for recyclables have fluctuated significantly over the past several years, just as prices for all commodities fluctuate with demand and other factors. Some recyclable materials have seasonal cycles in supply and demand, but all materials exhibit long-term trends with the possibility of sudden price spikes or dips. In some cases, long-term contracts with price floors can help moderate the swings in market revenues, but this isn't possible for all materials. Figures 4-1 and 4-2 show how the prices for aluminum cans and a few other materials collected from residential sources in the Pacific Northwest have fluctuated over the past 20 years. As can be seen in Figures 4-1 and 4-2, market prices dipped for most materials from 2008 to 2009 due to the slump in demand caused by the recession.

Another important factor for marketing of recyclable materials collected in Liberty Lake is the cost of transporting the materials to end-markets, many of which are outside of Washington State. Recyclers in eastern Washington are farther from most markets and so have less access to these markets because the transportation cost is a barrier. The low market value of many recyclable materials limits the number of materials that can be cost-effectively moved to markets.

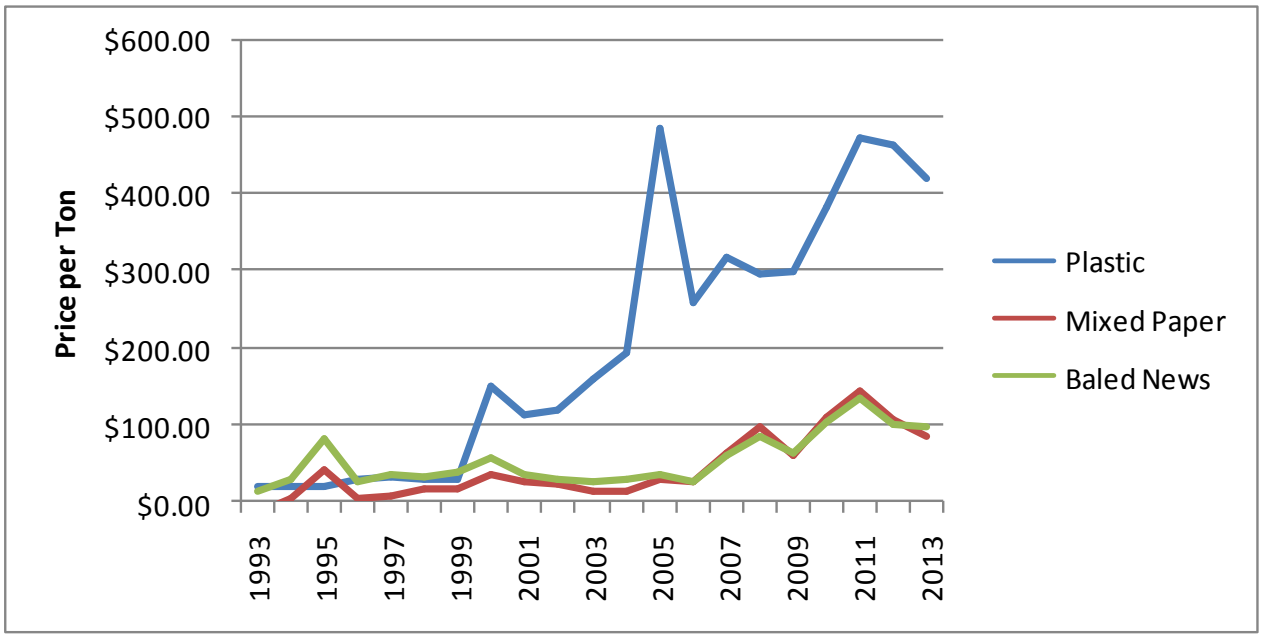
[3] Diverted materials are materials that are handled separately from solid waste and instead directed to a beneficial use, but that do not meet the definition of recycling. Examples include construction wastes that are recycled and wood wastes that are burned for energy recovery. See Section 2.5 for more details.

Figure 4-1
Price Paid for Baled Aluminum Cans (Annual Averages)



Source: Seattle Public Utilities website (original data source: American Metal Markets).

Figure 4-2
Prices Paid for Select Recyclable Materials (Annual Averages)



Source: Seattle Public Utilities website (original data sources are Mill Trade Journal's Recycling Markets, Pulp and Paper Week, Recycling Times, and Waste News).

4.2. DESIGNATION OF RECYCLABLE MATERIALS

The designation of recyclable materials has taken on more importance with the adoption of Chapter 173-350 WAC, which defines recyclable materials as being those materials "that are identified as recyclable materials pursuant to a local comprehensive solid waste plan." Since market conditions for recyclables can change drastically in a short amount of time, the list of designated materials is also accompanied by a description of the process for revising that list.

Table 4-2 shows the list of designated recyclable materials. This list is not intended to create a requirement that every recycling program in the City collect every designated material. Instead, the intent is that through a combination of programs, residents and businesses should have an opportunity to recycle all of the designated materials through at least one program. In other words, if plastics are on the designated materials list, then at least one program in the city must collect plastics. The list has been prioritized to indicate the degree of access that residents and businesses should have for these materials (in other words, greater access should be available for the higher-priority materials).

The list of "designated recyclable materials" shown in Table 4-2 should be used for guidance as to the materials to be recycled in the future. This list is based on existing conditions (collection programs and markets), and future markets and technologies may warrant changes in this list. The following conditions are grounds for additions or deletions to the list of designated materials:

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

Any proposed changes in the list of designated materials should be reviewed and approved by the City Administrator or their designee, and minor changes in this list may be adopted without formally amending this Plan. The revised list of designated materials should be appended to available digital and hard copies.

Table 4-2
List of Designated Recyclable Materials

Priority Level	Material
High Priority Materials: Materials that should be collected by the curbside, multi-family and commercial recycling programs, or by the mixed organics collection programs, in the city.	<u>Recyclables</u> Clean paper and cardboard Clean glass bottles and jars Aluminum and tin cans, scrap metal, aluminum food containers, and empty/non-hazardous aerosol cans Plastic bottles, jars and tubs <u>Mixed Organics</u> Yard debris Food scraps Food-soiled paper
Medium Priority Materials: Materials that should be collected at drop-off and buy-back locations (in the city or nearby), or through other collection services.	Edible food (donated) Cell phones Electronics (e-waste) Clothing, textiles Oil and oil filters Antifreeze Asphalt and concrete Batteries (all types) All metals, inc. appliances Plastic bags Reusable building materials
Low Priority Materials: Hard to recycle materials that should be recycled if markets are available.	Wood Carpet Drywall Roofing materials Mixed construction and demolition Shrink wrap, building wrap, and other film plastics Tires

4.3. PLANNING ISSUES FOR RECYCLING AND ORGANICS

The City of Liberty Lake is currently well-served by a variety of recycling and composting programs, but several improvements and issues could be addressed by this Plan. The most significant of these are noted below.

The collection frequency for the residential curbside recycling program is currently every-other-week. Other studies have repeatedly shown that more frequent collections will lead to more diversion. Some communities have gone so far as to make garbage collection every-other-week and recycling weekly to encourage more recycling.

Glass is currently included in the curbside recycling program and is mixed with other materials. When mixed with other materials, glass both contaminates the other materials and the glass itself is difficult to recycle.

4.4. ALTERNATIVE RECYCLING AND ORGANICS STRATEGIES

The following alternatives were considered for new or expanded recycling and organics activities. The listing of an alternative in this section does not mean that it is considered feasible or desirable, nor that is recommended (see Section 4.6 for recycling and organics recommendations).

Alternative A – Switch to Dual Stream Collection to Collect Glass Separately

Glass is a serious problem when mixed with other materials for recycling. Broken glass contaminates the other materials, especially paper and plastic, and makes it more difficult to recycle those materials. The glass that is carried along with the other materials causes problems with the processing equipment for paper and plastic and does not get recycled but ends up in landfills near the processing plants for the other materials. The glass that is recovered from a curbside mixture is also difficult to recycle because it consists of mixed colors and is also highly contaminated by other materials. Even if collected separately, however, markets for glass in Eastern Washington are nearly non-existent (although conversion to fiberglass and other alternative uses may be options), and the value of glass does not pay for the costs of shipping it to markets in Seattle and Portland.

Alternative B – Drop-Off Site for Mixed Organics

When the City of Liberty Lake left the Regional System, there was a question about the level of access that residents and local businesses would continue to have to the services provided by that system, including the Clean Green drop-off program at the Valley Transfer Station. This service can instead be provided by a drop-off site at the Sunshine Transfer Station. At this time, Spokane County does provide drop-off service to all Spokane County residents at the Valley Transfer Station. Liberty Lake residents and businesses also have the option to use the Clean Green drop-off site at the Sunshine Transfer Station.

