ATTACHMENT 2

COUNTYWIDE SITING ELEMENT

of the

MONO COUNTY INTEGRATED

WASTE MANAGEMENT PLAN

Mono County, California

Recommended for adoption by the
Mono County Solid Waste Task Force

January 2015

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SECTION 1.0
INTRODUCTION

The following Countywide Siting Element has been prepared by the Mono County Department of Public Works in accordance with requirements established by Title 14, California Code of Regulations (CCR), Division 7, Chapter 9, Article 6.5. In addition to the Source Reduction and Recycling Element (SRRE), the Household Hazardous Waste Element (HHWE), the Non-Disposal Facility Element (NDFE), and the Summary Plan, this document is one of five parts that comprise the Countywide Integrated Waste Management Plan. The purpose of the Countywide Siting Element is to demonstrate that a minimum of 15 years of permitted disposal capacity is available through existing or planned facilities on a countywide or regional basis. To meet this requirement, this document describes the geographic context of the planning area, defines the goals and objectives of this element, provides an estimate of existing countywide disposal capacity, demonstrates that existing capacity exceeds 15 years, and presents general criteria for future siting of new facilities. This document has been developed with review and input from members of the Local Task Force (LTF) including staff from the Town of Mammoth Lakes, the County of Mono, and CalRecycle.

SECTION 2.0

PROGRAM GOALS AND POLICIES

The Mono County Local Solid Waste Task Force (LTF) was originally established by the Mono County Board of Supervisors in January 1990 and ratified by the Town of Mammoth Lakes in April 1990, in accordance with the requirements set forth in section 40950 of the California Public Resources Code. Following a period of inactivity, the LTF was re-organized and re-authorized by the Board of Supervisors in November 1999 and the Town of Mammoth Lakes in December 1999. This group was responsible for developing the 2000 CIWMP which has guided the county's solid waste system until the present time. Membership was modified in May 2004 to replace those who had become inactive, and again in 2006 with the emergence of new stakeholders and staff changes within participating agencies.

By 2012, emerging diversion programs and proposed infrastructure, as well as the upcoming closure of the regional Benton Crossing Landfill, caused a need to formally update the CIWMP to reflect the inevitable transitions of the future planning period. In August 2012, in coordination with existing members, a change in membership as well as new bylaws were recommended and by late 2012 were approved by both the Mono County Board of Supervisors and the Town of Mammoth Lakes. The 2012 bylaws, as well as a list of current members are provided in Appendix A; copies of the local authorizing actions are also included in Appendix A.

The stated duties of the LTF are as follows:

- Advise jurisdictions responsible for the Source Reduction and Recycling Element, Household Hazardous Waste Element and Non-Disposal Facility Element preparation, and review goals, policies, and procedures for jurisdictions, which, upon implementation, will aid in meeting the solid waste management needs of the county, as well as the mandated source reduction and recycling requirements of Public Resources Code section 41780.

- Assist jurisdictions in the implementation of the SRRE, HHWE, and NDFE.

- Provide technical guidance and information regarding source reduction, waste diversion, and recycling to local jurisdictions during preparation and revision of the SRRE, HHWE and NDFE. Such information may be presented to the general public at public hearings and upon request by members of local government and community organizations.

- Identify solid waste management issues of countywide or regional concern.

- Determine the need for solid waste collection and transfer systems, processing facilities,

and marketing strategies that can serve more than one local jurisdiction within the region.

- Facilitate the development of multijurisdictional arrangements for the marketing of recyclable materials.

- To the extent possible, facilitate resolution of conflicts and inconsistencies between or among city and county source reduction and recycling elements.

- The task force shall develop goals, policies, and procedures which are consistent with guidelines and regulations adopted by CalRecycle, to guide the development of the siting element of the countywide integrated waste management plan.

2.1 Element Goals

In accordance with 14 CCR 18755.1, a set of general goals have been developed by the County and LTF to provide guidance for the countywide solid waste program. The goals defined by the LTF for this Countywide Siting Element are as follows:

- Develop and maintain a long-term waste management infrastructure that serves county residents with an efficient, economic, safe, and convenient system for the collection, processing, disposal and/or export of municipal solid waste generated within county boundaries;

- Implement programs and policies identified in this element as a cooperative effort between the Town of Mammoth Lakes, the County of Mono, private industry, and other regional agencies as appropriate. New source reduction, recycling, composting, and special waste programs shall be coordinated or implemented on a multi-jurisdictional basis to the greatest extent feasible in order to ensure the least cost to ratepayers, to improve the potential for effective programs, and to avoid unnecessary duplication of programs, efforts, and administration.

- Encourage residents, businesses, organizations, and public agencies to maximize source reduction and minimize waste disposal;

- Develop convenient opportunities for residents and businesses to recycle waste materials;

- Encourage residents, businesses, organizations, and public agencies to buy recycled-content products;

- Maintain opportunities for the safe collection, storage, and shipment of household hazardous wastes for proper re-use, recycling, transformation, treatment, or disposal.

- Educate residents to prevent the inappropriate disposal of household hazardous wastes, motor oil, and other special wastes and;

- Ensure that long-term disposal capacity is available, whether in-county or outside the county, for waste that cannot be recycled or composted.

- Utilize Solid Waste Parcel Fees to fund environmentally appropriate closure and post-closure maintenance of existing landfills, and to invest in recycling infrastructure that increases the convenience and benefits of recycling for all county residents.

- Identify and implement programs that will provide feedstock to locally marketable recyclable products, including transformation and biomass, and assist private sector development of businesses that recycle and re-use these commodities.

2.2 Countywide Policies

The following policies and programs are being implemented by the County in an effort to meet the goals stated above. Some of the policies have been fully implemented and are in a state of maintenance at this time. Other programs are concepts that are anticipated to be developed within the planning period of this document.

Safe Disposal Practices

1. Maintain compliance with state minimum operating standards at all county waste facilities, which includes providing site security and access control, daily compaction and cover of waste, and routine monitoring of landfill gas and ground water at each site.

2. Update the operations plan for each landfill as circumstances change, specifically describing the method of operation, the types of wastes that are accepted and those that are prohibited, the methods to control potential environmental nuisances (e.g., dust, litter, surface drainage), and other elements of site operation as required by Title 27, CCR.

3. Continue to provide County facilities for the safe collection and storage of used motor oil and household hazardous wastes, as well as the proper transformation or disposal of the materials. Maintain a public awareness program to promote the availability of such facilities and the importance of removing these materials from the waste stream.

