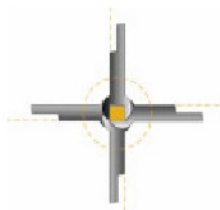


Update of the Lincoln County, Oregon Integrated Solid Waste Management Plan



*Prepared for Lincoln County
and the
Lincoln County Solid Waste
District*

Submitted by:



**Zia Engineering
& Environmental**

**Consultants, LLC.
1700 Woodland Terrace
Lake Oswego, Oregon 97034
Phone (503) 675 – 2705
Fax (503) 675 – 2705**

In association with:

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Appendix: Executive Summary / Final Draft Version

Update of Lincoln County, OR
Integrated Solid Waste Management Plan (Plan or ISWMP)
Final Draft

1.0 Introduction

Section 1 discusses the reasons for updating the County's ISWMP and the process undertaken to complete the final document for adoption by the Board of Commissioners.

The Update of the Lincoln County ISWMP was prepared for the County and the Lincoln County Solid Waste District (District) by Zia Engineering & Environmental Consultants, LLC. and URS Corporation (Zia / URS). The main purposes of the Plan Update include the following:

- Define the common principles, goals, and action agenda that will engage the key involved parties in a unified manner. Those parties are understood to be the District, the County, the cities, the Lincoln County Haulers Association (LCHA), and the Solid Waste Advisory Committee (SWAC).
- Determine the future status of the Solid Waste District. Define any proposed revised institutional arrangement, relationship, or structure impacting the District and other involved parties. Provide rationale for changing the status quo.
- Discuss the broad roles and responsibilities of the involved parties in carrying out the recommended solid waste management principles, goals and action agenda.
- Assess the advantages and disadvantages of using the disposal surcharge or other mechanisms to fund the District or a replacement entity. Offer recommendation for future financing method if justified by analysis.

2.0 Description of the County

Section 2 summarizes the unique features of Lincoln County such as the following: physical characteristics, current and projected population, economic base, transportation corridors, and political structure.

2.1 Physical Characteristics

2.2 Current and Projected Population

Based on data from the Population Research Center at Portland State University, the estimated population for the County as of July 1, 2003 was 45,000. Estimated populations for the incorporated cities as of that date were: Newport – 9,740; Lincoln City – 7,420; Toledo – 3,580; Waldport – 2,060; Depoe Bay – 1,230; Siletz – 1,130; and Yachats – 670. This totals to 25,830 or 57% of the residents living in the seven incorporated cities and 19,170 residents living in County unincorporated areas.

Table 1 portrays population trends in Lincoln County from 1990 to 2002 on a countywide and city – by – city basis. The estimated countywide population as of July 1, 2002 was 44,700 while the 2000 census counted 44,479 residents, resulting in an increase of 221 or 0.5%. For the County as a whole the population increased an average of 1.1 percent annually during the 1990 to 2002 time period. This slow rate of population growth is also evident in the data for each jurisdiction.

**Table 1: Lincoln County Population Trends
April 1, 1990 to July 1, 2002**

	July 1 Population Estimates	July 1 Population Estimates	July 1 Population Estimates	April 1 Census Count	April 1 Census Count
Time Period	2002	2001	2000	2000	1990
STATE	3,504,700	3,471,700	3,436,750	3,421,399	2,842,321
County and Cities					
LINCOLN COUNTY	44,700	44,650	44,600	44,479	38,889
Depoe Bay	1,200	1,190	1,180	1,174	870
Lincoln City	7,420	7,420	7,480	7,437	5,903
Newport	9,650	9,660	9,565	9,532	8,437
Siletz	1,130	1,130	1,135	1,133	992
Toledo	3,560	3,540	3,480	3,472	3,174
Waldport	2,060	2,060	2,065	2,050	1,595
Yachats	670	630	620	617	533
Uninc. County	19,010	19,020	19,075	19,064	17,385

<http://www.upa.pdx.edu/CPRC/publications/annualorpopulation/2002OregonPopReport.xls>

2.3 Economic Base

2.4 Transportation Corridors

2.5 Political Structure

3.0 Status of Existing Countywide Solid Waste Management System

Section 3 provides background information on the current methods of disposing and recovering solid waste generated in the County, including the following:

- 2002 recovery data and related analysis, based on information available from the Oregon Department of Environmental Quality (DEQ).
- Waste quantity / composition data and related analysis, based on waste generation and / or disposal information available from DEQ.

- Roles and responsibilities of key involved parties / stakeholders such as private sector service providers, the District, the County, the cities, and the SWAC.
- Discussion of programs, policies, arrangements, and facilities related to waste disposal, residential recycling, commercial recycling, utilization of yard and wood wastes, management of non-hazardous special wastes, and illegal dumping.
- Discussion of education, promotion, and outreach activities.

3.1 2002 Recovery Rate

The recovery rate for a county or “wasteshed” in Oregon is determined according to the following definitions, formulas, and guidelines:

- Tons recovered = total tons recycled, composted / mulched, and used for energy
- Tons generated = tons disposed + tons recovered
- Calculated recovery rate = tons recovered ÷ tons generated
- Total recovery rate = calculated recovery rate + additional percentage credits allocated by DEQ based on documentation submitted by county / wasteshed regarding programs for waste prevention, backyard composting, and reuse (2% in supplemental recovery credits allowable per program for a potential total of 6%)

Table 2 gives an overview of the 2002 disposed and recovered tonnages from the County based on data submitted to DEQ by the District and the LCHA. DEQ reviewed and revised the data, attributing more recovered

tonnage to the County based partly on information obtained from intermediate and end – use private sector materials markets in northwestern Oregon.

Table 2: Lincoln County 2002 Recovery Rate Summary

Tons	County Haulers Assoc.	Solid Waste District	Valley Landfill	DEQ/ Other	Totals
Recovered	7,571	2,685	20	4,886	15,161
Disposed	40,134		542		40,676

The total tonnage generated in the County for 2002 was 55,837. The calculated recovery rate was 27% but 2% in extra credits was received for the Backyard Composting Program operated by the District so the final recovery rate was 29%. HB 3744 (2001) set the recovery goals for Lincoln County at 19% in 2005 and 20% in 2009. Thus it is clear that as of 2002 the County had already exceeded the 2009 goal by nearly 10%.

This significant achievement is reflected in the broad range of materials recovered from the County due largely to the efforts of the LCHA and the District as well as participating residential and commercial generators. Table 3 portrays the quantities / types of recovered materials from Lincoln County and indicates that of the total recovered tons for 2002 (15,161), 28% was used for energy and 72% was recycled.

Within Lincoln County there is a local market for yard debris and wood waste – the Georgia – Pacific mill in Toledo – where this material is used as a fuel source. To facilitate the recovery and use of yard / wood wastes, the District and the company arranged for the provision of Georgia – Pacific property in Toledo for the processing and temporary storage of these materials. The site offers a free opportunity to the public, contractors, and the haulers to deliver lumber, brush, pruned branches, stumps, shipping pallets, and other clean woody debris for recovery. Georgia – Pacific contracts with a private processor to grind the material and then uses its own vehicles for transporting it to the mill. Other sites for the recovery of yard /

wood wastes are the Dahl and Dahl, Inc. Waldport Transfer Station, the Thompson Sanitary Transfer Station, and a transfer station operated by North Lincoln Sanitary.

Another important reason for the County's current recovery rate surpassing the 2009 goal is that the LCHA offers curbside residential recycling service in five of the seven incorporated cities (Newport, Lincoln City, Toledo, Waldport, and Yachats) and maintains recycling drop – off centers in several locations throughout the County, as discussed below. The LCHA members also offer commercial recycling resulting in the large amount of recovered cardboard documented in Table 3.

Table 3: 2002 Recovery by Material Type

Materials	2002 Tons
Aluminum	255
Grease	833
Antifreeze	12
Cardboard	4479
Glass	1495
Electronics	23
Fluorescent Lamps	0.3
High-Grade Paper	69
Lead Acid Batteries	153
Mixed Waste Paper	208
Newspaper	1602
Rechargeable Batteries	0.4
Latex Paint	13
Plastic Film	9
Plastic Bottles	118
Scrap Metal	988
Solvents	2
Tin / Aluminum	77
Tires	271
Motor Oil	341
Wood Waste	1537
Yard Debris	2675
Total Recovered	15,161
Total Disposed	40,676
Total Generated	55,837

3.2 Disposed Waste Quantities and Composition

Section 2.2 discussed the notably stable population and low growth rate in Lincoln County, as documented through data maintained by the Population Research Center at Portland State University. For example, the April, 2000 census figure for the County was 44,479, while the estimated population as of July, 2002 was 44,700, a difference of 221 or a percentage change of 0.5 percent. The estimated population as of July, 2003 was 45,000 while the

April, 1990 census count was 38,889, a difference of 6,111 or about 16 percent. Thus on average for the period 1990 to 2003 the County's population grew slightly more than 1 percent per year.

Based on the DEQ material recovery database for 2002, the County's calculated recovery rate during the period 1992 to 2002 ranged from a low of 16 percent in 1996 to a high of 28 percent in 2001. The average calculated recovery rate over that timeframe was 21 percent. The combination of a low population growth rate and a recovery rate exceeding required levels has in effect controlled the quantities of disposed waste at relatively stable amounts. As measured by the tons of County waste disposed at Coffin Butte Landfill presented in Table 4, the disposed tonnage from 1997 to 2003 has varied from approximately 38,000 to 40,500 annually and consistently stayed within that narrow range.