Alternative C – Evaluate Need for Increased Yard and Food Waste Diversion

Of all of the materials in the waste stream, yard waste is probably the easiest material to handle through other means. Yard waste can be left on the lawn (mulching of grass clippings), applied as a top-mulch in landscaping and gardens, handled through backyard composting (for leaves, grass clippings and some types of food wastes), chipped on-site (for branches and other woody materials), or recycled through residential and commercial yard waste and food waste collection programs.

It is thought that much of the yard waste from Liberty Lake is currently being diverted from disposal to better handling options (composting, etc.). If a future evaluation, however, should find that significant amounts of yard and food wastes are still being disposed in the solid waste stream, then additional steps could be taken to encourage more diversion of this material. The actual steps to be taken will depend on the source(s) of the yard waste (residential or commercial) and other factors. Determining whether this is a problem, and evaluating options for addressing it, may require a special study or analysis conducted with the assistance of a consulting firm.

4.5. EVALUATION OF RECYCLING AND ORGANICS ALTERNATIVES

Review of Rating Criteria

The above alternatives can be evaluated according to several key criteria, including consistency with solid waste planning goals, technical and political feasibility, and the relative cost-effectiveness of the alternative. Based on the ratings for these criteria, each alternative can be given an overall rating and a decision can then be made as to whether to pursue it or not.

Consistency with Solid Waste Planning Goals: All of these alternatives support the goal of increasing the recovery of marketable materials and providing convenient services for solid waste management.

Feasibility: Alternative B appears relatively easy for the City to implement, while Alternatives A and C could be difficult due to the costs and other factors. Alternative A would be difficult to implement because it would be very difficult for residents and businesses to switch to a dual-stream system after they have enjoyed the convenience of a single-stream system.

Cost Effectiveness: Alternative A would be relatively expensive to implement, since additional bins or carts would be needed for curbside recycling program participants, although it could potentially result in more tons of material actually being recycled in the end. Alternative B would not cost much to implement but could provide significant advantages. Alternative C may require significant costs to fund a study of alternatives, but could lead to a more cost-effective approach in the future (compared to the disposal of yard and food waste as garbage).

Rating of Alternatives

The evaluation of the alternatives is summarized in the following table.

Table 4-3
Rating of the Recycling and Organics Alternatives

Alternative	Consistency with Planning Goals	Feasibility	Cost-Effectiveness	Overall Rating
A, Dual-stream approach	H	L	L	L
B, Encourage City residents and businesses to use either the Sunshine Transfer Station or the Valley Transfer Station clean green sites	H	H	H	H
C, Evaluate need for increased diversion of organics	H	M	M	M

Rating Scores: H – High, M – Medium, L – Low

4.6 RECYCLING AND ORGANICS RECOMMENDATIONS

The following recommendations are being made for recycling and organics programs:

High-Priority Recommendations

R1) City residents and businesses will be encouraged to use the designated transfer station for yard waste and organics ("Clean Green") drop-off services.

Medium-Priority Recommendations

R2) The City will evaluate the best approaches for increased diversion of yard and food waste in the future, if necessary.

The City will be responsible for implementing Recommendations R1 and R2. Both of these recommendations will result in a small amount of costs to the City, although the cost for Recommendation R1 is included in the cost for public education activities in general. Recommendation R2 could lead to more significant costs in the future, depending upon the need to pursue a closer examination of yard and food waste options. Recommendation R1 should be implemented immediately, whereas Recommendation R2 should be evaluated in a few years (in 2017 or 2018).

CHAPTER 5

SOLID WASTE COLLECTION

5.1. EXISTING WASTE COLLECTION ACTIVITIES*

Existing Waste Haulers

There are two solid waste collection service providers in Liberty Lake. The City has 10-year contracts with Waste Management and Sunshine Disposal. Both haulers will continue to provide the same services as they had provided while the City was under Spokane County's Interlocal Agreement for Solid Waste Services. Sunshine Disposal currently collects waste from large containers (i.e., roll-offs and stationary compactors), and Waste Management collects waste from various containers (i.e., compactors, roll-off containers, dumpsters, and residential garbage carts) from residential and commercial customers. Sunshine Disposal will provide recycling services to commercial customers, and Waste Management will provide recycling services for both residential and commercial customers and Clean Green for residential customers. The mailing addresses and current population density for the service areas of the two collection service providers are shown in Table 5-1. Figure 5-1 shows a map of the City.

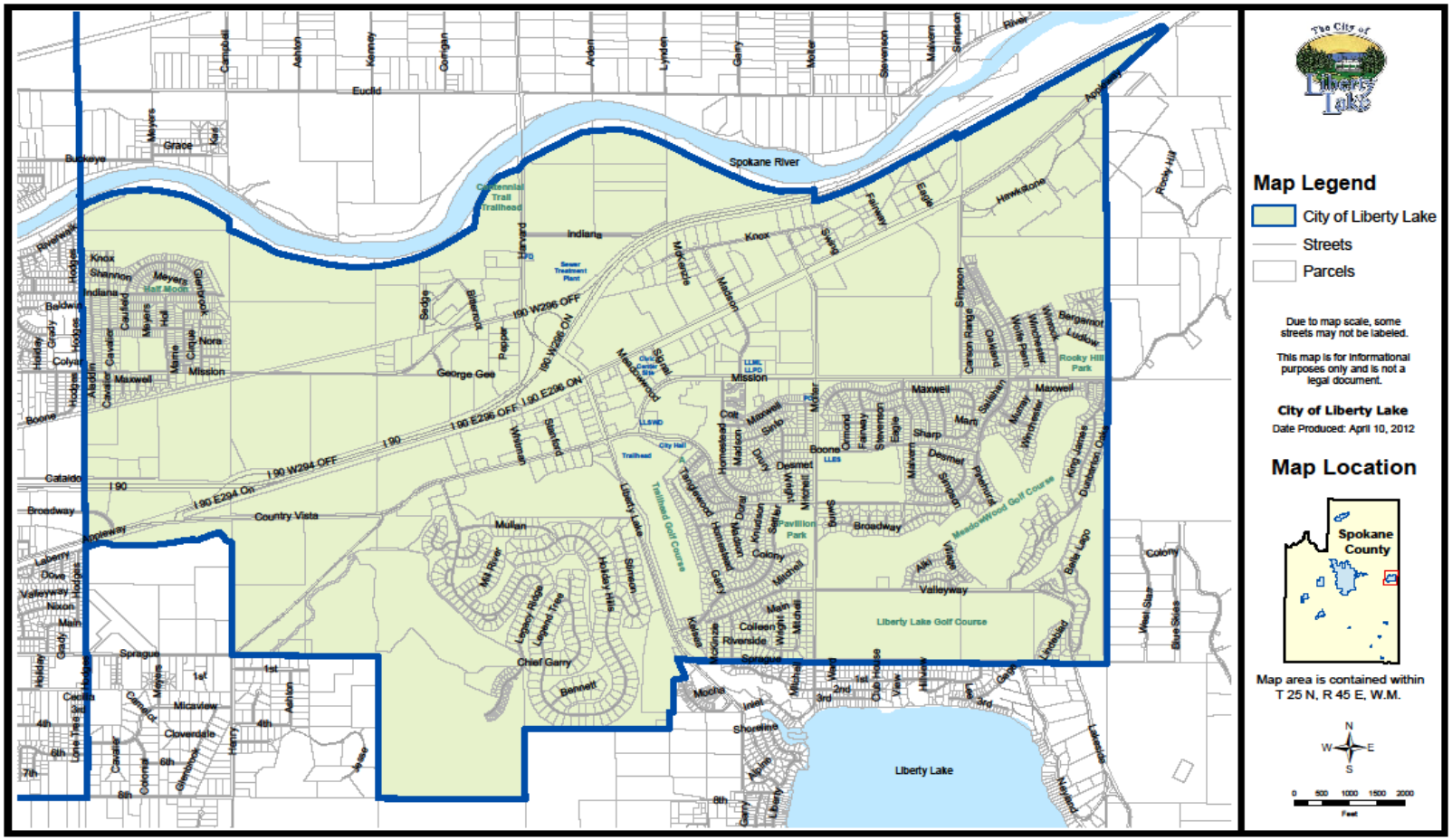
There are also other collection services active in the City for special types of waste. Two companies have been issued statewide authority by the UTC to collect biomedical waste. These companies are Stericycle of Washington and Waste Management Healthcare Solutions of Washington. Other companies collect hazardous wastes. "Self-haul" by the waste generator (transportation of a person's or company's own waste) is also allowed, as long as the waste is brought to a properly-permitted facility.