4. Prepare and implement Final Closure Plans for County landfills as circumstances dictate. Ensure adequate funding for the environmentally appropriate closure and post-closure activities.

Minimize Waste Generation

5. Establish "reuse exchange" areas at county waste facilities for the segregation and storage of re-usable goods. These materials may be set aside by incoming public self-haul customers or salvaged from the waste stream by site personnel prior to disposal.

Conduct and Promote Recycling

6. Continue to provide collection facilities at County landfills and transfer stations that allow the public to deposit recyclable waste material prior to disposal, including scrap metal, white goods, CRTs, e-waste, car batteries, used automotive tires, used motor oil, glass, tin cans, paper, plastics, and cardboard. Wherever feasible, expand these opportunities to include additional materials such as mixed paper.

7. Establish collection receptacles at County parks and well-traveled community areas that enable tourists and the general public to deposit recyclable beverage containers. Provide for the collection and recycling of the materials..

8. Implement the County Mandatory Commercial Recycling Plan. Pursue grant opportunities and provide other assistance to enhance existing commercial recycling efforts. Assist and encourage the establishment of recyclable collection, storage, and processing systems, such as certified redemption centers or certified waste oil collection centers, by community organizations and businesses. Assist their promotion by including information of such programs in public education materials.

9. Develop and distribute information to raise public awareness regarding the availability of recycling facilities countywide and the importance of recycling waste materials. Program implementation should involve schools, public agencies, local businesses, community groups, and the general public.

10. Continue to stockpile and grind wood waste materials at County waste facilities for re-use by the general public, as alternative daily cover, or feedstock for other processes. Provide re-use areas for useable wood waste materials for re-use by the general public, local businesses and public agencies.

11. Continue to utilize equipment and staff to divert clean wood and scrap metal from the waste stream as time and safety permits.

12. Evaluate the potential for set-aside area requirements for recyclable collection and storage facilities in the design of large-scale developments.

13. Implement a diversion program for construction and demolition aggregate material at County Landfills by stockpiling, and crushing the material for beneficial re-use as alternative daily cover, road base, or classified fill.

14. Develop a Master Recycling Plan for all County facilities, and work with team members to achieve the highest diversion rate feasible from all County-owned facilities including offices, parks, campgrounds and community centers.

15. Consider the requirement of curbside recycling service ("Blue Bag" program) throughout Mono County within future franchise contracts, and/or separate Franchise Agreements pertaining to only recyclable materials.

16. Encourage Caltrans and other jurisdictions to develop policies that would require recycled products such as glass cullet, crushed aggregate and asphalt in local road maintenance and development projects.

Conduct and Promote Recycled-Content Purchases

17. Continue to promote the purchase of recycled-content goods by implementing the County Recycled Product Procurement Policy.

Ensure Long-Term Disposal Capacity

18. Develop engineered design plans for Pumice Valley and Walker Landfills that utilizes disposal capacity within the existing waste footprint.

19. As economics or capacity limits dictate, provide for Long Haul Transfer Infrastructure. Such infrastructure can be provided through public funding, private funding, or a public private partnership, which should be selected in an effort to achieve the least cost to ratepayers. Infrastructure should be located as close to population centers as possible without creating significant environmental impacts.

20. Engage in transitional planning to ensure that safe and environmentally appropriate opportunities for the management of sludge are identified prior to such activities being discontinued at Benton Crossing Landfill.

2.3 Implementation Schedule and Administration

All of the policies described in the preceding section have been, or are actively in the process of being, implemented by Mono County in its effort to reduce the quantity of waste disposed in its landfills. Some programs are completed and continuously implemented, others occur on a regularly-scheduled basis, some are currently in development or undergoing revision, and yet others are periodic based on public interest, effectiveness, budget, or staff availability. Landfill permit revisions are anticipated to be completed within the next two years. The status or scheduled frequency of the programs are described in Table 1, below. The policy numbers refer to those described in Section 2.2, above.

TABLE 1

Projected Program Implementation Schedule

Policy No.	Status or Frequency	Completion Date	Policy No.	Status or Frequency	Completion Date
1	Continuous	n/a	12	In Progress	GP Update
2	Continuous	n/a	13	Continuous	n/a
3	Continuous	n/a	14	In Progress	Winter 2015
4	Periodic	n/a	15	In Progress	Winter 2016
5	In progress	Summer 2014	16	Continuous	n/a
6	Continuous	n/a	17	Continuous	n/a
7	Continuous	n/a	18	Continuous	n/a
8	Continuous	n/a	19	As Necessary	n/a
9	Continuous	n/a	20	As Necessary	3+ yrs prior
10	Continuous	n/a			
11	Continuous	n/a			

The local agency responsible for administering the program and implementing the above policies established to meet diversion and disposal goals in the unincorporated area is the Mono County Department of Public Works, Solid Waste Division. When requested, the Local Task Force contributes general guidance, assists with policy-making decisions and the local approval process, and provides review of planning documents prior to final approval. The person responsible for managing the program on a day-to-day basis is the Solid Waste Superintendent for Mono County, who can be reached at:

Mono County Department of Public Works
P. O. Box 457 / 74 N. School Street
Bridgeport, California 93517
phone: (760) 932-5453
fax: (760) 932-5441

2.4 Solid Waste Program Funding

The Mono County Board of Supervisors has authorized the establishment of a solid waste enterprise fund through which the countywide program is operated. Revenues generated through parcel fees and gate fees provide the annual operating budget for the program. Additional money for recycling efforts is pursued through grant programs periodically made available by CalRecycle, the California Department of Conservation, or other sources. It is through these mechanisms that the County implements the policies and programs developed to meet the waste reduction, recycling, and disposal goals.

SECTION 3.0

PLANNING CONTEXT

The following section establishes the context of the planning area for the Countywide Siting Element through a brief geographic and demographic overview of Mono County and a status summary of the solid waste management system that has been implemented in the county.