Table 4: Lincoln County Disposed Waste Tonnage, 1997 - 2003

	1997	1998	1999	2000	2001	2002	2003
January	3,032	2,873	3,061	3,134	3,051	2,905	3,110
February	2,757	2,848	2,809	2,626	2,658	2,721	2,812
March	2,982	3,306	3,547	3,374	2,888	3,157	2,939
April	3,314	3,301	3,454	2,917	3,042	3,356	3,290
May	3,481	3,146	3,138	3,390	3,251	3,460	3,316
June	3,470	3,576	3,683	3,607	3,271	3,407	3,445
July	4,221	4,246	3,897	3,781	3,559	4,228	3,972
August	4,131	3,906	4,142	4,247	4,124	4,111	3,953
September	3,965	3,721	3,710	3,715	3,028	3,549	3,820
October	3,552	3,457	3,101	3,173	3,542	3,561	3,448
November	2,665	2,789	3,020	2,907	2,948	2,803	2,777
December	2,994	3,144	2,516	2,590	2,683	2,874	3,379
Annual Total	40,564	40,312	40,078	39,460	38,046	40,134	40,261

However, DEQ also tracks the per capita disposal rate by watershed. For 2002 Lincoln County had the fourth highest per capita disposal rate out of the thirty – five watersheds in the state at 1,820 pounds per person per year. This is a 4.6% increase over the 2001 figure of 1,740 pounds per person per

year. The statewide average for 2002 was 1,557 pounds / person / year while Deschutes and Clatsop Counties were first and third in this ranking at 2,052 and 1,870 pounds per person per year respectively. The most likely explanation for these figures is that they reflect the significant role of tourism in the economies of Lincoln, Deschutes, and Clatsop Counties and how it impacts the per capita disposal rate in each one. This conclusion is further supported by the data in Table 4 referenced above which shows disposed tonnage increasing during the months of June to mid – September throughout the 1997 – 2003 time period.

Information about the composition of disposed waste from Lincoln County according to material category / type is not available. However, DEQ periodically conducts a study to characterize the disposed wastestream on a statewide basis. The most recent study was performed in 2002 based on actual sampling of waste loads from all over the state but only a few samples from each location in proportion to the amount of garbage being directly disposed at that location. Six waste load samples from Lincoln County were used in the 2002 study – two from route trucks, one from uncompacted waste in a drop box, and three from self – haul sources.

It is not valid to describe the County’s entire disposed wastestream based on just these six sampled waste loads. What can be done is to construct an illustrative model of the County’s disposed wastestream by applying the statewide composition percentages according to material category / type from the 2002 study to the tons of disposed refuse from Lincoln County in 2002 (Table 4). This illustrative model is presented as Table 5 below and it provides an approximation of what material quantities / types are likely to be found in the County’s disposed wastestream. Another way of assessing Table 5 is that reflects the effects of recovery programs by showing what remains in the disposed wastestream and therefore indicating the quantities and types of materials still available for recovery. For example, Table 5 identifies food waste as the biggest component of the disposed wastestream. This seems accurate for Lincoln County since there are no programs for

Table 5: Disposed Waste Composition Model for Lincoln County

Category	Sub-category	% by weight	Weight (tons)
Paper	Cardboard / brown bags	2.7%	1,084
	Newspaper	1.6%	642
	Magazines	1.2%	482
	High-grade paper	1.7%	682
	Low-grade paper	4.2%	1,686
	Non-recyclable paper	4.7%	1,886
	Paper subtotal		16.1%
Plastics	Rigid plastic containers	1.3%	522
	Other plastic packaging	2.9%	1,164
	Rigid plastic products	2.1%	843
	Recyclable plastic film	1.0%	401
	Other plastics	1.6%	642
	Plastic subtotal		8.9%
Organics	Yard debris	6.6%	2,649
	Wood	8.6%	3,452
	Food	16.4%	6,582
	Diapers	2.1%	843
	Carpet	1.9%	763
	Textiles	2.9%	1,164
	Roofing / tarpaper	3.8%	1,525
	Other	3.5%	1,405
Organics subtotal		45.8%	18,381
Glass	Glass containers	1.6%	642
	Other glass	0.7%	281
	Glass subtotal		2.3%
Metals	Aluminum cans, foil, etc.	0.3%	120
	Tin cans	0.8%	321
	Non-ferrous metal	0.1%	40
	Ferrous metal	1.7%	682
	Computers, TVs, small appliances	2.0%	803
	Other metals	2.4%	963
	Metals subtotal		7.3%
Other Inorganics	Rock, concrete, brick	2.6%	1,043
	Soil, sand, dirt	1.1%	441
	Pet litter, animal waste	1.7%	682
	Gypsum wallboard	4.6%	1,846
	Other inorganics	3.0%	1,204
	Other inorganics subtotal		13.0%
Household Hazardous Waste		0.7%	281
Residue		6.0%	2,408
Total		100%	40,134

Note: Percentages have been rounded. Total tons based on 2002 value of 40,134 tons. Subtotal sum may not equal total tons due to percentage rounding.

Household hazardous waste includes latex paint, oil paints & thinners, pesticides & herbicides, motor oil, fuels, adhesives & sealants, caustic cleaners, lead acid & dry cell batteries.

recovering food waste in the County and there are a large number of restaurants serving both visitors and residents.

3.3 Franchised Waste Service Providers

There are four franchised waste service providers operating in Lincoln County: Dunn LeBlanc, Inc. dba North Lincoln Sanitary, Dahl Disposal Service, Inc., Thompson Sanitary Service, Inc., and Lindsay's Sanitary Service, Inc. North Lincoln Sanitary, Dahl Disposal Service and Thompson Sanitary Service are members of the Lincoln County Haulers Association while Lindsay's Sanitary Service is not currently a member. Except for Lindsay's Sanitary Service, each hauling company has their own contract for disposal of Lincoln County waste at Coffin Butte Landfill near Corvallis in Benton County. The LCHA as an organization does not maintain a waste disposal contract with the landfill. The various franchises held by the four companies do not direct the haulers to take waste to a specific landfill. With the exception of the single – family residential sector in Lincoln City, refuse collection service is not required by the jurisdictions. Generators may transport their own waste to a transfer station operated by one of the franchised service providers or may subscribe on a voluntary basis to regular refuse and / or recycling pick – up.

Lindsay's Sanitary Service takes refuse to the transfer station operated by Dahl and Dahl, Inc. in Toledo. Lindsay's Sanitary Service has a franchise with the City of Siletz and with the County for service in unincorporated County areas. Lindsay's Sanitary does not operate any refuse transfer or recycling sites and does not haul waste directly to Coffin Butte Landfill.

Dunn LeBlanc / North Lincoln Sanitary holds three franchises with the City of Lincoln City, the City of Depoe Bay, and Lincoln County for County unincorporated areas. The firm operates a recycling center on Highway 101 in Lincoln City; a recycling center behind the Depoe Bay City Hall; and a transfer station located in an unincorporated County area near Lincoln City. At the main recycling center on Highway 101 the following materials are

accepted: glass containers, tin cans, aluminum cans, plastic bottles, tubs, and bags, newspapers, cardboard, magazines, scrap paper, and motor oil. The Depoe Bay recycling center accepts glass containers, tin cans, aluminum cans, newspapers, and cardboard.

North Lincoln Sanitary provides curbside residential recycling service in Lincoln City. Residents are instructed to place motor oil and color – sorted glass bottles / jars in separate containers. Otherwise all other materials can be commingled together and set out for collection. These materials are newspapers, cardboard, scrap paper (magazines, catalogues, junk mail, cereal boxes), plastic bottles, aluminum cans, tin cans.

Thompson Sanitary Service has a franchise with the City of Newport and with Lincoln County for certain unincorporated County areas. The firm operates a transfer station / recycling center in Newport. Materials accepted for recycling at the facility include newspapers, cardboard, office paper, shredded paper, scrap paper, magazines, glass containers, aluminum cans, tin cans, plastic bottles, wood waste, car batteries, tires, paint, and motor oil. Thompson Sanitary provides curbside residential recycling collection for newspapers, cardboard, scrap paper, magazines, glass containers, aluminum cans, tin cans, and motor oil.

Dahl Disposal Service has franchises with the Cities of Toledo, Waldport, and Yachats, and with Lincoln County for certain unincorporated County areas. Dahl and Dahl, Inc. operates a transfer station / recycling center in Toledo as well as in Waldport while Dahl Disposal Service offers curbside residential recycling service in all three cities where it is franchised. Materials picked up curbside include newspapers, cardboard, scrap paper, magazines, glass containers, aluminum cans, tin cans, and motor oil. Materials accepted at the two recycling centers include newspapers, cardboard, magazines, office paper, junk mail, glass containers, plastic bottles, aluminum cans, tin cans, motor oil, tires, batteries, ferrous metals, non – ferrous metals, and wood waste. Recycling of computers and paint has also recently been initiated on a test basis at the two recycling centers.

3.4 Solid Waste District

The Lincoln County Solid Waste District is a Chapter 451 County Service District. The District is the primary public sector entity in the County involved in managing solid waste on a countywide basis with an emphasis on overall solid waste management planning, waste reduction / recycling program promotion and technical assistance, and clean-up / prevention of illegal dumping. A twelve – member Solid Waste Advisory Committee (SWAC) advises the District in current and future waste management policies / programs. The SWAC membership consists of representatives from the seven incorporated cities and Lincoln County (eight total representatives) along with individuals representing the LCHA (one representative), the general public (two representatives), and waste reduction / recycling advocates (one representative).

As a Chapter 451 County Service District, it is the responsibility of the Lincoln County Board of Commissioners to serve as the governing body of the District. The District’s activities are currently funded by a \$4 / ton surcharge on disposed waste that is periodically supplemented by grant funds. The District does not own solid waste management facilities. The District provides solid waste management program assistance for any governmental entity which requests such services, including joint projects combining the efforts of the private haulers, the County, and one or more of the cities.

The Solid Waste District staff (1.5 FTE) and volunteers have been involved with sponsoring and promoting a variety of waste reduction / recycling activities such as:

- Wood and yard waste recovery / processing,
- Distribution of backyard composting bins and related education / information materials,

- Latex paint reclamation and resale,
- Separate recycling collection events for scrap metals, tires, and computers,
- Household hazardous waste collection events, and
- Presentations to students at schools in the County.

The County, the District, and the LCHA negotiated the first standardized rate review and reporting process to be undertaken in the County and cities (Uniform Rate Reporting Format). The District and the LCHA along with a representative from the County Board of Commissioners and the County Counsel have also initiated monthly meetings to more formally address common issues and cooperative actions.

3.5 Forest Enforcement Program

The District also provides partial funding for a County Sheriff's Officer to pursue enforcement of illegal dumping codes in non – federal, County unincorporated land. Additional funding for the Forest Enforcement Program Officer is provided by the eighteen members of the Association of Concerned Landowners and the Sheriff's Department. The District serves as a vehicle for coordination of the Forest Enforcement Program. Illegal dumping is a major concern of both the County Commissioners and city council members of the seven incorporated jurisdictions. The Association's interests go beyond solid waste issues and the Sheriff's Department has numerous law enforcement / crime prevention responsibilities. However, these organizations are partners with the District in the Forest Enforcement Program in order to focus on four common goals:

- Prevention of illegal dumping,

- Clean-up of existing and future dump sites,
- Protection of private and public lands from vandalism, theft and illegal drug activities, and,
- Preserving and increasing the public's opportunities for recreational access to private lands.