Table 5-1
Waste Collection Service Providers in Liberty Lake

Service Provider	Address	Population Served	Land Area, square miles	Density (people per square mile)
Sunshine Disposal	11320 W. McFarland Road, Airway Heights, WA 99001	NA	5.52	NA
Waste Management	11321 E. Indiana Avenue, Liberty Lake, WA 99206	8,675	5.52	1,572
Totals		8,675	5.52	1,572

Source: Population and land area figures are from the Washington Office of Financial Management (OFM) for 2014.

Figure 5-1
Map of Liberty Lake



Regulations Concerning Waste Collection

The Washington State authorities that govern collection activities are Ecology and the Washington Utilities and Transportation Commission ("UTC"). RCW 70.95.020 also assigns responsibilities to local government for the management of solid waste handling while encouraging the use of private industry.

The various laws that may apply to solid waste collection companies include:

- Chapter 81.77 RCW, Solid Waste Collection Companies: This law establishes the state regulatory authority for solid waste collection companies and the procedures and standards with which they must comply.
- Chapter 35.21 RCW, Cities and Towns: This law establishes the authority of towns and cities in regard to solid waste and the procedures and standards with which they must comply.
- Chapter 480-70 WAC, Rules for Solid Waste and/or Refuse Collection Companies: This chapter establishes standards for public safety, fair practices, reasonable charges, nondiscriminatory application of rates, adequate and dependable service, consumer protection, and compliance for solid waste collection companies.
- Chapter 480-07 WAC, UTC Procedural Rules: This chapter addresses how to conduct business with the UTC.

Four forms of collection services are allowed by State law in the City:

- Certificated: With this collection method, cities are not actively involved in the management of garbage collection. Instead, it allows the UTC-certificated hauler to provide service under UTC regulation.
- Municipal: Municipal collection utilizes municipal employees to collect waste (such as is done in the City of Spokane).
- Licensed collection: This method applies to municipalities that require private collectors to have both a city-issued license as well as a UTC certificate. This approach gives the municipality limited control over collection services.
- Contracted collection: The municipality may contract with a private hauler to provide waste collection services.

Pursuant to State law, the City has assumed control and management of solid waste collection within its boundaries by entering into a ten-year contract with Waste Management for solid waste, recycling, and organic collection.

5.2. PLANNING ISSUES FOR WASTE COLLECTION

Waste collection in Liberty Lake is not mandatory, although it is estimated that 90% to 95% of the residents currently subscribe to waste collection services.

5.3. ALTERNATIVE WASTE COLLECTION STRATEGIES

The following alternative was considered for new or expanded waste collection activities. The listing of an alternative in this section does not mean that it is considered feasible or desirable, nor that is recommended (see Section 5.5 for waste collection recommendations).

Alternative A – Increase Curbside Collection Subscriptions

The City could encourage increasing subscriptions for curbside collection by educating residents about the benefits of collection services. This approach potentially reduces the amount of illegal dumping and "junk" properties, and leads to lower per-unit collection fees. Collection fees are lower on the average because collection services can operate more efficiently when more households and businesses participate. This approach is also more efficient because it reduces individual trips that people make to a transfer station to drop off their garbage, with the resulting congestion there and the increased impact to the environment due to fuel consumption. Finally, there is anecdotal evidence to suggest that people who self-haul their garbage do not recycle as much as those who subscribe to garbage collection and curbside recycling services.

5.4. EVALUATION OF WASTE COLLECTION ALTERNATIVE

Review of Rating Criteria

The above alternative can be evaluated according to several key criteria, including consistency with solid waste planning goals, technical and political feasibility, and the relative cost-effectiveness of the alternative. Based on the ratings for these criteria, the alternative can be given an overall rating and a decision can then be made as to whether to pursue it or not.

Consistency with Solid Waste Planning Goals: This alternative supports the goal of providing convenient and reliable services, although some people may take issue with the idea that curbside garbage collection is better than self-hauling.

Feasibility: This approach is rated medium for technical and political feasibility due to the assumption that some residents would not want to be forced to subscribe to waste collection services.

Cost Effectiveness: This alternative should be cost-effective.

Rating of Alternative

The evaluation of this alternative is summarized in the following table.

Table 5-2
Rating of the Waste Collection Alternative

Alternative	Consistency with Planning Goals	Feasibility	Cost-Effectiveness	Overall Rating
A, Increase curbside subscriptions	H	M	M	M

Rating Scores: H – High, M – Medium, L – Low

5.5 WASTE COLLECTION RECOMMENDATIONS

The alternative considered for this element of the solid waste system has led to two recommendations:

Medium-Priority Recommendations

C1) Educate the public on the benefits and options of curbside collection services.

C2) The need for mandatory garbage collection services may be evaluated in the future.

The City is the lead agency for both of these recommendations. Recommendation C1 should be implemented immediately, and the costs for this should be included in the general public education activities. Recommendation C2 could be evaluated in 2018 or later, and the only expense anticipated for this activity is staff time.

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CHAPTER 6

TRANSFER AND DISPOSAL

6.1. EXISTING TRANSFER AND DISPOSAL ACTIVITIES

Overview

There are currently two transfer stations operating near Liberty Lake: a private station owned and operated by Sunshine Disposal and a public facility, the Valley Transfer Station. There are three additional transfer stations operating in Spokane County: the North County Transfer Station (also known as Colbert Transfer Station), the City of Spokane Waste-to-Energy (WTE) Facility (which also acts as a transfer station), and a transfer facility operated by Stericycle (for biomedical wastes).

There are no disposal facilities in Liberty Lake. In other areas of Spokane County, there is the City of Spokane WTE Facility, one active municipal solid waste ("MSW") landfill (Northside Landfill), one limited purpose landfill (Graham Road Recycling and Disposal), and six permitted inert waste landfills. The Northside Landfill is not open to the public, but is used by the City of Spokane for emergency disposal purposes (in case the WTE Facility is temporarily shut down) and for disposal of materials that cannot be processed at the WTE Facility. The Graham Road Landfill is open to the public and handles primarily construction and demolition waste, petroleum-contaminated soils, inert wastes, asbestos and other wastes. All of the six inert waste landfills are privately owned and operated. Three of these are not open to the public, and one of the inert landfills is permitted but not currently operating. The two inert waste landfills that are open to the public (Busy Bee Landfill and Spokane Rock Products) handle primarily concrete and asphalt. There are also a number of closed landfills in Spokane County (most notably Colbert Landfill, Greenacres Landfill and Mica Landfill), some of which are still undergoing monitoring and remedial actions.

Sunshine Disposal & Recycling Transfer Station

The Sunshine Transfer Station is a privately owned and operated transfer station located at 2405 University Road in Spokane Valley. This transfer station has been in operation at that location since 1983. The transfer station is currently open to contractors and commercial haulers for waste disposal. Residential and commercial waste collected by Sunshine Disposal is delivered here. Depending on the type of waste, these wastes are consolidated into transfer trailers or intermodal containers, which are used to transport waste to its final disposal site. Waste from contractors is generally transferred to the Graham Road limited purpose landfill. Cardboard and other recyclables collected from local businesses are delivered to the station and prepared for transport to markets by sorting and baling. Workers also separate some recyclables (primarily metals and wood) from mixed loads on the station's tipping floor.

Plans for the Sunshine Transfer Station were recently modified to include an MRW drop-off site, the capability to serve residential self-haul customers, a drop-off area for Clean Green, recycling drop-off containers, and other changes.

Valley Transfer Station

The Valley Transfer Station has been in operation since 1991. Previously, this station was owned and operated by the Regional System, but a recent agreement between the City of Spokane and Spokane County transferred the ownership of this and the North Side Transfer Station to Spokane County. This transfer of ownership became effective November, 2014. This agreement also included provisions for the County to direct waste from the transfer stations to the City's WTE Facility.

The Valley Transfer Station is open to residential and commercial customers, and accepts solid waste for disposal at the WTE Facility. The Valley Transfer Station also accepts recyclable materials, Clean Green and moderate-risk waste ("MRW"), and has a separate area for collecting white goods (large appliances such as refrigerators and washing machines).

6.2. TRANSFER AND DISPOSAL PLANNING ISSUES

The Interlocal Agreement for the Regional System expired November 16, 2014. The City of Liberty Lake has entered into a contract with Waste Management to provide collection and disposal services. The contract has an initial term of ten years, with the option for six-year extensions.

Certain disposal options, including but not limited to incineration facilities and landfills located within the City of Liberty Lake, are not considered feasible options and so are not discussed in this Plan.

6.3. ALTERNATIVE TRANSFER AND DISPOSAL STRATEGIES

The City recently went through a process to contract with Waste Management for collection and disposal services, with the initial expectation that Waste Management will deliver waste to the Sunshine Transfer Station for disposal purposes. A copy of this agreement can be viewed by interested parties upon request to the City Administrator or their designee. Having gone through this process immediately prior to the development of this Plan, there are no additional alternatives that merit consideration at this time.