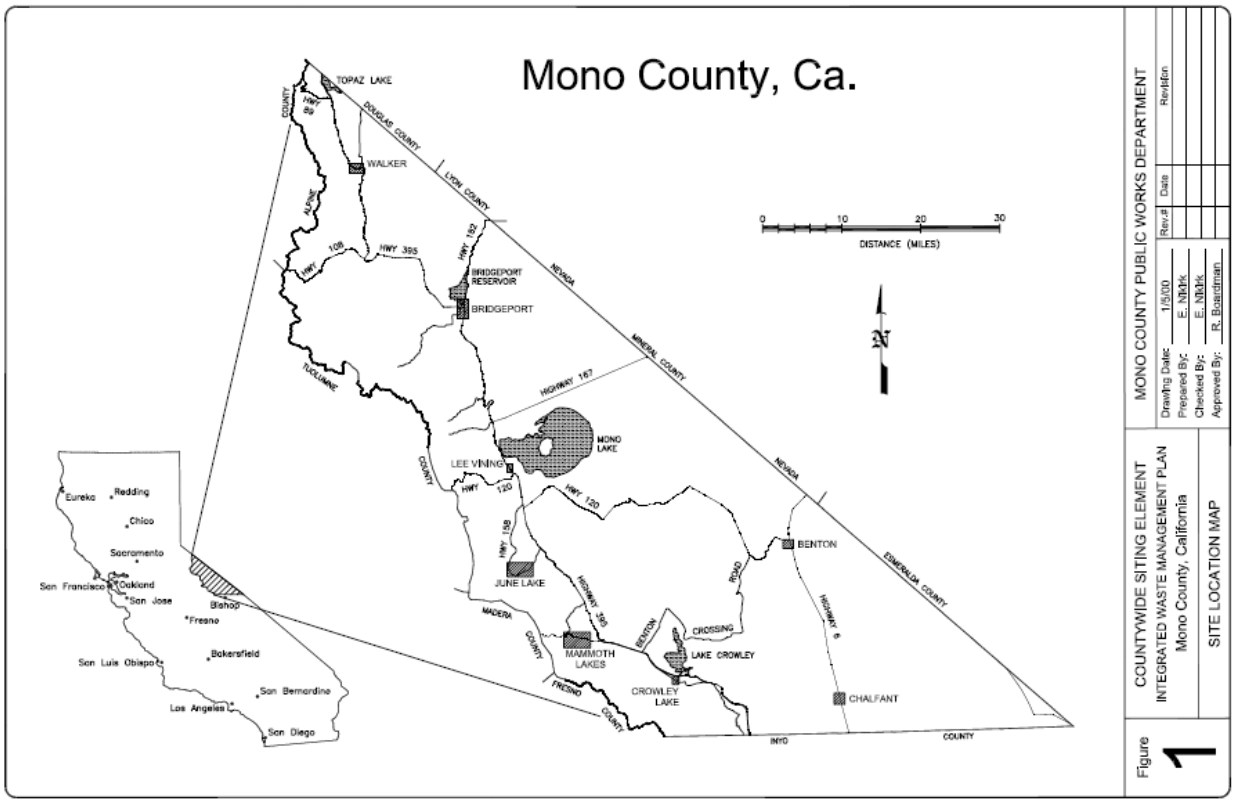
3.1 Geographic Setting

Primarily rural in nature, Mono County is located in central-eastern California, as indicated in Figure 1 on the following page. The county is bordered by the State of Nevada to the north and east, by Inyo County on the south, and by Alpine, Fresno, Madera, and Tuolumne counties on the west. Located in the high desert region on the eastern flank of the Sierra-Nevada Mountain range, Mono County can be geographically characterized as having rugged terrain with steep mountains, narrow valleys, and deserts. In addition, numerous rivers, streams, and lakes are scattered throughout the county. Generally speaking, topographic elevations range from 5,000 feet in the lower valleys and up to 14,000 feet in the White Mountains at the southeastern corner of the county. The county comprises 3,103 square miles of land space, with approximately 2,900 square miles, or 93.4 percent, owned by public entities, which include the federal government (Inyo National Forest, Toiyabe National Forest, Bureau of Land Management), the State of California, local government, and the City of Los Angeles (Department of Water and Power).

3.2 Population

The majority of population centers in the county are found along the Highway 395 corridor, which trends north-south in the western portion of the county. Communities in this area include, from north to south: Topaz, Coleville, Walker, Bridgeport, Mono City, Lee Vining, June Lake, Mammoth Lakes, Crowley Lake, Tom's Place, and Paradise Valley. Additional population areas include the communities of Benton and Chalfant along Highway 6 in the southeast corner of the county. The remainder of the county is largely uninhabited. The 2010 US Census determined the population of Mono County to be 14,202. The California Department of Finance estimates future annual growth at less than 1% per year for the next 50 years (Department, 2013). As of January 1, 2013, the estimate is 14,493 for the entire county. At 4.6 persons per square mile, the resulting population density is one of the lowest in the State.

Figure 1 – Location Map



The Town of Mammoth Lakes is the sole incorporated city established in Mono County. The 2010 Census determined the population of the Town of Mammoth Lakes to comprise 8,234 of Mono County's 14,202 residents. With approximately 57 percent of the county's residents, and an even greater percentage of the County's annual visitor totals, the Town of Mammoth Lakes generates the vast majority of waste within the county.

The population distribution throughout the county is presented in Table 2, below. Locations of the Town of Mammoth Lakes and other communities in the county are presented on the preceding Figure 1, Location Map.

TABLE 2

Population Centers in Mono County

Community	Population	Comments
Town of Mammoth Lakes	8,234	Ski area; large 2nd residence/high tourist influx
Unincorporated Areas		
Antelope Valley	1,265	Coleville, Topaz, & Walker.
Bridgeport Valley	575	Bridgeport & Twin Lakes.
Lee Vining/Mono City	394	n/a
June Lake	629	Ski area; large 2nd residence
Long Valley/Swall	1,535	Paradise, Sunny Slopes, Swall, Crowley
Tri-Valley	931	Benton, Chalfant, & Hammil Valley.
Total, Unincorporated	5,963	
Total, Countywide	14,202	

(US Census, 2010)

SECTION 4.0

EXISTING SOLID WASTE DISPOSAL CONDITIONS

This section addresses the waste disposal conditions that currently exist within the borders of Mono County. A general description of existing waste facilities and waste haulers is included, as well as specific permit conditions currently in-place at each landfill. The requirements of 14 CCR 18755.5 are addressed by the discussions and data presented in this section.

4.1 Solid Waste and Recycling Services

Two commercial haulers provide residential and commercial waste collection services in Mono County. Mammoth Disposal, a subsidiary of Waste Connections, Inc., is the franchise hauler and service provide for the Town of Mammoth Lakes mandatedresidential and commercial service.