The table below portrays the broad range of activities undertaken over the past few years by the Sheriff's Department Officer assigned to the Forest Enforcement Program, including those related directly to the four goals noted above.

Table 6: Forest Enforcement Program Accomplishments, 1997-2003

Activity	1997	1998	1999	2000	2001	2002	2003
Dump Sites Found	65	61	55	66	38	68	53
Dump Sites Cleaned	9	46	23	49	23	43	38
Abandoned Vehicles	25	23	61	36	36	50	49
Thefts	15	18	15	14	11	6	615
Criminal Trespass	15	19	39	16	13	19	23
Criminal Mischief	14	22	22	16	32	30	18
Campsite Checks	24	26	13	68	55	67	45
Permit Checks	14	9	43	145	87	75	90
Arrests	28	19	20	176	60	42	128
Agency Assists	42	26	58	65	38	60	53
Totals	251	269	349	651	393	460	512

Miles driven	19,795	21,680	20,796	20,641	16,787	23,905	17,435
Investigation hours	77	494	714	649	537	673	730
Patrol hours	135	819	689	617	577	615	620
Training hours	140	63	63.5	40	54	72.5	55
Persons contacted	1,102	1,426	1,905	997	1,573	1,621	2,129

4.0 Solid Waste Management System Strengths, Weaknesses and Opportunities

Section 4 discusses the strengths and weaknesses of the County's solid waste management system incorporating quantitative factors such as the 2002 material recovery level and qualitative factors such as communication, coordination, and cooperation among key involved parties / stakeholders. Section 4 also identifies issues, needs, and priorities for recommended actions and includes consideration of the following topics:

- The proposal from the LCHA to expand their role and responsibilities in the system.
- The relationship between the County, the cities, the SWAC, Solid Waste District and the LCHA as the key parties involved in the County solid waste management system.
- Roles and responsibilities of the key parties.
- Use of the \$4 / ton surcharge on County waste disposed at Coffin Butte Landfill as a funding source for the District.
- Rationale for allocation of resources to waste reduction / recycling activities.
- Rationale for allocation of resources to management of household hazardous wastes.

It should be noted that Sections 4.1 to 4.3 are based in part on separate meetings held by the consultant with District staff, the County Counsel and selected members of the County Board of Commissioners, the LCHA, the SWAC, and mayors of the incorporated cities.

4.1 Strengths

Section 3 above documents the achievements of the County's solid waste management system. A summary of the system strengths is presented below:

- The County's recovery rate is 29% (2002), including 2% in credits for conducting a Backyard Composting Program. Required recovery levels for Lincoln County as set by HB 3744 are 19% in 2005 and 20% in 2009. Therefore the County presently has a recovery rate almost 10% higher than the 20% level established for 2009.
- The Georgia – Pacific mill in Toledo serves as a local fuel market for recovered wood and yard wastes. The company has also provided land near the mill for the temporary aggregation and storage of these materials under an arrangement with the Solid Waste District. The public, the refuse haulers, businesses, landscapers, and contractors have free access to the site for dropping off wood / yard wastes.
- The Forest Enforcement Program is a broadly supported partnership that combines public / private sector resources in responding to illegal dumping that occurs on non – Federal, County unincorporated land. Emphasis is placed on cleaning up dump sites, identifying and citing / prosecuting those responsible for such sites, and preventing illegal dumping through education / outreach.
- The members of the Lincoln County Haulers Association maintain a network of transfer stations and recycling centers from the southern to the northern end of the County. Curbside residential recycling collection service is available to customers in five jurisdictions and commercial recycling collection service is offered to businesses / institutions in the franchised areas where LCHA firms operate.

- The Solid Waste District works with the LCHA to sponsor and implement periodic special collection / recovery efforts and projects for particular materials such as latex paint, electronic equipment, scrap metals, Christmas trees, tires, appliances, and household hazardous waste. District staff also make informational and promotional presentations to students and community groups.
- The County has an ongoing Solid Waste Advisory Committee whose members represent the County, the cities, the LCHA, the public, waste reduction / recycling advocates, and other interests. The SWAC reviews proposed or existing waste reduction / recycling initiatives and advises the County Commissioners on their adoption or modification.

It was noted previously that the County has an average annual population growth rate of 1.1% and has a recovery rate of 29% compared to its legislatively defined rate of 20% by year 2009. Even under a “worst case” scenario where no additional recovery occurs for the years 2005 through 2020, the County still maintains a recovery rate above the 20% level for that entire time period. Table 7 portrays this “worst case” or “stable recovery” scenario based on the 1.1% population growth factor and a per capita disposal rate of 1,820 pounds per person per year. Table 7 assumes as well that the County continues to qualify for an annual 2% supplement to its calculated recovery rate through the Backyard Composting Program. Two key formulas are also used in Table 7:

$$\text{Tons Generated} = \text{Tons Disposed} + \text{Tons Recovered}$$

$$\text{Recovery Rate} = \text{Tons Recovered} \div \text{Tons Generated}$$

Table 7: Lincoln County Waste Generation Projection

Year	Population ¹	Tons Recovered	Tons Disposed ²	Tons Generated ³	Recovery Rate ⁴	+2 percent
2005	47,190	15,161	42,943	58,104	26.1%	28.1%
2006	47,709	15,161	43,415	58,576	25.9%	27.9%
2007	48,234	15,161	43,893	59,054	25.7%	27.7%
2008	48,764	15,161	44,376	59,537	25.5%	27.5%
2009	49,301	15,161	44,864	60,025	25.3%	27.3%
2010	49,843	15,161	45,357	60,518	25.1%	27.1%
2011	50,391	15,161	45,856	61,017	24.8%	26.8%
2012	50,946	15,161	46,361	61,522	24.6%	26.6%
2013	51,506	15,161	46,871	62,032	24.4%	26.4%
2014	52,073	15,161	47,386	62,547	24.2%	26.2%
2015	52,646	15,161	47,907	63,068	24.0%	26.0%
2016	53,225	15,161	48,434	63,595	23.8%	25.8%
2017	53,810	15,161	48,967	64,128	23.6%	25.6%
2018	54,402	15,161	49,506	64,667	23.4%	25.4%
2019	55,000	15,161	50,050	65,211	23.2%	25.2%
2020	55,605	15,161	50,601	65,762	23.1%	25.1%

Notes: 1) Population projection based on an annual growth rate of 1.1 percent.

2) Disposed tons based on a per capita disposal rate of 1,820 pounds per person per year.

3) Tons generated = tons disposed + tons recovered

4) Recovery rate = tons recovered / tons generated

It is emphasized that the recovery rates resulting from the calculations in Table 7 will vary depending on the projected tons recovered for each year. If the principles, policies, goals, and recommendations in this ISWMP Update are adopted and implemented it is expected that recovery would increase correspondingly rather than remain unchanged.

4.2 Weaknesses

The consultant contracted to prepare the ISWMP Update conducted separate meetings with the mayors of the incorporated cities, the SWAC, the LCHA, and with District staff, the County Counsel, and selected members of the County Board of Commissioners. Based on these meetings it is clear that despite the strengths of the County's solid waste management system noted in the previous section, a serious deterioration in communication, coordination, and cooperation between the District Director and the LCHA membership has occurred. This deterioration was accelerated by the County's adoption of the \$4 / ton surcharge on County waste disposed at Coffin Butte Landfill as a source of funding for the District. The LCHA views the surcharge as a fundamental change in the way the District was funded, moving from property taxes to a funding method that focused on a particular sector of the County's citizens, namely refuse service customers.

The surcharge was one of the motivations underlying the LCHA proposal to essentially abolish the District and replace its Director and program with the LCHA's own Recycling Education and Promotion Program and Program Manager. The LCHA also claims there is not enough accountability and oversight regarding District operations because the District is an independent entity. In addition, the LCHA is concerned with the ability of the District to carry out a broad range of waste reduction / recycling programs on a countywide basis and emphasizes that under the LCHA proposal the resources of the member companies would be applied to such efforts and be available to the LCHA Program Manager.

Therefore, much of the analysis which follows, and the development of solid waste management principles, policies, goals, and recommendations for the County in Sections 5, 6, and 7, are designed to respond to this situation and with the way solid waste management is organized and carried out in the County. It is necessary to redefine the general framework and common understandings – the “ground rules” – for operating the solid waste management system and then proceed to more specific recommendations.

4.2.1 Relationships and Perspectives of Involved Parties

The current institutional arrangement is that the County Commissioners serve as the Board of Directors for the Solid Waste District and the District's Director reports directly to the Board / Commissioners. There is no intermediate or intervening County government department or individual that is responsible for providing ongoing oversight on, and evaluation of, the District's activities. In this situation accountability suffers due to the Commissioners' busy schedules, the limited time they can devote to managing District personnel, and the lack of a clear, direct connection between the District and any government entity at either the County or municipal level. This separation detracts from the District's legitimacy and undermines the basic concept of public sector administration of the solid waste management system.

The primary responsibility for managing solid waste in Oregon is assigned to counties in the state. State law – ORS Section 459.125 – gives counties the authority to design, construct, and operate facilities; provide services; contract for facilities or services; and generate revenue. Traditionally in Lincoln County however, the role of the County and the municipalities has been limited to acting as contracting entities in the issuance of exclusive franchise agreements for solid waste services. Through these franchise agreements the four companies profiled in Section 3.3 above have for many years carried out refuse collection and recycling services in the County. The franchises have typically been renewed on an annual basis for the duration of the franchise period, thus virtually assuring the haulers a long-term business base not subject to competitive bidding or systematic performance review.

In this context it is not surprising that the haulers have concluded they are the primary group responsible for solid waste management in the County and have viewed the public sector role as a minimal one, a perspective expressed in their proposal for a Recycling Education and Promotion

Program / Program Manager. Indeed, the meetings conducted by the consultant retained by the District (Zia / URS) to update the ISWMP confirm there are fundamentally different ways of viewing and defining key aspects of the County's solid waste management system on the part of public sector representatives from the County / cities and the private sector members of the LCHA.