6.4 TRANSFER AND DISPOSAL RECOMMENDATIONS

The following recommendation is being made for transfer and disposal programs:

High-Priority Recommendations

D1) The Sunshine Transfer Station has been designated as the disposal system for all solid waste from Liberty Lake, effective November 17, 2014.

The City is the lead agency for this and related activities. Funding for transfer and disposal costs will be derived from user fees.

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CHAPTER 7

SPECIAL WASTES

7.1. INTRODUCTION

The purpose of this chapter is to review the generation, handling and disposal methods for special wastes in Liberty Lake. These wastes generally require special handling and disposal due to regulatory requirements or for one or more other reasons.

The following special wastes are discussed in this chapter:

7.2 Asbestos

7.3 Biomedical Wastes

7.4 Construction and Demolition ("C&D") Wastes

The source(s) and current handling practices for each special waste are described in this chapter. All of the wastes are also examined for needs and issues, but only those that pose disposal problems were further examined for alternatives and recommendations.

7.2. ASBESTOS

Existing Management Practices for Asbestos

The harmful effects of microscopic airborne asbestos fibers have been recognized for many years. When inhaled, these fibers lodge in the lungs and can cause asbestosis, mesothelioma, and lung cancer up to 30 years later. These problems caused many uses of asbestos to be banned in the 1970's and 1990's, but some uses of asbestos are still allowed, particularly in construction materials. Hence, a building of any age could have asbestos-containing materials in it. Some of these materials are well-known (such as pipe insulation and "popcorn" ceiling material), but asbestos has been used in over 3,000 different construction materials and other products over the years and many of these products are not easily identified. The ongoing use of asbestos led to a new State law, effective January 1, 2014, that requires labeling of new asbestos-containing building products.

The primary agency that regulates asbestos in the Spokane area is the Spokane Regional Clean Air Agency (SRCAA). The regulations adopted by SRCAA primarily focus on renovation and demolition projects. Two categories are recognized for these types of projects: 1) owner-occupied single-family residences, and 2) all other projects (including work being done by landlords and contractors). In the first case, an owner living in a single-family home and performing his/her own renovation is exempted from survey,

notification and fee requirements, but must still dispose of any asbestos-containing materials properly. All other renovation or demolition projects must first have a survey conducted for asbestos by an AHERA-certified building inspector, must notify SRCAA of any asbestos found and file for a removal permit (a Notice of Intent permit), and properly remove and dispose of the asbestos-containing materials. In the past five years (December 29, 2009 to September 19, 2014), there have been 88 penalties assessed by SRCAA for asbestos survey, notification, removal and disposal violations. These penalties have ranged from $150 to $27,241.

Most of the asbestos waste from Spokane County is disposed at the Graham Road Recycling and Disposal facility located west of the City of Spokane. This landfill also accepts construction and demolition wastes, tires, and other special wastes. According the facility's owner, Waste Management, this site has sufficient additional capacity to continue to operate for another 103 years. According to Ecology's records, this facility received 1,664 tons of asbestos wastes in 2012. In the same year, an additional 30 tons of asbestos-containing wastes from Spokane County were disposed at the Roosevelt Regional Landfill in Klickitat County.

The City of Liberty Lake has helped address proper asbestos disposal by including a statement on building permits to the effect that people should contact the SRCAA for information about asbestos, and by requiring evidence of contact with the SRCAA on demolition permits.

Planning Issues for Asbestos

There appear to be no significant known disposal problems with asbestos-containing wastes, although education is needed on an ongoing basis. The City of Liberty Lake will continue to inform the public where possible about the need to conduct an asbestos survey prior to renovation activities, and will continue to require evidence of this for demolition permits.

7.3. BIOMEDICAL WASTES

Existing Management Practices for Biomedical Wastes

State law (Chapter 70.95K RCW) defines biomedical wastes to include:

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

Biosafety level 4 disease waste: biosafety level 4 disease waste is waste contaminated with blood, excretions, exudates, or secretions from humans or animals who are isolated to protect others from highly communicable infectious diseases that are identified as pathogenic organisms assigned to biosafety level 4 by

the centers for disease control, National Institute of Health, biosafety in microbiological and biomedical laboratories, current edition.

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

Human blood and blood products: discarded waste human blood and blood components, and materials containing free flowing blood and blood products.

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

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

The UTC regulates transporters of biomedical wastes. The UTC has issued statewide franchises to Waste Management and Stericycle to transport biomedical wastes. Their regulations also allow regular solid waste haulers to refuse to haul wastes that they observe to contain infectious wastes as defined by the UTC.

Individual residents who generate hypodermic needles are not regulated as are clinics and agencies. Residents may collect used hypodermic needles in either labeled sharps containers made for that purpose or in empty plastic bottles such as detergent or bleach bottles (preferably labeled). Full containers can be dropped off at MRW collection sites.

Planning Issues for Biomedical Wastes

Most biomedical wastes generated in Washington State are currently being handled properly. There are occasionally problems with small amounts of biomedical wastes being improperly disposed from small generators such as veterinarians and dental offices, but in general these can be addressed on an as-needed basis. Residential "sharps" (syringes), however, can be a problem. Sharps and other biomedical wastes are generated at residential locations from home health care, especially for diabetes and other health problems, and from illegal drug use. Residential sources often lack access to proper disposal methods, and residential sharps thrown in the garbage can pose a hazard to waste collectors and others.

Alternative Strategies for Biomedical Wastes

The following alternative was considered for biomedical wastes.

Special Waste Alternative A – Publicize Proper Disposal Options for Residential Sharps: An ongoing campaign could be conducted to publicize and promote the proper disposal options for residential sharps. This could be accomplished through a multi-prong effort involving the City, the Health District and local pharmacies that sell syringes. The Health District and local pharmacies could take the lead on establishing programs to handle the syringes and publicizing the availability of these programs. For the City, a brief explanation of the problems and proper disposal opportunities could be included on general information that is distributed about the waste collection system.

This alternative is evaluated further at the end of this chapter (see Section 7.5).

7.4. CONSTRUCTION AND DEMOLITION (C&D) WASTES

Existing Management Practices for C&D Wastes

This section of the Plan also addresses "green building," which is a topic closely related to construction and demolition wastes.

C&D wastes are defined simply as the wastes that are generated from construction and demolition activities. These wastes consist primarily of new and used building materials (such as wood, sheetrock, pipe and other metals, shingles, concrete and asphalt). Land clearing wastes, including soil, stumps and brush, are also sometimes included in this category, but these materials are rarely treated as a waste. To the extent these materials are taken off-site, land clearing wastes can be handled as a valuable product, clean fill, inert wastes (in the case of clean soils), or as a wood waste. If treated as an inert waste, the wastes must be brought to a properly-permitted landfill.

A category related to C&D wastes is "inert wastes." State rules adopted in February 2003, Chapter 173-350 WAC, created this category of waste. Inert wastes are defined to include some types of construction wastes, such as concrete, asphalt, brick, and ceramic tile, but specifically excludes sheetrock. Inert wastes also include glass, stainless steel, aluminum, and other wastes that can meet the criteria for inert wastes (will not burn, creates no harmful leachate or gases, etc.). The regulatory status of inert wastes differs from mixed C&D wastes, with disposal requirements that are less strict.

The total amount of C&D wastes generated in Liberty Lake is unknown, but for most communities, C&D wastes are generated in quantities equal to half or more of the regular solid waste stream. C&D wastes are generated at a rate that is proportional to construction activity, and so annual amounts will vary depending on population growth, the economic climate and other factors. Large commercial developments and other one-time projects can have a significant impact on annual amounts, as can natural disasters.

C&D wastes can be handled in a variety of ways. Some of this waste can be reused or recycled at facilities in the area (such as Habitat for Humanity, Brown Building Materials and Greenacres Gypsum), and much of it is brought to one of the landfills in the area (Graham Road Recycling and Disposal or one of the inert waste landfills). A significant amount of C&D wastes are disposed with solid wastes. According to the estimated waste composition figures (see Table 2-4), there are 371 tons of wood and 466 tons of construction waste in the solid waste stream from Liberty Lake.

Beyond Waste Plan: Increasing the amount of green building practices is one of the five key initiatives identified in the State's *Beyond Waste Plan*. Green building is defined by the *Beyond Waste Plan* as "design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and occupants in five broad areas: sustainable site planning; conservation of materials and resources; energy efficiency and renewable energy; safeguarding water and water efficiency; and indoor air quality." The *Beyond Waste Plan* adopted a short-term goal of "dramatically increasing adoption of environmentally preferable building construction, operation and deconstruction practices throughout the state and the region." A separate long-term goal was also adopted, which is for "green building to be a mainstream and usual practice throughout the state."