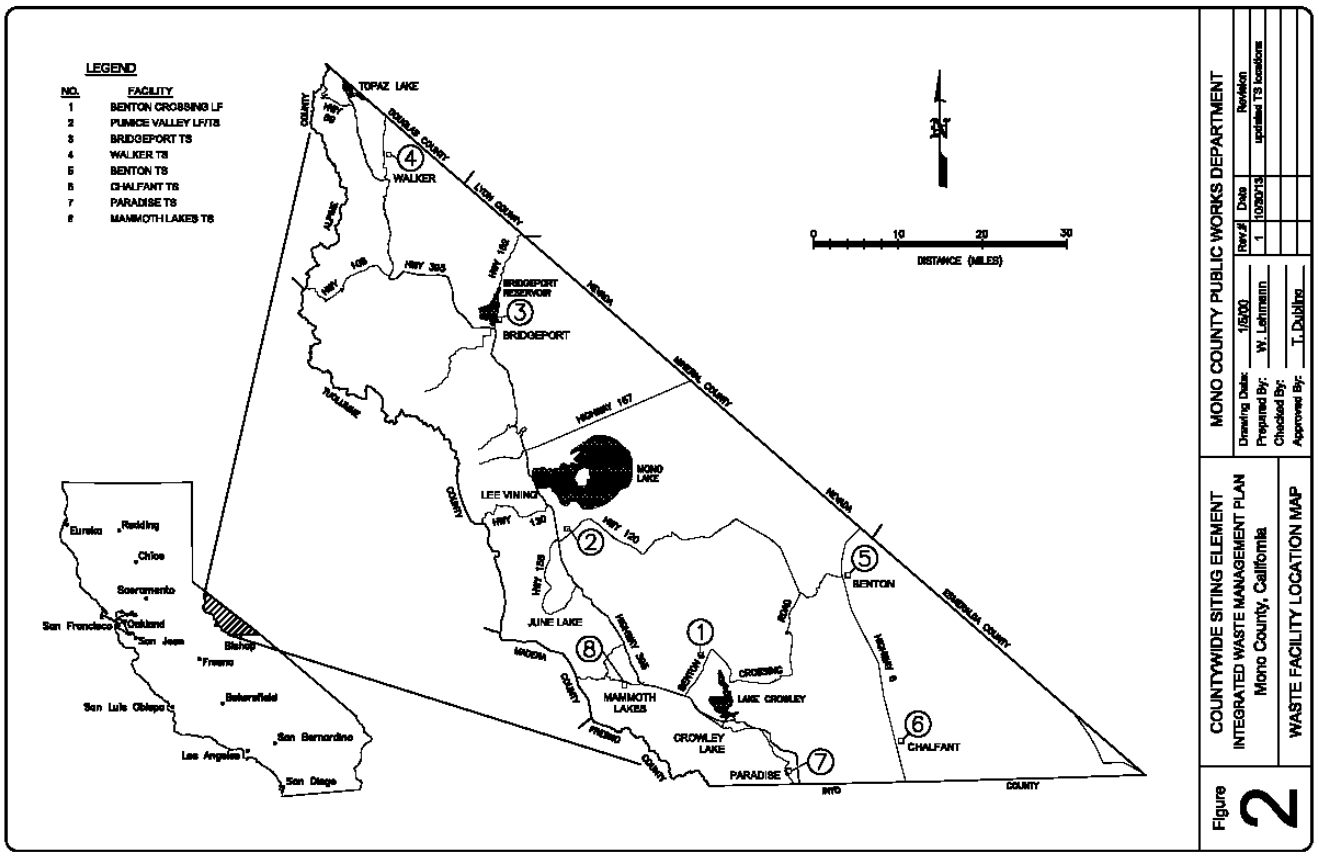
The unincorporated area of Mono County has two franchisees, including Mammoth Disposal and D&S Waste out of Yerington, NV.

Curbside recycling services are offered throughout the Town of Mammoth Lakes as well as certain parts of the County by Sierra Conservation Project. Other businesses such as Shred-Pro (mixed paper shredding service) and Mammoth Rock-n-Dirt (aggregate crushing) contribute to the available recycling services centering around the Town of Mammoth Lakes.

Self-hauling of waste and recyclable materials is available to all residents of Mono County, with seven Transfer Stations and/or landfills located near population centers. Three of the County's transfer stations now occupy land adjacent to closed landfills that are in a post-closure maintenance period.

Disposal of solid waste in Mono County is conducted at only 3 active landfills. Two of these, Pumice Valley and Walker, currently accept only inert C&D waste for burial, and transfer all municipal solid waste off-site for disposal. The Benton Crossing Landfill has been the County's regional, and sole municipal solid waste landfill, for over 10 years and remains in use today. Figure 2 on the following page presents the locations of each facility.

Figure 2 – Waste Facility Location Map



4.2 Existing Landfill Permit Conditions

This section addresses the current permit status of County landfills, in accordance with the requirements of 14 CCR 18755.5. A discussion of disposal capacity for each landfill is presented in Section 5.0. Table 3 on the following page summarizes pertinent administrative and permitting information for each existing landfill, as specified in Title 14 CCR, section 18755.5(a)(1) & (a)(2).

Mono County has six landfills. Three of these sites, Benton, Chalfant, and Bridgeport, were closed in 2007-2009. The landfills are now in the post-closure maintenance period, with operating Transfer Stations onsite. All municipal solid waste, recycling and HHW is transported off-site to various destinations. These three facilities also accept clean wood waste and organics, which is chipped onsite and beneficially re-used for post-closure maintenance, or distributed to the public.

Two of the three remaining landfills are active, but are very low-volume C&D landfills where cover activities occur only once every 90 days. These two sites, Walker and Pumice Valley, also have onsite Transfer Stations that accept municipal solid waste, recycling and HHW for transport. The sites accept inert C&D in a separate area for quarterly burial and cover.

In accordance with 27 CCR Section 20220, the Benton Crossing Landfill accepts all putrescible and non-putrescible solid and semi-solid waste including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, construction and demolition wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded wastes, provided that such wastes do not contain waste which must be managed as a hazardous waste, wastes which contain soluble pollutants in concentrations that exceed applicable water pollution control objectives, or wastes that could cause degradation of waters of the state (designated waste). In addition to typical non-hazardous municipal solid waste as described above, the Benton Crossing Landfill also accepts source-separated waste for management through its waste diversion program, including wood waste, scrap metal, white goods and appliances, waste tires, non-hazardous sewage sludge, CRTs, CEDs, HHW and used oil and filters.