Depending on the particular topic these differences range in their levels of significance, with perhaps the most acute disparity being in how the \$4 / ton surcharge on disposed waste is perceived. The haulers view the surcharge as an unfair tax on their businesses and customers, believe the funds derived from the surcharge should flow to them as the more appropriate agents for carrying out waste reduction / recycling programs in the County, and do not believe the District directly improves or assists their waste reduction / recycling efforts. The County and city representatives view the surcharge as an equitable user fee that the haulers pass on in their rates and see it as a more stable, reliable funding source in comparison to other options.

Further, in general the representatives of the County (County Counsel and Commissioners) and the cities (mayors and SWAC members) view public sector involvement with the solid waste system in the form of the District or some other institutional arrangement or entity, as legitimate and necessary, even though outside of the District such involvement on the part of the County and cities has not been particularly proactive in the past. Among the important roles / responsibilities that are viewed as appropriate for the public sector to be involved with performing are the following:

- Meeting or exceeding the recovery goals set for the County by HB 3744.
- Submitting the annual Opportunity to Recycle report to DEQ that documents accomplishments in waste reduction / recycling.

- Compliance monitoring of the franchised haulers' services, facilities, and operations by the designated federal, state, and local agencies based on applicable laws, ordinances, and regulations.
- Long – range planning and policy development.
- Research on emerging and innovative recovery strategies, implementation of pilot projects for recycling / reuse of special wastestreams, “materials of concern”, or “problem materials” such as latex paint, computers, and other forms of electronic waste.
- Promotion, education, and outreach centered on fostering resource conservation behavior by citizens, businesses, and institutions, and emphasizing the integral link between responsible solid waste management, environmental quality, and financial health in Lincoln County. This theme and message is viewed as especially important because the economy of the County is heavily dependent on the natural beauty of the coastline and the special character of its communities to attract visitors / tourists as well as on more traditional resource – based industries such as fishing and timber harvesting.
- Support for the Forest Enforcement Program designed to provide patrol on rural, non – federal public and private lands in County unincorporated areas with an emphasis on illegal dumping enforcement and clean-up efforts.
- Preparation of grant applications to provide supplemental funding for projects and programs.

The public sector perspective is that the involved parties – the County, the cities, the SWAC, the LCHA, the District – are partners in managing the solid waste system in the County and that involvement in this partnership is based on the principle of shared responsibility. Further, it is noted that maintaining a commitment to steadily expanding recovery in the County and

keeping ahead of the required recovery levels, as proposed in Section 6 below on Solid Waste Management Goals, necessitates a cooperative combination of the resources and efforts of both the public and private sectors. On the private sector side this includes expertise in operations, facility management and equipment related to the collection, processing, and marketing of recyclables. On the public sector side there are resources and expertise related to education / promotion / outreach, policy and program initiation / development, and planning for the short – and long – term.

By contrast, in both meetings and in their proposal for a Recycling Education and Promotion Program, the LCHA has defined several concerns and positions, as follows:

- There is a lack of long – term planning and scheduling coordination between the District and the LCHA for events and activities.
- There is a need for regular communication on the part of District staff with the LCHA members to build the long – term relationships that are essential to the quality of District service.
- The LCHA is in a better position and possesses stronger qualifications to serve the citizens and ratepayers than the District since these are the customers of the LCHA member companies.
- The SWAC requires renewed attention, emphasis, and use to more effectively carry out its advisory / representative functions.
- There is a lack of ongoing accountability / evaluation for the actions of the District staff and for the expenditures of the District; information about how District staff time and money is spent should be documented and communicated on a regular basis.

The LCHA contends that their proposal offers greater accountability and oversight for the County, cities, and SWAC because the proposed program

and related responsibilities of the Program Manager will be part of the terms of each franchise agreement with the County and cities.

4.3 Opportunities

4.3.1 LCHA Proposal for Forming a Recycling Education and Promotion Program and Hiring a Program Manager

The LCHA has submitted two draft proposals dated May 6 and November 14, 2003 to the County Counsel proposing to replace the District with their own Recycling Education and Promotion Program and Program Manager. The prevailing proposal is considered to be the one dated November 14. The proposal would, in essence, virtually allocate all roles and responsibilities related to waste reduction / recycling program development and implementation in the County to the LCHA and its Recycling Education and Promotion Program Manager. The District would be dissolved but the SWAC would continue to function primarily in relation to the LCHA. Public sector involvement with solid waste management would be focused on providing representatives to the SWAC and maintaining the franchises. The proposal describes the role / responsibilities of the County in the following manner (pages 1 – 2): “If Lincoln County wishes to maintain an FTE to oversee solid waste issues of the county, the LCHA recommends that the FTE should be a county employee, funded by the county, under the direction of a specific existing county department...this person would be an integral part of the SWAC and a liaison for the LCHA programs manager.” The LCHA proposal does assign responsibility to the LCHA Program Manager for communicating with representatives of the cities and County.

The most productive way to view the LCHA proposal is that it presents an opportunity for the key involved entities / parties to jointly examine their relationship and associated roles / responsibilities in the County solid waste management system and in implementing the State of Oregon’s waste management priorities of waste prevention, reduction, reuse, recycling,

composting / mulching, and energy transformation. From this perspective there are a number of positive and helpful concepts in the LCHA proposal that can be the basis for discussion and negotiation between the District, LCHA, SWAC, the cities, and the County. For example, the section from the proposal quoted above implies two key individuals representing the public and private sectors who would have an ongoing working relationship in the solid waste management system – a County Solid Waste Manager and the LCHA Recycling Education and Promotion Program Manager. Additional concepts are identified and evaluated below and have guided many of the recommendations presented in Section 7.

- “It has...become apparent that the current structure of the Solid Waste District is not the best or most efficient way to operate...(page 1).” The statement suggests consideration of alternative arrangements for public sector involvement with solid waste management and the LCHA other than the District in its present form and status should be examined. On page 2 the LCHA proposal uses the following terms to make the same point: “While the Solid Waste District, directed and funded by the County and Cities, has been a reasonable starting point, it now seems appropriate...for a timely transition to be made.”
- “The [LCHA Recycling Education and Promotion] Program will be incorporated into each franchise holder’s ordinance in each jurisdiction (page 1).” This statement establishes that solid waste program / service responsibilities, expectations, and performance requirements for the service provider can be written into the respective franchises. The LCHA believes this is a key element of their proposal that will establish clear accountability and oversight for the County and cities regarding implementation of the organization’s Recycling Education and Promotion Program and the functions of the LCHA Program Manager.
- “It is the intention of the LCHA to keep the Essential Functions, Major Responsibilities and Scope of Work consistent with that of the current Solid Waste Director position (page 2).” Indeed, the programs and

activities that would be carried out by the LCHA Program Manager are indistinguishable from those presently performed by the District Director. For example, the LCHA Program Manager would organize, promote, and implement recovery activities for certain special materials at the various recycling and refuse transfer facilities operated by LCHA members. These include collection events for latex paint (eight per year), Christmas trees (recovered at four sites), tires (every other year opposite household hazardous waste events), household hazardous waste (every other year opposite tire events), and computers (annual events and ongoing year – round collection at four sites). However, the LCHA believes their proposal for carrying out waste reduction / recycling activities provides more opportunities for accountability / oversight than are available with the District as a distinct, independent entity because the haulers' implementation responsibilities will be made part of each franchise agreement.

- LCHA members also informed the consultant that the organization does not wish to become directly involved with the prevention and clean – up of illegal dump sites in the County unincorporated areas under the Forest Enforcement Program. The budget in the LCHA proposal lists this program as a separate line item with an allocation from the surcharge funds to partially cover the costs of the Sheriff's Officer assigned to the program. This is how the Forest Enforcement Program is handled in the District budget as well. Thus the LCHA would maintain the current arrangement for the Forest Enforcement Program.

The other functions / responsibilities listed in the LCHA proposal for their Program Manager are very similar to those of the District Director, such as:

- Create, publish, and distribute educational materials on recycling and other solid waste topics.

- Perform waste audits and training for commercial, institutional, school, and governmental generators aimed at increasing waste reduction / recycling practices.
- Attend community events and meetings throughout the County to promote waste reduction / recycling and educate citizens and businesses on solid waste issues.
- Conduct program update presentations to the County Board of Commissioners and the City Councils on a quarterly basis.
- Serve as support staff for SWAC.
- Apply for grants.

The LCHA Recycling Education and Promotion Program and the current waste reduction / recycling agenda of the District are virtually the same. The haulers are the primary solid waste service providers in the cities and County, as recognized in the various franchise agreements. The haulers view themselves as the custodians of the funds generated by their rate – paying customers. If waste reduction / recycling efforts are to be paid for by surcharge funds the LCHA maintains its members should have the most significant role in planning and implementing such efforts. The core issue is thus fundamentally about what the organizing principles are for these efforts and less about what needs to be done. The comments from the LCHA proposal noted above suggest they may be receptive to discussing how to apply the principles of shared responsibility and cooperative partnership if public sector representatives are willing to consider other institutional arrangements for involvement with waste reduction / recycling as potential alternatives to a separate Solid Waste District.

4.3.2 Use of the \$4 / Ton Surcharge on County Waste Disposed at Coffin Butte Landfill as a Funding Source for the District

The general disparity between public sector stakeholders (SWAC members, City and County decision-makers, the District) and the LCHA in how the surcharge is perceived was referenced in Section 4.2. However, it is not totally clear whether the LCHA perspective is critical of the surcharge as a concept or with the fact that it is used to fund the District. For example, the LCHA proposal for forming a Recycling Education and Promotion Program and hiring a Program Manager states (page 1) “Currently, each hauler pays \$4.00 per ton to fund the SWD [Solid Waste District] and its functions. If the LCHA’s proposal were accepted...current funding would be reallocated to fund the LCHA Recycling Education and Promotion Program.”

In reality, as acknowledged by LCHA members during discussions with the consultant, the surcharge is reflected in the current waste service rate structures in effect throughout the County. It is clear the organization is proposing to fund its Recycling Education and Promotion Program / Program Manager with the surcharge, in other words, through the rates. As stated in the proposal (page 2), “The actual, exact cost of the program would be reflected in our rates and therefore accounted for in the Uniform Rate Reporting Format.” Thus while objecting to the surcharge as a method of supporting the District the haulers appear to accept it as a form of rate – based user fee that is an equitable and sensible funding mechanism for their proposed Recycling Education and Promotion Program / Program Manager.