Planning Issues for C&D Wastes

There appears to be no significant problems currently with the management of C&D wastes in Liberty Lake. The City's current comprehensive plan and development code strongly encourage recycling, reuse, and green building practices.

Alternative Strategies for C&D Wastes

Possible alternatives for C&D wastes are described below.

Special Waste Alternative B – Install Collection Areas at the Transfer Stations: An area at the two nearby transfer stations could be set up as a collection and temporary storage point for reusable building materials. Materials could be placed in this area by either the customers or by transfer station staff (time permitting). The area should be close to the tipping floor but also distinctly separated from it, to avoid confusion about what materials are permissible to take (scavenging directly from the tipping floor should not be allowed due to safety and regulatory concerns). Rules would need to be established as to whom may take materials from this area, and in any case solid waste customers should be required to weigh and complete their garbage transaction before taking materials from this area.

Special Waste Alternative C – Promote Green Building: As mentioned earlier in this section, Ecology has adopted green building as one of the five primary initiatives in the *Beyond Waste Plan*. The scope of green building is very broad, however, and there are only a few of these topics that fit within the context of this Plan. For instance, issues

dealing with energy efficiency, water conservation and indoor air quality have little to do with topics such as C&D recycling or even the use of recycled products. The green building activities that are relevant to this Plan are limited to:

- Promoting de-construction activities that allow reuse and recycling.
- Encouraging builders and others to recycle C&D materials.

These activities could be promoted using a variety of tactics, ranging from providing links to other sources of information, to recycling requirements attached to new building permits. For the City of Liberty Lake, an appropriate level of involvement might be to provide brochures and other information developed by others.

Alternatives B and C are evaluated further below.

7.5. EVALUATION OF SPECIAL WASTE ALTERNATIVES

Review of Rating Criteria

The special waste alternatives can be evaluated according to several key criteria, including consistency with solid waste planning goals, technical and political feasibility, and the relative cost-effectiveness of the alternative. Based on the ratings for these criteria, each alternative can be given an overall rating and a decision can then be made as to whether to pursue it or not.

Consistency with Solid Waste Planning Goals: All of the special waste alternatives support the goals of providing reliable solid waste services and encouraging recycling and/or proper disposal as appropriate to the type of waste.

Feasibility: Alternatives A (publicizing proper disposal methods for residential sharps) and C (promoting green building) are feasible although may lead to a minor amount of additional expenses not currently being incurred by the City. Alternative B (installing set-aside areas at the two transfer stations in the City) is not likely to be technically or politically feasible (due to cost and space constraints).

Cost Effectiveness: Alternative A (publicizing proper disposal methods for residential sharps) is cost-effective in the sense that this may avoid a significant personal injury (should a waste collector or other person be stuck by an improperly-disposed syringe). Alternative B (installing set-aside areas at the two nearby transfer stations) may not be cost-effective in the sense that it would be hard to recover the capital costs of constructing the area for this activity. Alternative C (promoting green building) could be considered cost-effective in the sense that an investment in education and outreach would lead to future cost savings (from energy and water savings) in the ownership of homes and commercial buildings.

Rating of Alternatives

The evaluation of the alternatives is summarized in the following table.

Table 7-1
Rating of the Special Waste Alternatives

Alternative	Consistency with Planning Goals	Feasibility	Cost-Effectiveness	Overall Rating
Biomedical Wastes				
A, Publicize proper disposal options for residential sharps	H	M	H	H
C&D Wastes				
B, Collection areas at transfer stations	H	L	L	L
C, Promote green building	H	M	H	H

Rating Scores: H – High, M – Medium, L – Low

7.6 SPECIAL WASTE RECOMMENDATIONS

The following recommendations are being made for special waste programs:

High-Priority Recommendations

SW1) Proper disposal options for residential sharps (syringes) will be promoted through a cooperative effort between the City of Liberty Lake, the Health District, and the waste collectors.

SW2) Green building practices will be promoted by distributing brochures and publicizing other sources of information.

For Recommendation SW1, implementation responsibility should be shared by the City and the Health District, with assistance and cooperation from Waste Management. The City will be the lead agency for Recommendation SW2.

The cost for Recommendation SW1 could be in the range of $10,000 to $20,000, depending on the extent of the public outreach campaign and the potential to "piggy-back" on related public information efforts. This cost would be borne by the Health District, if they agree to conduct the campaign. The cost for Recommendation SW2 would be minimal, assuming the City would at most need to make minor modifications

to the City's website and incur a small expense for printing of brochures developed by others.

Both recommendations should be implemented as soon as possible and then conducted on an ongoing basis.

CHAPTER 8

ADMINISTRATION

8.1. EXISTING ADMINISTRATION ACTIVITIES

City of Liberty Lake

The City of Liberty Lake, which was incorporated on August 31, 2001, is a non-charter second-class code city that operates under a mayor-council system of government. In this form of government, policy and administration are separated. All legislative and policy-making powers are vested in the City Council. The administrative authority is vested in the Mayor. The City Council, being legislative, has the power to enact laws and policies, consistent with State law. The City Council regulates local and municipal affairs usually through the enactment of an ordinance or resolution. The Mayor, being executive, is in charge of carrying out the policies set by the Council and seeing that local laws are enforced. The Mayor has general supervision of the administration of city government and all city interests.

Prior to this Plan, the City of Liberty Lake participated in local solid waste programs largely though the Regional System, which included the City of Spokane, Spokane County, and other cities. This involvement guided policies and programs in the City and throughout the region. Solid waste services are performed by private companies, although the City and others have been involved in public education and other support activities.

The City of Liberty Lake recently entered into a contract with Waste Management that stipulates that Waste Management will provide solid waste collection and disposal services for City residents and businesses. A clause of that contract provides that an administrative fee be paid to the City. This fee is equal to one percent (1%) of gross revenues and is to be made by the tenth of each month.

Surveillance and Control Issues: A program for surveillance and control is an important aspect of a solid waste management system. Such a program needs to address the measures that will be taken to prevent wastes from being illegally dumped or otherwise handled incorrectly. In Liberty Lake, this process begins with city codes that specifically address property conditions within the city. The City of Liberty Lake Development Code, and also the River District Specific Area Plan, require that trash and debris are stored properly and removed regularly (or at least frequently enough so as not to attract vermin or create other nuisance problems). The city codes also require the proper storage of recyclables, address junk vehicles, require that the interior of buildings be maintained in a clean and sanitary condition (free of accumulation of garbage), and have detailed requirements for garbage cans for rental units. These requirements are enforced by a Code Enforcement Officer that works for the City of

Liberty Lake. Depending on the nature and location of an illegal dumping incident, this officer might also arrange for cleanup and other appropriate actions (although incidents involving hazardous waste would likely be deferred to Ecology, see below). It should also be noted that the City's contract with Waste Management requires an annual collection event for bulky wastes, which should help ensure the proper disposal of these types of items (bulky wastes are often the types of wastes involved in illegal dumping and accumulation of junk on private properties).

It is also important that solid waste collection and transportation activities be conducted in a manner that avoids spillage and other problems. The City's collection contracts with Waste Management and Sunshine Disposal do not specifically address spillage, but this issue is governed by State law that addresses the condition and operation of collection equipment. Likewise, potential "spillage" and litter issues caused by residents and businesses hauling their own garbage are addressed by the State's secure load law. RCW 46.61.655. The City's collection contracts do specify that hazardous wastes are excluded from solid waste collection services provided by the two collection companies. In addition, Sunshine Disposal's operations permit for their transfer station has provisions for the proper handling of any hazardous wastes that are found mixed with the solid waste received there.

Spokane County and the Spokane Regional Solid Waste System

Until recently, solid waste programs in Spokane County were largely managed through the Regional System. Liberty Lake and other cities in Spokane County participated in this Regional System while maintaining some autonomy in solid waste collections and other programs (the City of Spokane, for instance, operates its own collection system for recycling and solid waste). The Regional System ceased to exist in November 2014, however, and Spokane County became the lead agency for many of the programs that had been handled by the Regional System.

Spokane Regional Health District

The Health District is responsible for health programs throughout Spokane County, including Liberty Lake. In addition to programs addressing personal health problems and food safety, the Health District has an Environmental Public Health Division that conducts inspections of solid waste facilities and handles complaints related to solid waste.

Washington State Agencies and Regulations

The two State agencies that are primarily involved in solid waste management are Ecology and the UTC.

Washington Department of Ecology: The Solid Waste Handling Standards (Chapter 173-350 WAC) were promulgated by Ecology under the authority granted by Chapter 70.95 RCW. In addition, Chapter 173-351 WAC, Criteria for Municipal Solid Waste

Landfills, contains the current standards for municipal solid waste landfills. The Model Litter Control and Recycling Act (RCW 70.93.060) prohibits depositing garbage on any property not properly designated as a disposal site. There is also a "litter fund" that has been created through a tax levied on wholesale and retail businesses, and the monies from this fund have been used for education, increased litter clean-up efforts, and contracts to eligible county entities for illegal dump clean-up activities.