TABLE 3

Landfill Administration and Permit Information

Landfill Name	Facility Permit No.	Property Owner	Facility Operator	Operational Status	Permit Date
Benton	26-AA-0006	Mono County	Mono County	Post-Closure	6/17/2013
Benton Crossing	26-AA-0004	LADWP	Mono County	Active	3/8/2013
Bridgeport	26-AA-0002	Mono County	Mono County	Post-Closure	6/17/2013
Chalfant	26-AA-0005	Mono County	Mono County	Post-Closure	6/17/2013
Pumice Valley	26-AA-0003	LADWP	Mono County	Active C&D	7/14/78
Walker	26-AA-0001	Mono County	Mono County	Active C&D	5/22/07

Table 4 below provides a summary of average daily disposal rates and a characterization of wastes that each active landfill is permitted to accept. Daily rates are calculated based on the number of actual operating days.

TABLE 4

Current Waste Generation and Disposal

Landfill	Avg. Disposal Rate		Operating	Accepted Waste Types
	(cy/day)	(tons/day)	Days/Yr	
Benton Crossing	204	102	312	MSW (res./comml./indust.) and Inert Construction and Demolition Waste
Pumice Valley	21	13	104	Inert Construction and Demolition Waste
Walker	3	1	104	Inert Construction and Demolition Waste
Totals	228	116		

(SRK 2012, SRK 2013 and SWT 2014)

TABLE 5

Permitted Maximum Landfill Disposal Rates

Landfill	Max. Daily Disposal		Max. Annual Disposal	
	(cy/day)	(t/day)	(cy/yr)	(ton/yr)
Benton Crossing	n/a	500	n/a	156,000
Pumice Valley	n/a	n/a	n/a	n/a
Walker	n/a	80	n/a	500
Totals	n/a	n/a	n/a	n/a

Maximum permitted daily and annual disposal rates are specified on SWFPs for Benton Crossing and Walker. Existing SWFP for Pumice Valley (1978) does not establish limits on daily tonnage or capacity.

SECTION 5.0

ESTIMATE OF COUNTY DISPOSAL CAPACITY

Pursuant to the requirements of 14 CCR 18755.3, this section presents information regarding existing disposal capacity available within the county and provides documentation of the disposal capacity that existed in the base year of 1990. In addition, this section presents current estimates of the site life at each landfill and provides a projection of the disposal capacity available for future waste disposal within the county.

This information must be viewed within the context of a system that is in transition. Due to the economic challenges of operating low volume rural landfills, the County is currently in a position where the operation of our landfills exceeds the cost of available long-haul transfer opportunities. This is due to our relatively close proximity to available capacity in other jurisdictions where much larger scale, and more efficient landfill operations are underway.

The County intends on maintaining the current course at Benton Crossing Landfill until a point of closure, but following the closure of this site the County intends to pursue the most cost-effective options to meet future disposal needs. These options include the long-haul transfer of waste. While there is interest in maintaining landfill capacity and the flexibility it affords, by developing long-haul transfer infrastructure the County is assured of another competitive, and capacity-preserving option.

5.1 Base Year Disposal Capacity

As discussed in preceding sections of this report, three active landfills provide disposal capacity for the residents of Mono County. In accordance with the requirements of 14 CCR 18755.3, Table 6, below, has been prepared to present the total permitted and remaining disposal capacities that were in place within the county in 1990.

TABLE 6

Base Year Disposal Capacity Conditions

Landfill	Total Permitted Capacity [1]		Total Remaining Capacity [1] in 1990	
	(cu.yds.)	(tons) [2]	(cu.yds.)	(tons) [2]
Benton	109,520	27,380	92,920	23,230
Benton Crossing	1,307,990	327,000	822,340	205,585

Bridgeport	767,160	191,790	665,150	166,290
Chalfant	126,380	31,595	97,570	24,390
Pumice Valley	479,940	119,985	376,920	94,230
Walker	247,880	61,970	197,060	49,265
Totals	3,038,870	759,720	2,251,960	562,990

Notes:

(1) Total permitted capacity is not specified on 1978 permits. Data based on calculations in the site RDSI's (1989) and projected to Jan. 1, 1990 through disposal site survey records.

(2) Assumed in-place conversion of 500 lb/cy for all sites, given operating practices at that time.

5.2 Current Disposal Capacity

There are existing SWFPs for Benton Crossing Landfill and Walker Landfill. The County is currently in the process of revising the solid waste facilities permit for Pumice Valley Landfill. The Joint Technical Documents (JTD) that have been approved for Benton Crossing and Walker, as well as the JTD developed in draft form for Pumice Valley, define the final disposal capacity and provide estimates of remaining site life.

Future disposal operations at each site will be contained within the existing waste footprint, with disposal capacity provided through vertical fill over existing grades.

Table 7 on the following page presents the remaining disposal capacity and site life estimate for each site under current and proposed permit conditions. It should be noted that capacity data represents the total fill space available, or the aggregate quantities of compacted solid waste and cover soil.

As seen in Table 7, following page, the County currently has approximately 1,164,488 cubic yards of remaining permitted waste disposal capacity. Should permit conditions at Pumice Valley be revised according to proposed site designs, the aggregate disposal capacity will be upgraded to 1,444,777 cubic yards. Under current waste generation and disposal trends (see Table 4) of approximately 66,144 (unadjusted for growth) cy per year, the site life expectancy for all County landfill capacity would be approximately 22 years.

TABLE 7

Existing and Proposed Disposal Capacity Conditions

	Current Permit Conditions		Proposed Permit Conditions
Landfill	Remaining Capacity (cy)	Site Life	Remaining Capacity (cy)
Benton Crossing	817,300	until 2023	n/a
Pumice Valley	232,851	n/a	513,140
Walker	114,337	+100 yrs	n/a
Totals	1,164,488		513,140

(SRK 2012, Mono County 2014, SRK 2013, SWT 2014) Note: Site life expectancies are based on existing volume and capacities on a site-by-site basis.

5.3 Projected Waste Disposal Requirements

State solid waste regulations require that the Countywide Siting Element develop a projection of waste disposal quantities and the resulting impact on remaining countywide landfill capacity over a 15-year period. Table 8 on the following page presents an annual volumetric accounting of the estimated disposal quantities over the next 15 years. The annual reduction in disposal capacity of existing facilities is calculated for the period under consideration, assuming that current permit conditions remain the same.