During consultant interactions with stakeholders there was discussion of two other funding sources for a Countywide waste reduction / recycling program – increased property tax assessments and increased franchise fees, or some combination of both. These would be levied at both the County and municipal levels. It is likely the haulers would request rate adjustments if franchise fees were raised as a cost of doing business that is passed on to the customer. In this case the funding source would actually be the rates and

thus similar to the existing situation where the surcharge is incorporated into the rates as well. However the franchise fees are not strictly a user fee because they are not connected to the waste generating behavior of customers as expressed in the total disposed tonnage produced countywide and transported to Coffin Butte Landfill. There is also the fiscal dilemma of determining how much the franchise fees would need to be raised in each city and for the County unincorporated areas to cover program and staffing costs. Finally, there is the political uncertainty that all jurisdictions would agree on what their “fair share” is and officially approve the specific franchise fee increases.

There are similar concerns with the approach of increasing property tax assessments. Not all residents and businesses in the County own property, however, they do generate waste. There is therefore an equity issue in relying on property taxes as a funding mechanism. In addition, there is the complication of figuring out whose property taxes have to be raised how much in each city and the County unincorporated areas to yield the required funding level. There is also considerable uncertainty that such an approach would be politically supported by local decision-makers and city councils as well as the County Board of Commissioners.

In conclusion, the user fee approach reflecting the surcharge in the rates is the fairest and most practical way of funding a countywide waste reduction / recycling program, whether that program is in the form of the Solid Waste District, the LCHA proposal, or a more comprehensive strategy that integrates public and private sector contributions. The fact that the haulers would keep the surcharge as the funding source for their Recycling Education and Promotion Program / Program Manager further supports this conclusion. In addition, adopting universal refuse service standards / requirements for the residential and commercial sectors on a countywide basis would extend the rate base and promote greater equity in the application of the surcharge.

4.3.3 Rationale for Allocation of Resources to Waste Reduction / Recycling Activities

At the meetings held by the consultant with the LCHA, the SWAC, the District, mayors of the cities, the County Counsel, and two members of the County Board of Commissioners, the following question was posed to participants: “The County’s recovery rate already exceeds the 2009 goal set by HB 3744. Given this, what is the rationale or motivation for dedicating resources to expanding recovery activities versus continuing programs to maintain the current recovery rate?” The various stakeholder representatives expressed a common viewpoint that at a minimum the current recovery rate (27% calculated rate, 29% total rate; see Section 3.1 above) should be maintained and preferably increased

- By making existing residential and commercial recycling programs more effective;
- By enlarging special recovery efforts that now target such materials as tires, latex paint, computers / electronic equipment (“e – waste”), yard / wood waste; and,
- By more extensive and regular promotion / education / outreach.

Additional areas of interest included:

- Involvement with the Oregon Green Schools Program.
- Requiring recycling of specified materials from construction and demolition projects.
- More frequent availability of opportunities for recycling of e – waste.

- More extensive use of waste audits to stimulate commercial sector waste reduction / recycling.
- Recycling at events such as community fairs, festivals, and concerts.
- Looking at whether areas at some of the transfer stations and recycling drop – off centers can be set up for reusable materials, items, and equipment.
- More systematic and scheduled education / information presentations in schools throughout the County.
- More systematic and scheduled education / information presentations at meetings of business, community, civic, and service organizations.

4.3.4 Rationale for Allocation of Resources to Management of Household Hazardous Wastes

A Household Hazardous Waste (HHW) Management Plan was submitted to the District dated September 29, 2000 by Harding Lawson Associates (HLA). However, the recommended HHW management strategy has not been implemented due to lack of funding. At the stakeholder meetings noted above there was also consistent concern expressed that the periodic HHW collection events are an inadequate response to the health and environmental dangers posed by HHW materials and that the same level of commitment to waste recovery in the County should also be applied to more aggressive management of HHW.

The HHW Management Plan targeted the following priority materials:

- **Poisons** such as pesticides, herbicides, fungicides

- **Products Containing Heavy Metals** such as thermostats, thermometers, fluorescent light tubes, mercury batteries, Nickel – Cadmium batteries, lead – acid batteries
- **Flammables** such as solvents, gasoline, kerosene, oil – based paint
- **Corrosives** such as acids, bases, and reactives

In addition, examples of other targeted materials include solvent – based and water – based cleaning fluids, drain cleaners, oven cleaners, motor oil, antifreeze, other automotive fluids, and vehicle batteries.

The HHW Management Plan proposed by HLA was not intended to replace the special recycling program for latex paint and the recycling of used motor oil and lead – acid batteries currently carried out by the District and franchised waste collectors. The recommended HHW management approach consists of the following elements:

- A small, permanent HHW facility for waste acceptance, identification, packing and temporary storage. Wastes consolidated at the facility would periodically be removed by a permitted / trained contractor and transported to one or more permitted Treatment, Storage, and Disposal facilities for recycling, incineration, or disposal.
- Eight to twelve collection events held annually with each event lasting approximately four hours. HLA proposed that four of these events be located at the permanent facility with the remainder conducted in the incorporated cities and unincorporated communities of the County. Wastes collected at these local collection events would be safely packaged and transported to the permanent facility for further consolidation and containment.

- During the periods of time between scheduled collection events the permanent facility would be open to residents and businesses (those categorized as Conditionally Exempt Small Quantity Generators) as a HHW drop – off location on an appointment – only basis.

5.0 Basic Guiding Principles and Policies for Operation of the County Solid Waste Management System

Section 5 describes the fundamental assumptions and understandings that would be accepted by the key involved parties / stakeholders in order for the countywide solid waste management system to function effectively in the future. These assumptions and understandings are stated in the form of guiding principles and policies.

The pursuit of a balanced approach to administering and operating the solid waste management system is preferred because it benefits the County as a whole by combining the resources and expertise of both the public and private sectors. The balanced approach avoids excessive reliance on public agency / department staff or for – profit companies to conduct solid waste services and programs. Instead, responsibilities and obligations are shared through a structured partnership. This promotes flexibility in decision – making, coordination in communication, and cooperation in problem – solving. Activities, projects, programs, and events should be designed as public / private partnerships, with joint coordination, sponsorship, and support required for implementation and with credit, publicity, and recognition shared by all involved entities and parties. Therefore a core principle of the County’s solid waste management system and this Plan Update is that there should be a cooperative, collaborative relationship between the District and the LCHA, with the SWAC playing a critical oversight role on both.

6.0 Solid Waste Management Goals

Section 6 describes the broad purposes and directions intended to guide the County's solid waste management system for the future.

- To continue to exceed the legislatively established recovery goals for the County by at least the margin documented by DEQ in 2002.
- To provide conveniently scheduled, established opportunities for the collection, handling, storage, transport, reuse, recycling, or disposal of household hazardous wastes in a manner that protects both the environment and public health.
- To conduct regular promotion, education, and outreach activities on a variety of solid waste management topics using diverse communication methods and materials. Such activities, methods, and materials should emphasize the reduction, reuse, recycling, and composting / mulching of waste and inform residential, commercial, and institutional generators about how to participate in programs and opportunities that offer these alternatives to disposal.
- To continue efficient, effective responses for the enforcement of illegal dumping and nuisance complaint violations and expand efforts aimed at prevention of these actions.
- To maximize the efficiency and effectiveness of recyclable material collection, processing, and marketing.
- To maximize the efficiency and effectiveness of disposal operations.

7.0 Specific Recommendations and Supporting Rationale

7.1 Overview

The recommendations presented in Section 7 are intended to build on the strengths of the County's solid waste management system and address the system's weaknesses and opportunities discussed in Section 4 above. Further, the recommendations are consistent with the guiding principles, policies, and goals for the system as presented in Sections 5 – 6 above and designed to achieve their implementation. Several of the recommendations focus on new organizational / institutional arrangements intended to facilitate closer, more integrated working relationships between the involved entities / parties. For example, there are recommendations concerning the District becoming part of the County government and the LCHA appointing a Program Manager for Waste Reduction / Recycling to be the private sector counterpart to the District Director. There are also recommendations designed to continue and expand recovery activities carried out by the LCHA and the District. Advancing a waste reduction / recycling agenda on a countywide basis requires a partnership involving the combined efforts of both the public and private sectors. No one entity or party by itself has the resources to implement a broad range of recovery programs on its own. In this regard specific roles and responsibilities for the primary involved entities / parties of the County's solid waste management system are described in the sections that follow.

7.2 Roles and Responsibilities of the County, the Cities, the SWAC

- The County and the cities should be committed to the broad policy of continuing to exceed the 2005 and 2009 recovery goals set for the County in HB 3744 by at least the existing margin, and should exercise a leadership role in pursuing measures that produce additional recovery in order to prevent the annual per capita disposal rate from rising.
- The County and the cities are responsible for administering, managing, and monitoring the various franchise agreements. This role includes the possible incorporation in those agreements of performance measures,

reporting criteria, and evaluation procedures particularly focused on waste reduction / recycling initiatives that are reviewed annually with the franchised waste services company. Such reviews may also assess the rate structure applicable to the jurisdiction or County unincorporated area covered by a given franchise agreement.

- SWAC is responsible for monitoring and evaluating the actions of the District and the LCHA in implementing the current and proposed materials recovery programs / activities. It is appropriate for SWAC to view the District and LCHA as service providers to the cities and County. SWAC should hold the District and the LCHA accountable for making reasonable progress in carrying out the adopted recommendations of this Plan Update.
- SWAC should be a proactive source of ongoing support, assistance, and advice to the District, the LCHA, and the County Commissioners. SWAC members representing the County and the cities are responsible for communicating regularly with City Councilpersons and other key jurisdictional decision – makers about solid waste management issues being considered by SWAC to minimize discrepancies in viewpoints.

7.2.1 Roles / Responsibilities of the Solid Waste District

- Manage the Forest Enforcement Program, document results of illegal dumping / nuisance complaint enforcement and prevention efforts conducted by assigned Sheriff's Officer, and communicate such results on a regular basis to the SWAC.
- Maintain the 2% credit from DEQ for a Residential Composting Program through cooperative efforts with the LCHA regarding promotion, bin distribution, demonstration site maintenance and other required program elements.
- Prepare the annual Opportunity to Recycle report for submission to DEQ.