Under the Model Toxics Control Act (Chapter 70.105D RCW), grants are available to local governments for solid waste management plans and programs, hazardous waste management plans and programs, and remedial actions to clean up existing hazardous waste sites. Solid and hazardous waste planning and programs are funded through the CPG program administered by Ecology's Waste 2 Resources Program.

Ecology also responds to complaints regarding hazardous material spills or releases.

Washington Utilities and Transportation Commission: The UTC regulates privately-owned utilities and companies that provide public services such as electric power, telephone, natural gas, private water systems, transportation, and waste collection. The UTC's authority over solid waste collection is established in Chapter 81.77 RCW and Chapter 480-70 WAC.

The UTC regulates residential and non-residential garbage collection services, primarily in unincorporated areas and also for incorporated areas that have not taken control of the collection system. Cities are permitted by State law to choose their form of waste collection regulation. Many cities in Washington contract with a private hauler for garbage collection services (or collect it with city crews as in the case of Spokane), and only a few rely on the UTC to regulate a private garbage hauler as if they were an unincorporated area. UTC authority does not extend to companies operating under contract with any city or town, or to any city or town that undertakes solid waste collection. This regulatory system was set up by the State Legislature in the 1960's to ensure that every citizen and business, no matter how remotely located, can get garbage collection service.

The UTC regulates solid waste collection companies by granting "certificates of convenience and necessity" that allow companies to operate in specified service areas. It also regulates solid waste collection, under authority of RCW 81.77.030, by:

- Fixing collection rates, charges, classifications, rules, and regulations.
- Regulating accounts, service, and safety of operations.
- Requiring annual reports and other reports and data.
- Supervising collection companies in all matters affecting their relationship to their customers.

- Requiring collection companies to use rate structures consistent with state waste management priorities.

The UTC requires certificate holders to provide the minimum levels of solid waste collection and recycling services established by a local solid waste management plan and enacted through a service level ordinance.

Federal Agencies and Regulations

At the federal level, the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Solid Waste Disposal Act Amendments of 1980 (42 U.S.C. 6901-6987), is the primary body of legislation dealing with solid waste. Subtitle D of RCRA deals with non-hazardous solid waste disposal and requires the development of a state comprehensive solid waste management program that outlines the authorities of local, state and regional agencies. Subtitle D requires that the state program must prohibit "open dumps" and must provide that all solid waste is disposed in an environmentally-sound manner.

8.2. ADMINISTRATION PLANNING ISSUES

No City personnel are currently assigned responsibility for solid waste management and recycling issues.

When the City leaves the Regional System, the City will begin to incur costs for activities that were previously handled by the Regional System. These costs are not well-defined at this time, but are anticipated to be in the neighborhood of $25,000 to $50,000, primarily for various education and outreach activities. The City will also become eligible for CPG funds from Ecology beginning July 1, 2015, and these funds could be used to partially cover these costs. As of July 1, 2015, Liberty Lake will be eligible for approximately $21,650 in CPG funds (for a two-year period, or $10,825 annually), although the City will need to provide a 25% match ($7,144, or $3,572 annually) for those funds. In addition to the "regular" CPG funds that are offered on a two-year cycle, there are often additional grant funds that are available on alternating years. The availability and amount of these "offset cycle" grant funds are subject to budget limits and other factors, but if available these grants can be a potential source of funding for special projects.

8.3. ALTERNATIVE ADMINISTRATION STRATEGIES

The following alternatives were considered for new or expanded administration programs. The listing of an alternative in this section does not mean that it is considered feasible or desirable, nor that is recommended (see Section 8.5 for administration recommendations).

Alternative A – Hire Staff to Manage the Solid Waste System

None of the existing City employees are specifically assigned to solid waste activities, and so these duties currently fall on the City Administrator and others. With the new System, additional work will be required for managing contracts, conducting public education activities, and also possibly grant management and reporting. A part-time employee may be needed to conduct these activities.

Alternative B – Use Fees and Grants to Fund Administration of the Solid Waste System

The additional costs related to managing the City System could be covered by the surcharge on collection fees (per the contract with Waste Management), CPG grant funds, and other funds as available. In addition to these regular and ongoing activities, special or one-time activities in the future, such as evaluating yard and food waste diversion or conducting surveys to evaluate the performance of waste reduction and recycling programs (see also Alternative H in the Waste Reduction chapter for more on monitoring methods), will require additional funds. Conducting the special activities may require additional grant funds to implement, such as the "offset cycle" CPG grants.

8.4. EVALUATION OF ADMINISTRATION ALTERNATIVES

Review of Rating Criteria

The above alternatives can be evaluated according to several key criteria, including consistency with solid waste planning goals, technical and political feasibility, and the relative cost-effectiveness of the alternative. Based on the ratings for these criteria, each alternative can be given an overall rating and a decision can then be made as to whether to pursue it or not.

Consistency with Solid Waste Planning Goals: Both of these alternatives support the goals for this Plan.

Feasibility: Alternative A (hiring staff) is considered highly feasible, in part due to the idea that a staff person dedicated to implementing the City System would help ensure that the System functions as intended. Alternative B (the use of a collection surcharge and grants as funding sources) is rated medium due to the concern that activities could be limited by the availability of funds.

Cost Effectiveness: Alternative A (hiring staff) is considered cost-effective, whereas Alternative B (the use of a collection surcharge and grants as funding sources) is rated medium again due to the concern that activities could be limited by the availability of funds.

Rating of Alternatives

The evaluation of the alternatives is summarized in the following table.

Table 8-1
Rating of the Administration Alternatives

Alternative	Consistency with Planning Goals	Feasibility	Cost-Effectiveness	Overall Rating
A, Hire new staff	H	H	H	H
B, Use collection surcharge and grants for funding City System	H	M	M	M

Rating Scores: H – High, M – Medium, L – Low

8.5 ADMINISTRATION RECOMMENDATIONS

The following recommendations are being made for administration programs:

High-Priority Recommendations

A1) The City will provide a solid waste system that is in compliance with applicable laws and regulations, and that is responsive to the needs of City residents and businesses. A part-time staff person may be hired to help ensure the solid waste system is implemented properly.

A2) The City will enact a covered-load law by adopting an Ordinance in 2015.

Medium-Priority Recommendations

A3) The additional expenses incurred to implement the City's solid waste system will be funded by a surcharge on waste collection fees and grant funds.

The City of Liberty Lake is the lead agency for both of these recommendations, which was implemented November 2014. The funding source is defined above, plus CPG funds can be used when the City becomes eligible for those.

CHAPTER 9

IMPLEMENTATION PLAN

9.1. INTRODUCTION

This chapter lists all of the recommendations from previous chapters and presents a plan to implement the recommendations. These recommendations are intended to guide decision-making activities for Liberty Lake for the next ten years, while also providing direction for the next 20 years. Implementation of individual program elements will be accomplished through annual budgets and contracts.

9.2. WASTE REDUCTION RECOMMENDATIONS

The following recommendations are being made for waste reduction programs (see Chapter 3 of the Plan for more details).

High-Priority Recommendations

WR1) The City of Liberty Lake will develop a five-year work plan to annually monitor waste reduction alternatives and implement priorities. The work plan will leverage other programs, collaborate with other agencies, and participate in regional programs to ensure Liberty Lake is partnering for efficient and best management practices of industry standards.

WR2) The City of Liberty Lake will evaluate product stewardship programs as these are proposed on a statewide or national level, and support those if appropriate to the interests of their citizens and the business community.

WR3) The business community in Liberty Lake may be encouraged to reduce waste through a recognition program that publicizes success stories.

WR4) The City of Liberty Lake will adopt policies and practices to encourage City departments to reduce waste.

Medium-Priority Recommendations

WR5) Public education materials distributed by the City of Liberty Lake will include information on alternative handling methods for yard waste, the value of "smart shopping" methods, how to avoid wasting food, and the availability of volume-based garbage collection fees.

WR6) The City of Liberty Lake will continue to promote the citywide garage sale as a community event.

9.3. RECYCLING AND ORGANICS RECOMMENDATIONS

The following recommendations are being made for recycling and organics collection programs (see Chapter 4 for more details).

High-Priority Recommendations

R1) City residents and businesses will be encouraged to use the designated transfer station for yard waste and organics ("Clean Green") drop-off services.

Medium-Priority Recommendations

R2) The City will evaluate the best approaches for increased diversion of yard and food waste in the future, if necessary.

9.4. SOLID WASTE COLLECTION RECOMMENDATIONS

The following recommendations are being made for waste collection programs (see Chapter 5 for more details).