As one would expect after reviewing the site life projections addressed in the preceding section, Table 8 demonstrates that Mono County has sufficient capacity through existing disposal facilities to handle the quantity of waste expected to be collected over the next 15 years, whether current or proposed permit conditions apply.

Given current permit conditions, it is anticipated that Mono County will retain an estimated 548,515 cubic yards (589,850 tons) of waste disposal capacity 15 years from the date of this report preparation. Although weight-based data for remaining capacities is not presented in Table 8, this information may be viewed on the detailed spreadsheet enclosed in Appendix D. Table 8 does not account for waste exported out of the county since this amount, should it exist, accounts for a minute portion of the total county-wide waste stream. Additionally, very limited waste is imported into Mono County (from campgrounds in Madera County) for disposal at its landfills, so this was not addressed either.

TABLE 8

15-Year Countywide Disposal Capacity Projections

Calendar Year	No. of Years	In-Place Disposal [1] (tons/yr)	In-Place Disposal [1] (cy/yr)	Cover Soil Required[2] (tons/yr)	Cover Soil Required[2] (cy/yr)	Total Annual Fill (tons/yr)	Total Annual Fill (cy/yr)	Remaining Capacity [2] (cu.yds.)
2014	1	33,280	66,144	13,312	26,458	46,592	92,602	1,164,488
2015	2	33,446	66,475	13,379	26,590	46,825	93,065	1,071,423
2016	3	33,614	66,807	13,445	26,723	47,059	93,530	977,893
2017	4	33,782	67,141	13,513	26,856	47,294	93,998	883,896
2018	5	33,951	67,477	13,580	26,991	47,531	94,468	789,428
2019	6	34,120	67,814	13,648	27,126	47,769	94,940	694,488
2020	7	34,291	68,153	13,716	27,261	48,007	95,415	599,074
2021	8	34,462	68,494	13,785	27,398	48,247	95,892	503,182
2022	9	34,635	68,837	13,854	27,535	48,489	96,371	406,811
2023	10	34,808	69,181	13,923	27,672	48,731	96,853	309,958
2024	11	34,982	69,527	13,993	27,811	48,975	97,337	212,621
2025	12	35,157	69,874	14,063	27,950	49,220	97,824	114,797
2026	13	35,333	70,224	14,133	28,089	49,466	98,313	16,484
2027	14	35,509	70,575	14,204	28,230	49,713	98,805	-82,321
2028	15	35,687	70,928	14,275	28,371	49,962	99,299	-181,620

1. In Place Disposal includes an increase of .5% per year.

2. Cover Soil Requirements based on average of 2.5:1 waste-soil ratio

SECTION 6.0

IDENTIFICATION OF ADDITIONAL DISPOSAL CAPACITY

Mono County does not currently have plans to establish any new solid waste disposal sites within its jurisdictional boundaries. Based on the data presented in this report, the County will not exhaust its remaining permitted disposal capacity for over 13 years. With proposed disposal capacity included, this period grows to over 17 years. At this time, the County does not intend to site any additional disposal sites, but instead will look to other methods to extend our existing capacity, and if necessary and desirable, to export waste. Identification of any new disposal facilities in the future will require an amendment of this document and the approval of local governing bodies.

As stated in previous sections of this report, the County is nearing closure of its regional landfill at Benton Crossing. As a result, there is considerable interest and effort being applied to identifying future plans. First and foremost are efforts to reduce our waste stream through increased diversion and recycling. It is expected that these efforts will yield annual decreases in total waste generation, instead of the increasing figures shown in Table 8. Should these efforts prove successful, the County's existing permitted capacity would be extended beyond 15 years.

Although capacity remains at other County landfills, re-starting a municipal solid waste landfill at either of these sites does not appear to be the preferred economic or environmental solution at this time. As a result, the development of long-haul transfer infrastructure is being contemplated. This approach would ensure the County's ability to dispose of its waste without needing additional disposal capacity within the County. The County would seek to utilize this option so long as it proves to be the most economical choice, and would maintain local capacity for emergency circumstances and as an alternative should the economics of long-haul eventually deteriorate.

In accordance with the requirements set forth in 14 CCR 18756, the County has established a set of criteria for the future expansion of existing landfills or the siting of new disposal facilities. This criteria is divided into four major categories, as specified in 14 CCR 18756. The general criteria for each category is described below. Should the County pursue location of a new facility in the future, a detailed set of criteria with exclusionary and ranking considerations may be prepared by County staff and members of the Local Task Force.

<u>Environmental Considerations</u>

- Future disposal sites shall be located on parcels that are located no closer than 1,000 feet from any of the following: 1) residences; 2) major highways; and, 3) perennial bodies of surface water.

In addition, the static ground water level from the uppermost aquifer shall be no closer than 25 feet from the base of the planned disposal unit.

- Potential disposal sites shall not pose significant impacts to any special status species. Sites with limited habitat value (disturbed sites, reclamation sites) shall be preferred over sites with native habitat values. Future landfills or lateral expansions of existing sites shall be located no closer than (FAA Rules?) 5 miles from the end of any airport runway used by a turbojet aircraft, nor closer than 5,000 feet from the end of any airport runway used only by piston-type aircraft.

- No future site or lateral expansions of existing sites shall be placed in any of the following settings: 1) a 100-year floodplain; 2) wetlands; 3) within 200 feet of a fault that has experienced displacement in Holocene time; 4) any site that has unstable soils or soils susceptible to liquefaction; and, 5) ground water recharge zones.

- Future landfills or lateral expansions of existing sites with workable soil on-site in a quantity sufficient to meet the daily cover needs of the planned disposal unit, and sites with native low-permeable soil that is suitable for use in final cover construction will be ranked higher than those without.

- In an effort to reduce vehicle miles traveled and related GHG emissions, potential disposal sites shall be as close as possible (notwithstanding the above direction) to waste-generating sources.

- Future disposal sites shall be located in such a way that no operations are visible (within one mile) from any state highway, scenic vista or tourist destination.

<u>Environmental Impacts</u>

- An environmental review process will be initiated for evaluation of any parcel selected to receive a future disposal facility, in compliance with the requirements set forth by the California Environmental Quality Act (CEQA). Mitigating measures shall be implemented in the event that significant environmental impact is established. Sites with little or no mitigation requirements will be ranked higher than those with substantial measures.

- Any location selected in the future for establishment of a transformation facility (i.e., compost, bio-digestion, thermal biomass, waste-to-energy) shall be evaluated with respect to potential air quality impacts. Potential locations shall minimize exposure to any adverse air quality impacts.