- Based in part on information provided by the LCHA members, maintain an ongoing database about material tonnages according to type of recovery program, and communicate results to SWAC on at least a quarterly basis in the form of a summary report.
- Meet the requirements for the 2% DEQ credit under the Waste Prevention Program criteria.
- Meet the requirements for the 2% DEQ credit under the criteria for a Materials Reuse Program.
- Assist haulers with development and distribution of recycling education and promotion materials pertaining to the programs and services they provide.
- Coordinate recovery events for latex paint, computers, scrap metals, and waste tires at hauler facilities and other locations, with the intention of transitioning the direct operation of such events into permanent diversion opportunities at the transfer stations / recycling centers of the LCHA members.
- It is recommended below that the District become part of a County government department, and all solid waste management functions related to the County unincorporated areas be assigned to District staff. Under this scenario the District would conduct annual performance reviews and periodic rate reviews related to the refuse service franchise agreements for those areas. In this regard the District would also be available to offer technical assistance to the cities for performance and rate reviews relative to their own franchise agreements.
- Monitor developments in the waste reduction / recycling field on a continuous basis to identify innovative programs, policies, and strategies

that could be applicable to Lincoln County for the recovery of additional materials. In consultation with the LCHA and the SWAC, determine related pilot projects appropriate for implementation.

- Dedicate funds in the annual District budget for unanticipated financial and staff support to the cities, the LCHA, and civic groups for special projects such as clean – up events, periodic material – specific recovery activities, and related promotion / education / outreach.

7.2.2 Roles / Responsibilities of the LCHA

- Identify ways to increase participation in existing curbside residential recycling programs.
- Develop opportunities to expand involvement in current commercial sector recycling services.
- Provide periodic or permanent opportunities for the recovery of latex paint, computers, scrap metals, and waste tires at existing transfer stations / recycling centers and / or in cooperation with the cities, County and District identify suitable local community sites for the recovery of these materials.
- Provide the County, the cities, the SWAC and the District with quarterly data about the results of materials recovery efforts so an ongoing record may be maintained that documents the various waste reduction / recycling services offered by the LCHA membership.
- When logistically and economically feasible, increase the cooperative processing / marketing of recyclables to maximize the operational efficiencies and facility utilization of LCHA member companies.

- Maintain and periodically distribute printed materials that encourage use of the various recycling services and opportunities offered by the LCHA member companies.
- Maintain compliance with all applicable statutes, ordinances, and regulations at the jurisdictional, state, or federal level concerning the provision of waste reduction / recycling services and opportunities, the collection and transport of refuse and recyclables, and the operation of facilities for refuse transfer and processing / storage of recyclables.

7.2.3 Specific Joint LCHA / District Roles and Responsibilities

- Make K – 12 school presentations regarding the State of Oregon’s solid waste hierarchy of reducing waste at the source, reusing and recycling materials, composting and mulching organics, recovering energy from waste, and disposal of residual materials in a permitted landfill.
- Conduct waste audits for businesses / institutions to identify opportunities for resource conservation, waste reduction, materials recycling, and the procurement of recycled – content products.
- Merge separate efforts for wood and yard waste recovery into a unified, countywide program with a common promotion / education theme and supportive outreach materials / messages.
- Develop a formal partnership for the planning and implementation of the household hazardous waste management recommendation resulting from adoption of this Plan Update.

7.3 Priority Recommendations

7.3.1 Integrate the District and its staff into an existing County government department and continue the surcharge as the most equitable funding mechanism for the District.

Section 4.3.2 concluded that the surcharge is the most equitable and practical funding mechanism for the District. However, the District should not remain a separate entity without any direct organizational relationship to other governmental bodies in the County. The District is responsible for planning and implementing waste reduction / recycling initiatives that serve both the County unincorporated areas and the incorporated cities. One of its primary roles and responsibilities is to foster and maintain a countywide perspective while at the same time being responsive to local needs / circumstances and working with the other involved parties / entities in a unified manner.

County Counsel has advised that the County itself cannot implement the \$4 / ton surcharge and that the District would need to exist in some form in order to keep the surcharge in effect. For the reasons summarized in this section it therefore is logical to incorporate the District into an existing County department. Under this scenario all solid waste functions and activities carried out by the District Director acting as the County Solid Waste Manager would be consolidated within the designated department, including those currently handled by the Solid Waste Administrator now situated in the County's Health and Human Services Department.

This means that the County Solid Waste Manager would oversee the enforcement of the County's solid waste nuisance code. With the assistance of the Forest Enforcement Officer, the Manager could investigate nuisance complaints and violations through research and site investigations. The Manager would also work with property owners to clean up and close illegal dump sites and enforce applicable County regulations. It is also suggested the District Director / County Solid Waste Manager could assist the cities

with enforcement of their respective solid waste nuisance codes. The feasibility of this potential service should be reviewed by the involved parties.

Even though the District as an organizational entity and its staff would be incorporated into a department of the County government, for purposes of clear accountability there should still be a District Budget Committee because the source of solid waste program funds is the surcharge, not general fund tax revenues. The designated department head could be the budget officer and the Budget Committee would function as required under local budget law. The Board of Commissioners would retain final approval authority over the District budget but the department head would be responsible for management and monitoring of its expenditures based on existing procedures for establishing and maintaining County department budgets.

7.3.2 The LCHA should proceed to designate an individual as their Solid Waste Program Manager.

Moving ahead with this recommendation should be a proactive decision, not one taken in reaction to past or ongoing actions of the County, Solid Waste District, cities, or other involved parties. It should be viewed as an important step on the part of the haulers in establishing the LCHA as waste reduction / recycling leaders in the County and in receiving subsequent public recognition for such leadership. It is expected the Program Manager would be the official spokesperson for the LCHA and represent the organization as a whole on SWAC. The Program Manager would be a direct counterpart from the private sector to the District Director / County Solid Waste Manager. It will be their joint role / responsibility to form and carry out a collaborative relationship that combines the strengths and resources from their respective sectors in working closely with the SWAC to carry out an ambitious waste recovery agenda. That agenda is a combination of existing District / hauler programs and services expanded by the ones

proposed in this Plan Update, including more convenient and systematic management of household hazardous waste.

7.3.3 Continue to exceed the 2005 and 2009 recovery goals established for the County in HB 3744 by at least the current margin, and strive for additional recovery in order to control the annual per capita disposal rate.

Based on consultant discussion with the key stakeholders, there appears to be a consensus for continuing and undertaking programs that would, at a minimum, maintain the County's overall recovery rate and preferably increase it. The County's current recovery rate (2002) is 29% (calculated recovery rate of 27% plus 2% in credits for the District Composting Program) while the HB 3744 goals for 2005 and 2009 are 19% and 20% respectively. The County's annual per capita disposal rate (2002) is the fourth highest out of thirty – five wastesheds in the state at 1,820 pounds per person per year. An additional option to be considered is to set higher quantitative recovery goals for 2005 and 2009 than those defined for the County in HB 3744.

7.3.4 Review the recommended HHW management approach, revise it if deemed appropriate, establish permanent funding through rates and use grants as a source of supplemental, not primary, funding for the HHW management program.

In particular, the recommendation that a small, permanent HHW facility be constructed and operated by the District could be modified to reflect joint construction, ownership, and operation by a public / private partnership.

7.3.5 Consider adoption of universal solid waste service standards / requirements for the residential and commercial sectors in all the incorporated cities and unincorporated areas of the County.

Presently Lincoln City has universal service for the single – family sector and Newport is evaluating this policy. It is recommended that the assessment of universal service be conducted on a countywide basis for both the residential and commercial sectors. The surcharge is reflected in the rate base, according to the LCHA. The exact allocation and distribution of the surcharge among the various components of the rate base, such as fees at the transfer stations, commercial rates, and residential rates, is not currently known. However, universal service would expand the rate base, thus promoting greater fiscal equity and a wider distribution of the cost impacts associated with solid waste management in the County, including the implementation of recommendations made in this Plan Update. Universal service would also extend the availability of curbside residential recycling to additional households as well as provide supplemental revenue to the franchised service providers which could potentially be directed to waste reduction / recycling programs.

7.4 Supplemental Recommendations

7.4.1 Implement programs and policies to meet the requirements for the remaining 2% credits in waste prevention and waste reuse and apply to DEQ for the total of 4% in recovery credits.

The County has qualified for a 2% credit under the criteria for a residential / backyard composting program. The District, the LCHA, and the SWAC should review the program criteria for receiving the 2% credit allocations for waste prevention and waste reuse to determine what current efforts are applicable under the criteria and what remains to be initiated and documented in order to qualify for the total of 4% in additional recovery credits. These programs are an opportunity for cooperative action among the involved entities / parties.

7.4.2 Determine current levels of participation in curbside residential recycling service for each city where such service is offered, set targets for increasing program involvement, and conduct outreach / publicity to support achievement of these objectives.

Establish a set – out or participation rate goal for each city and formulate an education / promotion strategy to reach the goals. Use standardized materials tailored to each jurisdiction.

7.4.3 Plan and implement a targeted, countywide, commercial sector waste reduction / recycling initiative.

Identify the largest 100 businesses / institutions in the County based on number of employees, size of facility, or amount of waste disposed. Conduct research through a survey and / or interviews with haulers servicing these sites and generator representatives to determine the extent and types of waste reduction / recycling activities at each location. Determine additional efforts that can be implemented. Identify a commercial sub-sector critical to the County's economy such as the lodging industry and consider development of a waste reduction / recycling program and technical assistance services targeted to that sub-sector including such elements as:

- Production of standardized promotion / education materials.
- Availability of site – specific waste audits and program initiation assistance.
- Establishment of an awards / recognition program for commercial generators based on different levels and types of waste reduction / recycling activities.
- Establishment of a group of representatives from commercial / institutional generators that have implemented waste reduction /

recycling practices and would be willing to serve as “mentors” for their fellow business persons.

- Regular placement of waste reduction / recycling reminders, tips, and information in newsletters, other publications, and internet sites of community, civic, and service organizations oriented to the business / commercial sector.

7.4.4 Define waste reduction / recycling project and program ideas that are practical for schools in Lincoln County and establish related goals / timeframes for their implementation.

Working together, the District Director / County Solid Waste Manager and the LCHA Program Manager should conduct meetings with selected administrators and teachers from a representative group of schools in the County to determine what waste reduction / recycling activities are feasible given available resources and circumstances. Based on this information program implementation goals and schedules can be formulated stating the projects / programs that will be established at specific schools during identified time periods.

7.4.5 Integrate, promote, and expand existing efforts for the recovery of yard / wood wastes into a unified, countywide program.