Medium-Priority Recommendations

C1) Educate the public on the benefits and options of curbside collection services.

C2) The need for mandatory garbage collection services may be evaluated in the future.

9.5. TRANSFER AND DISPOSAL RECOMMENDATIONS

Pursuant to the City's agreement with Waste Management, the following recommendation is being made for transfer and disposal programs (see Chapter 6 for more details).

High-Priority Recommendations

D1) The Sunshine Transfer Station has been designated as the disposal system for all solid waste from Liberty Lake, effective November 17, 2014.

9.6. SPECIAL WASTE RECOMMENDATIONS

The following recommendations are being made for special waste programs (see Chapter 7 for more details).

High-Priority Recommendations

SW1) Proper disposal options for residential sharps (syringes) will be promoted through a cooperative effort between the City of Liberty Lake, the Spokane Regional Health District ("Health District"), and the waste collectors.

SW2) Green building practices will be promoted by distributing brochures and publicizing other sources of information.

9.7. ADMINISTRATION RECOMMENDATIONS

The following recommendations are being made for administration programs (see Chapter 8 for more details).

High-Priority Recommendations

A1) The City will provide a solid waste system that is in compliance with applicable laws and regulations, and that is responsive to the needs of City residents and businesses. A part-time staff person will be hired to help ensure the solid waste system is implemented properly.

A2) The City will enact a covered-load law by adopting an Ordinance in 2015.

Medium-Priority Recommendations

A3) The additional expenses incurred to implement the City's solid waste system will be funded by a surcharge on waste collection fees and grant funds.

9.8. TEN-YEAR IMPLEMENTATION SCHEDULE

The proposed implementation schedule is shown in Table 9-1.

9.9. IMPLEMENTATION RESPONSIBILITIES

The City of Liberty Lake is primarily responsible for most of the recommendations made in this Plan, but that responsibility is shared with others as appropriate to the nature of the recommended activity. Implementation responsibilities for the recommended activities are summarized in Table 9-2.

Table 9-1
Implementation Schedule for Recommendations

Recommendation	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Chapter 3, Waste Reduction										
WR1) Develop a Five-Year Work Plan to Monitor Waste Reduction										
WR2) Support product stewardship programs as appropriate										
WR3) Business waste reduction recognition program										
WR4) Adopt city waste reduction policies	X									
WR5) Promote waste reduction and other programs										
WR6) Promote citywide garage sale as a community event										
Chapter 4, Recycling and Organics										
R1) Encourage use of Sunshine Transfer Station for Clean Green										
R2) Evaluate yard and food waste diversion			X	X						
Chapter 5, Solid Waste Collection										
C1) Educate public about benefits of waste collection services										
C2) Evaluate need for mandatory collection at later date				X						
Chapter 6, Transfer and Disposal										
D1) Designate Sunshine Transfer Station as the disposal site for all waste from Liberty Lake										
Chapter 7, Special Wastes										
SW1) Promote proper disposal of residential sharps										
SW2) Promote green building										
Chapter 8, Administration										
A1) Manage solid waste system										
A2) Enact covered-load law										
A3) Fees and grants for funding sources										

X – Indicates a singular or short-term event  – Shading indicates ongoing activities.

Table 9-2
Implementation Responsibilities for Recommendations

Recommendation	City	Health District	Waste Haulers	Others
Chapter 3, Waste Reduction				
WR1) Develop a Five-Year Work Plan to Monitor Waste Reduction	X			
WR2) Support product stewardship programs as appropriate	X			
WR3) Business waste reduction recognition program	X			O
WR4) Adopt city waste reduction policies	X			
WR5) Promote waste reduction and other programs	X			
WR6) Promote citywide garage sale as a community event	X			
Chapter 4, Recycling and Organics	X			
R1) Encourage use of Sunshine Transfer Station for Clean Green	X			
R2) Evaluate yard and food waste diversion	X		O	
Chapter 5, Solid Waste Collection			O	
C1) Educate public about benefits of waste collection services	X		O	
C2) Evaluate need for mandatory collection at later date	X			
Chapter 6, Transfer and Disposal				
D1) Designate Sunshine Transfer Station as the disposal site for all waste from Liberty Lake	X			
Chapter 7, Special Wastes				
SW1) Promote proper disposal of residential sharps	O	X		O
SW2) Promote green building	X			
Chapter 8, Administration				
A1) Manage solid waste system	X			
A2) Enact a covered-load law by adopting an Ordinance in 2015.				
A3) Fees and grants for funding sources	X			

X – indicates primary responsibility. O – indicates secondary responsibility.

9.10. FUNDING STRATEGY

The recommended programs will be funded through garbage rates, tipping fees, a collection surcharge, user fees, and State grants (CPG funds). It should be noted here that none of the recommendations in this Plan require additional construction or other

capital acquisition activities, and so the costs addressed in this Plan are solely for operating expenses for a variety of programs. A summary of the funding sources for the recommended programs is shown in Table 9-3.
Garbage rates will be used to fund waste collection, curbside recycling and commercial recycling programs. Tipping fees will be used for the recommended waste reduction, transfer, transport and disposal, household hazardous waste, and administration. Special user fees will fund small quantity generator and other special waste programs.

Table 9-3
Funding Strategies for Recommendations

Project or Activity	Garbage Rates, Other User Fees	Tipping Fees	Collection Surcharge	Grants	Other Funding as Available
Waste Reduction			X	X	X
Recycling and Organics	X	X			
Solid Waste Collection	X				
Transfer and Disposal	X	X			
Special Wastes			X	X	X
Administration			X		X

9.11. TWENTY-YEAR IMPLEMENTATION SCHEDULE

It is anticipated that programs and facilities in Liberty Lake will generally be able to stay on the course established by this Plan for the next twenty years. The waste stream for the City is not expected to increase so much (see Table 2-6) as to create capacity issues for the collection and disposal system that the City is proposing to use. The recently-executed contracts with Waste Management and Sunshine Disposal will provide collection and disposal services for at least the next ten years (with additional six-year extensions possible). Recycling and organics collection services will continue to be provided through the collection contract. Hence, the twenty-year implementation strategy is much the same as the implementation details shown in the previous tables in this chapter. Changes will likely continue to occur, however, in the local, statewide and national solid waste arena, and should any of these changes require an amendment or revision to this Plan, then the steps described in the next section can be taken to address those.

9.12. PROCEDURES FOR AMENDING THE PLAN

The Solid Waste Management-Reduction and Recycling Act (Chapter 70.95 RCW) requires local governments to maintain their solid waste plans in current condition. Plans must be reviewed every five years and revised if necessary. Assuming a timely adoption process for this Plan, with the process completed in early 2015, this Plan should be reviewed and, if necessary, revised or amended in 2020 or 2021. According to Ecology's guidelines[4], "amendments" are more minor changes that generally occur within the five-year time period after a solid waste plan is approved, whereas "revisions" are more significant changes that could require more opportunities for public review and comment.

Individuals or organizations wishing to propose Plan amendments before the scheduled review process must petition the City of Liberty Lake in writing. The petition should describe the proposed amendment, its specific objectives, and explain why immediate action is needed prior to the next scheduled review. The City Administrator or their designee will investigate the basis for the petition and prepare a recommendation for the City Council.

If the City Administrator or designee decides that the petition warrants further consideration, the City Administrator or designee will draft a proposed amendment. This process will also be used if City staff initiate amendments to the Plan. The proposed amendment must be submitted to the City Council and undergo the normal review and approval process for this type of Plan amendment. As an amendment, a SEPA Checklist will likely not be necessary, but the proposed amendment should be reviewed by Ecology (the extent and timing for their review should be determined at a later date on a case-by-case basis). Once adopted, the amendment should be submitted to Ecology for review and approval.

The City Administrator or designee may develop reasonable rules for submitting and processing proposed Plan amendments, and may establish reasonable fees to investigate and process petitions. All appeals may be brought to the City Council.

Minor changes that may occur in the System, whether due to internal decisions or external factors, can be adopted without the need to go through a formal amendment process.

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

[4] Guidelines for Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions, by the Washington Department of Ecology, February 2010, Publication #10-07-005.

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

GLOSSARY

The following definitions are provided for various terms used in the *Liberty Lake Solid Waste Management Plan*:

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

Buy-back recycling center: a facility that pays people for recyclable materials.

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

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

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

CPG: Coordinated Prevention Grants, a grant program administered by the Washington State Department of Ecology.

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

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

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

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

HDPE: high-density polyethylene, a type of plastic commonly used in milk, detergent, bleach bottles and other containers. Also used for products that line and cap landfills.

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

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

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

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

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

MSW: municipal solid waste (see also "solid waste").

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

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

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

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

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

RCW: Revised Code of Washington.