- Any location selected to receive a future disposal facility shall take into consideration the potential impact on surrounding parcels as a result of site development, including the following: 1) storm water surface flows and channel discharge; 2) ground water; 3) soil erosion and sediment transport; 4) slope stability; 5) litter; 6) traffic; 7) noise; 8) visibility; and, 9) dust. Impact may require that mitigating measures be established.

Socio-Economic Considerations

- Any site under consideration for a future landfill shall be sufficient in size to ensure that it will provide a minimum of 15 years of disposal capacity for the proposed service area.

- Sites under consideration for a future disposal site shall be located as close as possible to the community(ies) it will serve.

- Sites under consideration for a future disposal site shall be located where the zoning designation of adjacent parcels is compatible with the intended use of the site.

- Sites under consideration for a future disposal site shall either be accessible by existing roads, or be located within a reasonable distance from existing roads such that development costs will not be excessive.

- Location of a future disposal facility shall be consistent with the County General Plan and other local planning considerations.

Legal Considerations

- Future disposal facilities shall be developed and operated in compliance with all applicable local, state, and federal solid waste regulations.

In the event that it becomes necessary for Mono County to establish a new disposal facility in the future, the Local Task Force will develop a detailed siting process. The process will be defined by a series of sequential steps that will gradually expand in detail and narrow in focus. The purpose of the effort will be to meet the needs of the community and goals of the County, as described in Section 2.0 of this report. The siting criteria summarized above will be expanded upon and a ranking hierarchy will be established. The geographic search for appropriate sites and the subsequent screening process will be managed by County personnel, with direction from the Mono County Board of Supervisors, and guidance from the Local Task Force. Community workshops will be held at appropriate intervals in the process to educate the public and allow feedback to County managers. Once the selection process has narrowed its focus and a preferred site has been identified, a detailed site investigation will take place.

SECTION 7.0

GENERAL PLAN CONSISTENCY

All active landfill sites have a land use designation of Public Facilities in the Mono County General Plan. This land use designation permits Solid Waste infrastructure and Landfills subject to Use Permit. A copy of a letter from the Mono County Planning Department certifying that all existing County landfill sites are consistent with the Mono County General Plan is provided in Appendix E of this report.

SECTION 8.0

LOCAL AGENCY APPROVAL

The 2015 update of the CSE began in the Summer of 2013, at the July meeting of the SWTF, where Goals and Objectives of the plan were presented and discussed. Comments and suggestions from that effort were incorporated into a Draft CSE, which was brought back to the SWTF for additional comments and feedback. A final draft was presented to the group in September 2014, and was recommended to the Mono County Board of Supervisors on November 6, 2014.

SECTION 9.0

REFERENCES

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APPENDIX B

NON-DISPOSAL FACILITY ELEMENT

of the

MONO COUNTY INTEGRATED WASTE MANAGEMENT PLAN

Mono County, California

Recommended for Adoption by the
Mono County Solid Waste Task Force

January 2015

Prepared by the
Mono County Department of Public Works
Post Office Box 457
Bridgeport, California 93517
(760) 932-5440

1.0 INTRODUCTION

The County of Mono is pleased to present this updated Non-Disposal Facility Element *(NDFE)* to CalRecycle per CCR, Title 14, and guidelines pursuant to AB341. This document outlines the County's geographic area, provides relevant information on the County's solid waste disposal infrastructure on non-disposal facilities. The document includes descriptions of non-disposal facilities that are considered part of the regional system, though are not within the jurisdiction of Mono County. The document includes a brief description of proposed non-disposal facilities that have been discussed in recent years as the region anticipates transition from the current system to one based upon diversion and long haul transfer. The NDFE presented herewith is incorporated into and made a part of the Mono County Integrated Waste Management Plan.

2.0 REGIONAL DESCRIPTION

2.1 Geographic Setting

Primarily rural in nature, Mono County is located in central-eastern California. The county is bordered by the State of Nevada to the north and east, by Inyo County on the south, and by Alpine, Fresno, Madera, and Tuolumne counties on the west. Located in the high desert region on the eastern flank of the Sierra-Nevada Mountain range, Mono County can be geographically characterized as having rugged terrain with steep mountains, narrow valleys, and deserts. In addition, numerous rivers, streams, and lakes are scattered throughout the county. Generally speaking, topographic elevations range from 5,000 feet in the lower valleys and up to 14,000 feet in the White Mountains at the southeastern corner of the county. The county comprises 3,103 square miles of land space, with approximately 2,900 square miles, or 93.4 percent, owned by public entities, which include the federal government (Inyo National Forest, Toiyabe National Forest, Bureau of Land Management), the State of California, local government, and the City of Los Angeles (Department of Water and Power).

2.2 Population

The majority of population centers in the county are found along the Highway 395 corridor, which trends north-south in the western portion of the county. Communities in this area include, from north to south: Topaz, Coleville, Walker, Bridgeport, Mono City, Lee Vining, June Lake, Mammoth Lakes, Crowley Lake, Tom's Place, and Paradise Valley. Additional population areas include the communities of Benton and Chalfant along Highway 6 in the southeast corner of the county. The remainder of the county is largely uninhabited.

The 2010 US Census determined the population of Mono County to be 14,202. Approximately 60% of those residents reside within the Town of Mammoth Lakes, which is not a part of the County's jurisdiction. The Town also experiences significant transient occupancy, which stretches the occupancy of the Town to well over 30,000 people at one time.

The California Department of Finance estimates future annual growth at less than 1% per year for the next 50 years[i]. As of January 1, 2013, the estimate is 14,493 for the entire county. At 4.6 persons per square mile, the resulting population density is one of the lowest in the State.

3.0 SOLID WASTE SERVICES

Two commercial haulers provide residential and commercial waste collection services in Mono County. Mammoth Disposal, a subsidiary of Waste Connections, Inc., is the franchise hauler and service provide for the Town of Mammoth Lakes mandated residential and commercial service. The unincorporated area of Mono County has two franchisees, including Mammoth Disposal and D&S Waste out of Yerington, NV.

Curbside recycling services are offered throughout the Town of Mammoth Lakes as well as certain parts of the County by Sierra Conservation Project. Other businesses such as Shred-Pro (mixed paper shredding service) and Mammoth Rock-n-Dirt (aggregate crushing) contribute to the available recycling services centering around the Town of Mammoth Lakes.