The Georgia – Pacific Toledo mill is a local market for recovered yard / wood wastes and there are recovery efforts for these materials sponsored by the District and three of the franchised refuse collectors. While these efforts are an effective utilization and support of this local materials market they can also be the basis of a broader, more productive model of public / private partnership for increased recovery of yard / wood wastes countywide. This is a particularly promising opportunity because of the several parties presently involved: Georgia – Pacific, a private processor, the District, and LCHA members. The existing recovery efforts for these materials were developed separately without being deliberately organized as different but

related parts of a comprehensive program. The District and the LCHA should now cooperatively take the initiative to merge their yard / wood waste recovery projects into a single program that has multiple opportunities for participation. Promotion / education / outreach materials and activities for the program should be developed / increased featuring a common program title and information about all options for recovery of yard / wood wastes.

7.4.6 Consider modifications to the franchise agreements to incorporate basic performance elements for each franchised area.

The proposed performance elements are as follows:

- Description of recycling responsibilities for residential sector.
- Description of recycling responsibilities for commercial sector.
- Requirement for regular reporting of data on types and quantities of material recovered (recycled, composted / mulched, or used for fuel) from residential and commercial sectors.
- Requirement for periodic calculation of set – out rate and / or participation rate in curbside residential recycling program.
- Requirement for regular reporting of data on quantities of material disposed.
- Waste reduction / recycling promotion, education, and information requirements.
- Performance Standards to be met over specified time frames.

- Periodic solid waste management status reports to governing body (City Council, County Commissioners).

7.4.7 The customary practice of renewing franchises each year for the term of the franchise should be reviewed and evaluated by each franchising entity.

The tradition of “automatically” renewing franchises each year for the full term of the franchise is a custom that has evolved over time in the cities and the County and has assured continuity of service. It may be appropriate to determine whether franchise renewals prior to the expiration date of the franchise should be based on performance reviews conducted by the franchising authorities in coordination with the franchised service providers, noting areas of achievement and improvement. Franchising entities can also conduct annual performance reviews without any obligation to renew the franchise prior to its expiration date. At the terminating point of each franchise the franchising authority can make a decision about whether to extend the franchise and for how long based on the terms of each franchise.

It is understood this recommendation concerns the franchises between the County, the cities, and the service providers, and that decisions about the terms of the franchises or franchise renewal practices are ultimately made by the franchising authority and the respective service provider.

7.4.8 SWAC should be actively involved with implementing the adopted recommendations of this Integrated Solid Waste Management Plan Update and act as an agent of accountability relative to the franchised service providers and the Solid Waste District.

If the priority recommendations under Sections 7.3.1 and 7.3.2 of this Plan Update are approved, there will be a transition period when the District becomes part of County government, the LCHA identifies a Solid Waste Program Manager, and the District Director and LCHA Program Manager establish a cooperative working relationship. During this transition period

SWAC has a particularly critical role to play as the representatives of the franchising jurisdictions and other solid waste management stakeholders in the County. SWAC's role is to hold the LCHA and the District accountable and responsible for carrying out the Plan Update recommendations in a timely and responsive manner. Throughout the transition period SWAC should meet on a regular basis and receive joint status / progress reports from the LCHA Program Manager and District Director. SWAC's role is to exercise oversight on the process of altering the structure and programs of the County's solid waste management system according to the adopted recommendations in the Plan Update. In this regard SWAC should:

- Help clarify and refine program priorities, directions, and initiatives.
- Act in an advisory capacity not only to the District and LCHA but also to the County Department within which solid waste activities have been consolidated.
- Review and provide input regarding annual County / District waste reduction / recycling budget allocations and expenditures.
 - Provide implementation assistance at the local level by acting as communication liaisons and links to municipal decision – makers, stakeholders, and community groups.

It is emphasized that the expanded SWAC role described in this section is intended to be in effect during the transition period related to the initial implementation of the Plan Update recommendations. It is anticipated this transition period would last approximately one year.

7.4.9 Expand SWAC membership to include one or more representatives from the business / institutional / industrial sector.

There are no representatives of commercial interests presently on SWAC. Since the commercial sector constitutes the County's economy and is a

logical target for expanded or new waste reduction / recycling initiatives, this sector should be represented on SWAC by one or more individuals.

7.4.10 SWAC should consider the advantages and disadvantages of various procedures for periodically creating new membership opportunities.

Setting arbitrary limits for the length of time a person would serve on SWAC would mean that experienced and interested members could leave the Committee after a certain point, thus losing the value of their ongoing, informed contribution. As well, some individuals are SWAC members due to their governmental position within the County or a city and are representing a particular jurisdiction in that capacity. However, there are also benefits from periodically opening up SWAC participation to those that have not been involved previously and have innovative perspectives to offer. The cities and the County do have the option of rotating SWAC membership among appropriately qualified staff. Minimum membership terms could also be established with representatives able to evaluate their continued involvement after that period of time has elapsed. The issues related to length of membership on SWAC should be discussed and a determination made what, if any, guidelines and procedures might be adopted regarding this topic.

7.4.11 The Solid Waste District Director should provide SWAC with regular summary reports on District program activities, related expenditures, accomplishments, and allocated District personnel time per activity / program.

This accountability measure will allow the District and SWAC to more closely and accurately monitor the implementation of waste reduction / recycling activities and offer details about the allocation of resources to those activities.

7.4.12 The LCHA should arrange for two independent investigations, one regarding the feasibility of consolidating disposal transfer operations and the second concerning an increased level of cooperative processing / marketing of recyclables by the LCHA.

An objective analysis needs to be performed regarding the barriers and opportunities to increased cooperation among the franchised collectors for transfer of refuse to Coffin Butte Landfill (or other disposal sites) and for the handling, upgrading, and sale of recyclable materials. The analysis could indicate what practical steps can be undertaken to control costs and increase efficiency in these operations and how the public and private sectors can work together to undertake such steps.

8.0 Implementation Sequence / Phases / Steps

Five priority recommendations and twelve supplemental recommendations were proposed in Sections 7.3 and 7.4 above. A suggested order of implementation for these recommendations is presented below. For ease of reference the section number for each recommendation is included in the discussion.

8.1 Phase 1

The two most essential actions to move forward with following adoption of the ISWMP Update by the County Board of Commissioners are recommendations 7.3.1 and 7.3.2:

- 7.3.1 – Integrate the District and its staff into an existing County government department and continue the surcharge as the most equitable funding mechanism for the District.
- 7.3.2 – The LCHA should proceed to designate an individual as their Solid Waste Program Manager.

These recommendations are intended to re – structure the relationship between the Solid Waste District and the LCHA and are the foundation for the other organizational / institutional, program / policy, and procedural / administrative recommendations contained in Sections 7.3 and 7.4. It is understood that adoption of the ISWMP Update by the cities and / or the County constitutes acceptance of the guiding policy in recommendation 7.3.3:

- 7.3.3 – Continue to exceed the 2005 and 2009 recovery goals established for the County in HB 3744 by at least the current margin, and strive for additional recovery in order to control the annual per capita disposal rate.

8.2 Phase 2

Once the District has officially become part of a County government department the District Director then functions as the County Solid Waste Manager, in close collaboration with the newly designated LCHA Solid Waste Program Manager. These two individuals would jointly address the following recommendations:

- 7.3.4 – Review the recommended HHW management approach, revise it if deemed appropriate, establish permanent funding through rates and use grants as a source of supplemental, not primary, funding for the HHW management program.
- 7.3.5 – Consider adoption of universal solid waste service standards / requirements for the residential and commercial sectors in all the incorporated cities and unincorporated areas of the County.

Position papers outlining the advantages, disadvantages, and impacts of the selected HHW management strategy and universal waste service requirements should be developed and presented to SWAC. If requested, presentations could be made to city councils as part of the decision – making process for these issues.

As part of this implementation phase the District Director / County Solid Waste Manager would establish a schedule of monthly SWAC meetings for at least a period of one year following adoption of the Plan Update by the County Board of Commissioners. These meetings would be used in part for program and budgetary updates on District activities and for joint appearances by the two primary service provider representatives to report on progress in implementing the other recommendations of the ISWMP Update. A meeting / presentation schedule responds to the following recommendations and assists SWAC in performing its oversight role during the first year of ISWMP Update implementation (recommendation 7.4.8 below):

- 7.4.8 – SWAC should be actively involved with implementing the adopted recommendations of this Integrated Solid Waste Management Plan Update and act as an agent of accountability relative to the franchised service providers and the Solid Waste District.
- 7.4.11 – The Solid Waste District Director should provide SWAC with regular summary reports on District program activities, related expenditures, accomplishments, and allocated District personnel time per activity / program.

8.3 Phase 3

In its early meetings following Plan Update adoption SWAC can act on the following recommendations:

- 7.4.9 – Expand SWAC membership to include one or more representatives from the business / institutional / industrial sector.
- 7.4.10 – SWAC should consider the advantages and disadvantages of various procedures for periodically creating new membership opportunities.

During this implementation phase the LCHA would indicate to the District Director / County Solid Waste Manager and to SWAC how it intends to fulfill the following recommendation:

- 7.4.12 – The LCHA should arrange for two independent investigations, one regarding the feasibility of consolidating disposal transfer operations and the second concerning an increased level of cooperative processing / marketing of recyclables by the LCHA.

8.4 Phase 4

This implementation phase builds on the working relationship developed between the District Director / County Solid Waste Manager and the LCHA Solid Waste Program Manager in the previous phases. Under Phase 4 they need to cooperate and coordinate closely in preparing specific action proposals for the following recommendations:

- 7.4.1 – Implement programs and policies to meet the requirements for the remaining 2% credits in waste prevention and waste reuse and apply to DEQ for the total of 4% in recovery credits.
- 7.4.2 – Determine current levels of participation in curbside residential recycling service for each city where such service is offered, set targets for increasing program involvement, and conduct outreach / publicity to support achievement of these objectives.
- 7.4.3 – Plan and implement a targeted, countywide, commercial sector waste reduction / recycling initiative.
- 7.4.4 – Define waste reduction / recycling project and program ideas that are practical for schools in Lincoln County and establish related goals / timeframes for their implementation.

- 7.4.5 – Integrate, promote, and expand existing efforts for the recovery of yard / wood wastes into a unified, countywide program.