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

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

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

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

SEPA: State Environmental Policy Act.

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

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

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

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

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

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

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

UGA: Urban Growth Area, see the Liberty Lake Comprehensive Plan for more details.

UTC: Washington Utilities and Transportation Commission.

WAC: Washington Administrative Code.

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

White goods: large appliances such as refrigerators.

Yard debris: includes leaves, grass clippings, brush and branches.

ATTACHMENT A

ENVIRONMENTAL CHECKLIST

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SEPA CHECKLIST

Liberty Lake Planning & Building Services
22710 E. Country Vista Drive, Liberty Lake WA 99019
Phone: (509) 755-6707 Fax: (509) 755 6713
Website: www.libertylakewa.gov

City Development Code Article 10-6A, Environmental Ordinance

PURPOSE OF CHECKLIST

The State Environmental Policy Act (SEPA) chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impact from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

INSTRUCTIONS FOR APPLICANTS

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts or your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write “do not know” or “does not apply”. Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

USE OF CHECKLIST FOR NON-PROJECT PROPOSALS

Complete this checklist for non-project proposals, even though questions may be answered “does not apply.” IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS (part D).

For non-project actions, the references in the checklist to the words “project,” “applicant,” and “property or site” should be read as “proposal,” “proposer,” and “affected geographic area,” respectively.

A. BACKGROUND

1.	Name of proposed project & file #, if applicable:	Liberty Lake Solid Waste Management Plan
2.	Name of applicant: City of Liberty Lake	
3.	Address and phone number of applicant:	22710 E. Country Vista Drive, Liberty Lake, WA 99019, 509-755-6700
4.	Name of contact person: Katy Allen, City Administrator	
5.	Address and phone number of contact person:	22710 E. Country Vista Drive, Liberty Lake, WA 99019, 509-755-6700
6.	Date checklist prepared: September 26, 2014	
7.	Agency requesting checklist: Washington Department of Ecology	
8.	Proposed timing or schedule (including phasing, if applicable):	The recommendations contained in the Solid Waste Management Plan will be implemented primarily over the next five years.
9.	a. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. NA	
	b. Do you own or have options on land nearby or adjacent to this proposal? If yes, explain. NA	
10.	List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. NA	
11.	Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. NA	
12.	List any government approvals or permits that will be needed for your proposal, if known. This Plan must be adopted by the Liberty Lake City Council and then the Washington Department of Ecology must approve the plan.	
13.	Give a 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. Recommendations are made in this Plan for solid waste and other aspects of the solid waste management	

system. Recommended actions include management policies, education and promotion, assignment of implementation responsibilities, and a funding strategy.

14. 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 application related to this checklist.

    The activities described in the plan will take place within the City of Liberty Lake.

15. Does the proposed action lie within the Aquifer Sensitive Area (ASA)? The General Sewer Service Area? The Priority Sewer Service Area? (See: Spokane County's ASA Overlay zone Atlas for boundaries).

    Yes, the activities described in the plan will take place throughout the City of Liberty Lake.

B. ENVIRONMENTAL ELEMENTS:

1. EARTH

a. General description of the site (circle one): flat, rolling, hilly, steep slopes, mountainous, other:

Does not apply

b. What is the steepest slope on the site (approximate percent slope)? Does not apply

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

Does not apply

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

Does not apply

e. Describe the purpose, type 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 type of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial, wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known. No changes to current emissions related to solid waste services
	b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. Does not apply
	c. Proposed measures to reduce or control emissions or other impacts to air, if any: Does not apply
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. Does not apply
	2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. Does not apply
	3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. Does not apply
	4) Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known. Does not apply
	5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. Does not apply
	6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Does not apply

b. Ground:

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

Does not apply

2) Describe waste material that will be discharged into the ground from septic tanks or other sanitary waste treatment facility. Describe the general size of the system, the number of houses to be served (if applicable), or the number of persons the system(s) are expected to serve.

Does not apply

3) Describe any systems, other than those designed for the disposal of sanitary waste, installed for the purpose of discharging fluids below the ground surface (including systems such as those for the disposal of storm water or drainage from floor drains). Describe the type of system, the amount of material to be disposed of through the system and the types of materials likely to be disposed of (including materials which may enter the system inadvertently through spills or as a result of fire fighting activities).

Does not apply

4) Will any chemicals (especially organic solvents or petroleum fuels) be stored in above-ground or underground storage tanks? If so, what types and quantities of materials will be stored?

Does not apply

5) What protective measures will be taken to ensure that leaks or spills of any chemicals stored or used on site will not be allowed to percolate to groundwater (this includes measures to keep chemicals out of disposal systems described in 3b(2) and 3b(3)?

Does not apply

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.

Does not apply

2) Will any chemicals be stored, handled or used on the site in a location where a spill or leak will drain to surface or groundwater or to a storm water disposal system discharging to surface or groundwater?

Does not apply

3) Could waste materials enter ground or surface waters? If so, generally describe.

Does not apply

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

proposed action lies within the Aquifer Sensitive Area be especially clear on explanations relating to facilities concerning Sections 3b(4), 3b(5), and 3c(2) of this checklist).

Does not apply

4. PLANTS

a. Check types of vegetation found on the site:

☐ deciduous tree: alder, maple, aspen, other

☐ evergreen tree: fir, cedar, pine, other

☐ shrubs

☐ grass

☐ pasture

☐ crop or grain

☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

☐ water plants: water lily, eelgrass, milfoil, other

☐ other types of vegetation:

Does not apply

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

Does not apply

c. 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. Check 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:

mammals: ☐ deer ☐ bear ☐ elk ☐ beaver ☐ other:

fish: ☐ bass ☐ salmon ☐ trout ☐ herring ☐ shellfish ☐ other:

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: Does not apply
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. Does not apply
	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. Does not apply
	1) Describe special emergency services that might be required. Does not apply
	2) Proposed measures to reduce or control environmental health hazards, if any: Does not apply
	b. Noise
	1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? Does not apply
	2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

	Does not apply
	3) Proposed measure 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, which? Does not apply
	e. What is the current zoning classification of the site? Does not apply
	f. What is the current Comprehensive Plan land use 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, middle, or low-income housing. Does not apply
	c. Proposed measures 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 measures to reduce or control aesthetic impacts, if any: Does not apply
11.	LIGHT AND GLARE
	a. What type of light or glare will the proposal 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. Does not apply
	c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: Does not apply
13.	HISTORIC AND CULTURAL PRESERVATION
	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 impacts, 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. Does not apply
	b. Is site currently served by 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.

Does not apply

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

Does not apply

15. PUBLIC SERVICES

a. Would the project result 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 services, if any.

Does not apply

16. UTILITIES

a. Check utilities currently available at the site:

☐ electricity ☐ natural gas ☐ water ☐ refuse service ☐ telephone ☐ sanitary sewer

☐ septic system ☐ other:

Does not apply

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

Does not apply

C. SIGNATURE

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

Proponent:	**Katy Allen**		
	PRINT NAME	SIGNATURE	
Proponent Address:	**22710 E Country Vista Drive, Liberty Lake, WA 99019**		
	STREET ADDRESS	CITY	STATE ZIP
Proponent Phone:	**509-755-6700**	**Proponent Fax:**	**509-755-6713**
Person completing the form:	**Rick Hlavka, Green Solutions**		
Phone:	**360-897-9533**	**Date**:	**9-25-14**

FOR PLANNING & BUILDING SERVICES USE ONLY

Staff Member(s) Reviewing Checklist: Katy Allen, City Administrator

Date Checklist Reviewed: October 6, 2014

Based on this staff review of the environmental checklist and other pertinent information, the staff:

Concludes that there are no probable significant adverse impacts and recommends a determination of nonsignificance (DNS).

REFER TO FEE SCHEDULE FOR FILING FEE

NON-PROJECT ACTIONS MUST ALSO COMPLETE THE SUPPLEMENTAL SHEET - PART D

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 recommendations should help reduce the amount of water and air discharges, while increasing the proper handling of any solid or toxic wastes that are generated in the City. There should not be a significant increase or reduction in noise as a result of the recommendations.

   Proposed measures to avoid or reduce such increases are:

   Not Applicable.

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

   Any impacts to plants, animals, fish and marine life will only be incidental and should be beneficial.

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

   Not Applicable.

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

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

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

   Not Applicable.

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, flood plains or prime farmlands?

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

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

   Not Applicable.

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

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

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

   Not Applicable.

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

   The proposed recommendations should lead to minor reductions in transportation requirements and public services. Transportation of solid waste out of the city should be lessened by increased waste reduction and recycling.

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

   Not Applicable.

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

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

ADOPTION ORDINANCE

PENDING (this section will contain the City's Ordinance adopting this Plan, which will be nearly the final step of the process).