8.5 Phase 5

Based on the results from Phase 4 a number of different waste reduction / recycling program responsibilities for the LCHA will likely emerge that could be incorporated into the franchise agreements on a partial or complete basis. The County would take the initiative in determining with the LCHA what changes, if any, in the franchise agreements for the County unincorporated areas should be made. The District Director / County Solid Waste Manager could advise the cities of these options and opportunities for revising the franchises and offer technical assistance / information in that regard. The relevant recommendations for this implementation phase are:

- 7.4.6 – Consider modifications to the franchise agreements to incorporate basic performance elements for each franchised area.
- 7.4.7 – The customary practice of renewing franchises each year for the term of the franchise should be reviewed and evaluated by each franchising entity.

Appendix: Executive Summary / Final Draft Version
Update of Lincoln County, Oregon
Integrated Solid Waste Management Plan

A. Strengths of the County's Solid Waste Management System

- The County's recovery rate is 29% (2002), including 2% in credits for conducting a Backyard Composting Program (see Table ES – 1). Required recovery levels for Lincoln County as set by HB 3744 are 19% in 2005 and 20% in 2009. Therefore the County presently has a recovery rate almost 10% higher than the 20% level established for 2009.

Table ES – 1: Waste Generation & Recovery Overview, 2002

Total Tons Recovered	15,161
Total Tons Disposed	+40,676
Total Tons Generated	=55,837
Recovery Rate	27%
Composting Credit	+ 2%
Final Recovery Rate	= 29%

- Disposal quantities have remained relatively stable for several years, based in part on low population growth and high recovery rates (see Table ES – 2).

Table ES – 2: Lincoln County Disposed Waste Tonnage, 1997 – 2003
 Coffin Butte Landfill

	1997	1998	1999	2000	2001	2002	2003
January	3,032	2,873	3,061	3,134	3,051	2,905	3,110
February	2,757	2,848	2,809	2,626	2,658	2,721	2,812
March	2,982	3,306	3,547	3,374	2,888	3,157	2,939
April	3,314	3,301	3,454	2,917	3,042	3,356	3,290
May	3,481	3,146	3,138	3,390	3,251	3,460	3,316
June	3,470	3,576	3,683	3,607	3,271	3,407	3,445
July	4,221	4,246	3,897	3,781	3,559	4,228	3,972
August	4,131	3,906	4,142	4,247	4,124	4,111	3,953
September	3,965	3,721	3,710	3,715	3,028	3,549	3,820
October	3,552	3,457	3,101	3,173	3,542	3,561	3,448
November	2,665	2,789	3,020	2,907	2,948	2,803	2,777
December	2,994	3,144	2,516	2,590	2,683	2,874	3,379
Annual Total	40,564	40,312	40,078	39,460	38,046	40,134	40,261

- Even if no additional recovery were to occur in the County, the recovery would still be above the required levels due to slow population growth (see Table ES – 3).

Table ES – 3: Lincoln County Waste Generation Projection

Year	Population ¹	Tons Recovered	Tons Disposed ²	Tons Generated ³	Recovery Rate ⁴	+2 percent
2005	47,190	15,161	42,943	58,104	26.1%	28.1%
2006	47,709	15,161	43,415	58,576	25.9%	27.9%
2007	48,234	15,161	43,893	59,054	25.7%	27.7%
2008	48,764	15,161	44,376	59,537	25.5%	27.5%
2009	49,301	15,161	44,864	60,025	25.3%	27.3%
2010	49,843	15,161	45,357	60,518	25.1%	27.1%
2011	50,391	15,161	45,856	61,017	24.8%	26.8%
2012	50,946	15,161	46,361	61,522	24.6%	26.6%
2013	51,506	15,161	46,871	62,032	24.4%	26.4%
2014	52,073	15,161	47,386	62,547	24.2%	26.2%
2015	52,646	15,161	47,907	63,068	24.0%	26.0%
2016	53,225	15,161	48,434	63,595	23.8%	25.8%
2017	53,810	15,161	48,967	64,128	23.6%	25.6%
2018	54,402	15,161	49,506	64,667	23.4%	25.4%
2019	55,000	15,161	50,050	65,211	23.2%	25.2%
2020	55,605	15,161	50,601	65,762	23.1%	25.1%

- Notes: 1) Population projection based on an annual growth rate of 1.1 percent.
 2) Disposed tons based on a per capita disposal rate of 1,820 pounds per person per year.
 3) Tons generated = tons disposed + tons recovered
 4) Recovery rate = tons recovered / tons generated

- The Georgia – Pacific mill in Toledo serves as a local fuel market for recovered wood and yard wastes. The company has also provided land near the mill for the temporary aggregation and storage of these materials under an arrangement with the Solid Waste District. The public, the refuse haulers, businesses, landscapers, and contractors have free access to the site for dropping off wood / yard wastes.
- The Forest Enforcement Program is a broadly supported partnership that combines public / private sector resources in responding to illegal dumping on non – Federal, County unincorporated land. Emphasis is placed on cleaning up dump sites, identifying and citing / prosecuting those responsible for such sites, and preventing illegal dumping through education / outreach (see Table ES – 4).

Table ES – 4: Forest Enforcement Program Results, 1997-2003

ACTIVITY	1997	1998	1999	2000	2001	2002	2003
Dump Sites Found	65	61	55	66	38	68	53
Dump Sites Cleaned	9	46	23	49	23	43	38
Abandoned Vehicles	25	23	61	36	36	50	49
Thefts	15	18	15	14	11	6	615
Criminal Trespass	15	19	39	16	13	19	23
Criminal Mischief	14	22	22	16	32	30	18
Campsite Checks	24	26	13	68	55	67	45
Permit Checks	14	9	43	145	87	75	90
Arrests	28	19	20	176	60	42	128
Agency Assists	42	26	58	65	38	60	53
Totals	251	269	349	651	393	460	512

Miles driven	19,795	21,680	20,796	20,641	16,787	23,905	17,435
Investigation hours	77	494	714	649	537	673	730
Patrol hours	135	819	689	617	577	615	620
Training hours	140	63	63.5	40	54	72.5	55
Persons contacted	1,102	1,426	1,905	997	1,573	1,621	2,129

- The members of the Lincoln County Haulers Association (LCHA) maintain a network of transfer stations and recycling centers from the southern to the northern end of the County. Curbside residential recycling collection service is available to customers in five jurisdictions

and commercial recycling collection service is offered to businesses / institutions in the franchised areas where LCHA firms operate.

- The Solid Waste District works with the LCHA to sponsor and implement periodic special collection / recovery efforts and projects for particular materials such as latex paint, electronic equipment, scrap metals, Christmas trees, tires, appliances, and household hazardous waste. District staff also make informational and promotional presentations to students and community groups.
- The County has an ongoing Solid Waste Advisory Committee (SWAC) whose members represent the County, the cities, the LCHA, the public, waste reduction / recycling advocates, and other interests. The SWAC reviews proposed or existing waste reduction / recycling initiatives and advises the County Commissioners on their adoption or modification.

B. Weaknesses of the County's Solid Waste Management System

- Per capita annual disposal rate for 2002 was 1,820 pounds / person / year, the fourth highest in the state and an increase of 4.6% over the 2001 rate. This probably reflects the impacts of tourism in the County.
- A household hazardous waste (HHW) management strategy completed in 2000 has not been implemented. There is general agreement among representatives of the County, the cities, the District, the LCHA, and the SWAC that more convenient and permanent measures are needed to control HHW beyond the periodic collection events that are currently conducted.
- Rationale for the status of the Solid Waste District as an independent entity is not clear.
- Role of cities and County historically limited to serving as franchising authorities.

- Lack of performance standards and requirements in franchise agreements, particularly concerning waste reduction / recycling services.
- The LCHA has proposed eliminating the District and taking over its functions and operations. The haulers claim there is a serious lack of communication, coordination, and cooperation between the LCHA and the District.
- The LCHA opposed adoption of the \$4 / ton surcharge on disposed waste as a funding mechanism for the District and continue to believe it is an unfair tax on their customers.
- The effectiveness of curbside residential recycling programs has not been documented, and no formal, integrated effort has been undertaken that combines the resources of the County, the cities, the SWAC, the LCHA, and the District to systematically increase waste reduction / recycling in businesses, institutions, and schools.

C. Organizational, Program, and Policy Recommendations

Priority Recommendations

- Integrate the District and its staff into an existing County government department and continue the surcharge as the most equitable funding mechanism for the District.
- The LCHA should proceed to designate an individual as their Solid Waste Program Manager.
- Continue to exceed the 2005 and 2009 recovery goals established for the County in HB 3744 by at least the current margin, and strive for additional recovery in order to control the annual per capita disposal rate.
- Review the recommended HHW management approach, revise it if deemed appropriate, establish permanent funding through rates and use

grants as a source of supplemental, not primary, funding for the HHW management program.

- Consider adoption of universal solid waste service standards / requirements for the residential and commercial sectors in all the incorporated cities and unincorporated areas of the County.

Supplemental Recommendations

- Implement programs and policies to meet the requirements for the remaining 2% credits in waste prevention and waste reuse and apply to DEQ for the total of 4% in recovery credits.
- Determine current levels of participation in curbside residential recycling service for each city where such service is offered, set targets for increasing program involvement, and conduct outreach / publicity to support achievement of these objectives.
- Plan and implement a targeted, countywide, commercial sector waste reduction / recycling initiative.
- Define waste reduction / recycling project and program ideas that are practical for schools in Lincoln County and establish related goals / timeframes for their implementation.
- Integrate, promote, and expand existing efforts for the recovery of yard / wood wastes into a unified, countywide program.
- Consider modifications to the franchise agreements to incorporate basic performance elements for each franchised area.

- The customary practice of renewing franchises each year for the term of the franchise should be reviewed and evaluated by each franchising entity.
- SWAC should be actively involved with implementing the adopted recommendations of this Integrated Solid Waste Management Plan Update and act as an agent of accountability relative to the franchised service providers and the Solid Waste District.
- Expand SWAC membership to include one or more representatives from the business / institutional / industrial sector.
- SWAC should consider the advantages and disadvantages of various procedures for periodically creating new membership opportunities.
- The Solid Waste District Director should provide SWAC with regular summary reports on District program activities, related expenditures, accomplishments, and allocated District personnel time per activity / program.
- The LCHA should arrange for two independent investigations, one regarding the feasibility of consolidating disposal transfer operations and the second concerning an increased level of cooperative processing / marketing of recyclables by the LCHA.