Self-hauling of waste and recyclable materials is available to all residents of Mono County, with eight Transfer Stations and landfills located near population centers.

3.1 DISPOSAL FACILITIES

Disposal of solid waste in Mono County is conducted at 3 active landfills. Two of these, Pumice Valley and Walker, currently accept only inert C&D waste for burial, and transfer all municipal solid waste off-site for disposal. The Benton Crossing Landfill has been the County's regional, and sole municipal solid waste landfill for over 10 years, and remains in use today.

In addition to being the regional landfill, Benton Crossing Landfill also performs vital non-disposal functions as part of normal operations. This includes the processing and diversion of clean wood waste, as well as the processing and sorting of certain C&D waste. These efforts include the periodic crushing of C&D aggregate material as well as the sorting of mixed C&D to reduce the amount of metal and clean wood within the mixed loads. The landfill also provides sludge management and diversion services for biosolid waste originating primarily in the Town of Mammoth Lakes, through the Mammoth Community Water District.

3.2 NON-DISPOSAL FACILITIES

3.2.1 Transfer Stations

Mono County maintains 6 low volume Transfer Stations in various communities throughout the county. The Transfer Stations are operated under contract (currently by D&S Waste of Yerington, NV). These facilities accept municipal solid waste for transfer to a disposal site, as well as accept materials for recycling, including glass, aluminum, plastic, HHW, metal and wood waste. The percentage of diverted waste received at the Transfer Stations averages approximately 30%. Additional details on diversion rates by site can be found in Appendix A below.

From Transfer Stations south of Conway Summit (Pumice Valley, Chalfant, Benton, Paradise), waste is currently transported to Benton Crossing Landfill for disposal. From sites north of Conway Summit (Bridgeport, Walker) waste is currently transported to Lockwood regional landfill in Sparks, NV, via the D&S Waste Transfer Station in Yerington.

At all facilities except Paradise, wood waste is processed on site by County personnel, and beneficially re-used for ADC or post-closure maintenance. Chipped wood waste is also offered to the general public for use in landscaping applications.

Recyclable material from the transfer stations is transported to a variety of other facilities for future processing. In some cases, materials are consolidated at Benton Crossing Landfill where they await on-site processing and/or pickup (metal, HHW). Aluminum, glass and plastic are hauled to other recycling centers where they are processed and eventually transported to market.

Outside of the County's jurisdiction but playing a significant role in the overall system is the Transfer Station and Recycling Center located in the Town of Mammoth Lakes. This facility is owned and operated by Mammoth Disposal, and currently accepts municipal solid waste for transfer to Benton Crossing Landfill, as well as HHW, metal, and other recyclable materials for transport to market.

3.2.2 CRV Buyback Centers

There are two CRV buyback centers located in the County. One is located at the Walker Senior Center in the north end of the County, and the Mammoth Lakes Recycling Center mentioned above.

3.2.3 Proposed Non-Disposal Facilities

As the County and the Town of Mammoth Lakes move toward increased diversion goals and the closure of the regional landfill approaches, planning for Non-Disposal Facilities has been steadily increasing.

The Town of Mammoth Lakes, in partnership with Mammoth Disposal, has planned for the expansion of the Transfer Station that may include a long haul transfer station, a MRF, and a permanent HHW facility.

D&S Waste has proposed a Non-Disposal facility in the Mono Basin that may include long-haul transfer capability for County waste, as well as necessary recycling capabilities.

There are many other concepts being explored at this time, including a small scale sorting and baling facility located on County land to be run by inmate labor. Another concept is the development of a Regional Recycling Center at the Pumice Valley Landfill. Yet another is the siting of a similar facility within close proximity to the Town of Mammoth Lakes, through a federal land exchange.

Additionally, alternative technologies are emerging such as composting, transformation technology, thermal biomass and others that, if developed, would require non-disposal facilities capable of providing feedstock to their operations. The possibility for this future need is an important factor when considering potential siting and capacities for non-disposal facilities in the region.

One or more of these proposals may come to fruition in the coming years. The County is committed to working with stakeholders to determine the most cost-effective waste management solutions.

3.2.4 Siting Criteria for Future Non-Disposal Facilities

Although numerous concepts for future facilities have been discussed, the development of any of those facilities is not certain at this time. Nontheless, members of the Solid Waste Task Force agreed

that siting criteria for such facilities would benefit the future planning of the facilities, and have developed the following criteria:

Proximity to waste generating sources

NDFE1: *To the extent feasible and necessary, facilities should have proximity to power, water, and sewer services.*

NDFE2: *Facilities should be located as close as possible to communities, and should not exceed normal commute distances for a given community.*

Minimum separation from incompatible land uses

NDFE3: *Existing land use regulations (zoning code, land use designations) should determine whether adequate separation exists.*

NDFE4: *Character of areas should be considered when siting facilities.*

NDFE5: *Adequate distance from sensitive receptors should be maintained in order to comply with existing regulations.*

NDFE6: *Facility siting should be driven by public process, with public hearings part of the process.*

Lands status

NDFE7: *Facilities should utilize pre-disturbed lands.*

NDFE8: *Ownership of land can be public or private, so long as long-term use and future availability are ensured.*

Facility/Operations:

NDFE9:*Specific needs should be identified first, and facilities should be designed to meet those needs.*

NDFE10*: The cost effectiveness of a project is determined by the construction and operational cost of providing services to meet the identified needs.*

Competitive bidding

NDFE11: *Competitive bidding is critical to saving the taxpayers money.*

NDFE12: *Unless competitive bidding would infringe on existing franchise agreements, it should be utilized for construction and operations of facilities.*

NDFE13: *Competitive bidding must incorporate policy goals of a given jurisdiction, which may or may not be specific to Solid Waste. These policy goals may effect the cost effectiveness of proposals.*

NDFE14: *Requests for Proposals should be based on meeting identified needs, and to the extent possible should not impose specific practices and methods. This allows respondents to design effective solutions based on their own methods and expertise.*

Regional Needs

NDFE15: *Regional need, and regional coordination (with Inyo County) should be an integral part of facility planning.*

Nuisance controls

NDFE16: *Potential nuisance issues should be identified and mitigated through the CEQA process.*

NDFE17:*Whenever possible, nuisance controls should be engineered and designed into projects. Should nuisance problems arise, they should be addressed iteratively.*

Diversion/Transformation minimums

NDFE18: *Future facilities should be designed to meet minimum diversion requirements, articulated by percentages of diversion and not total tonnage.*

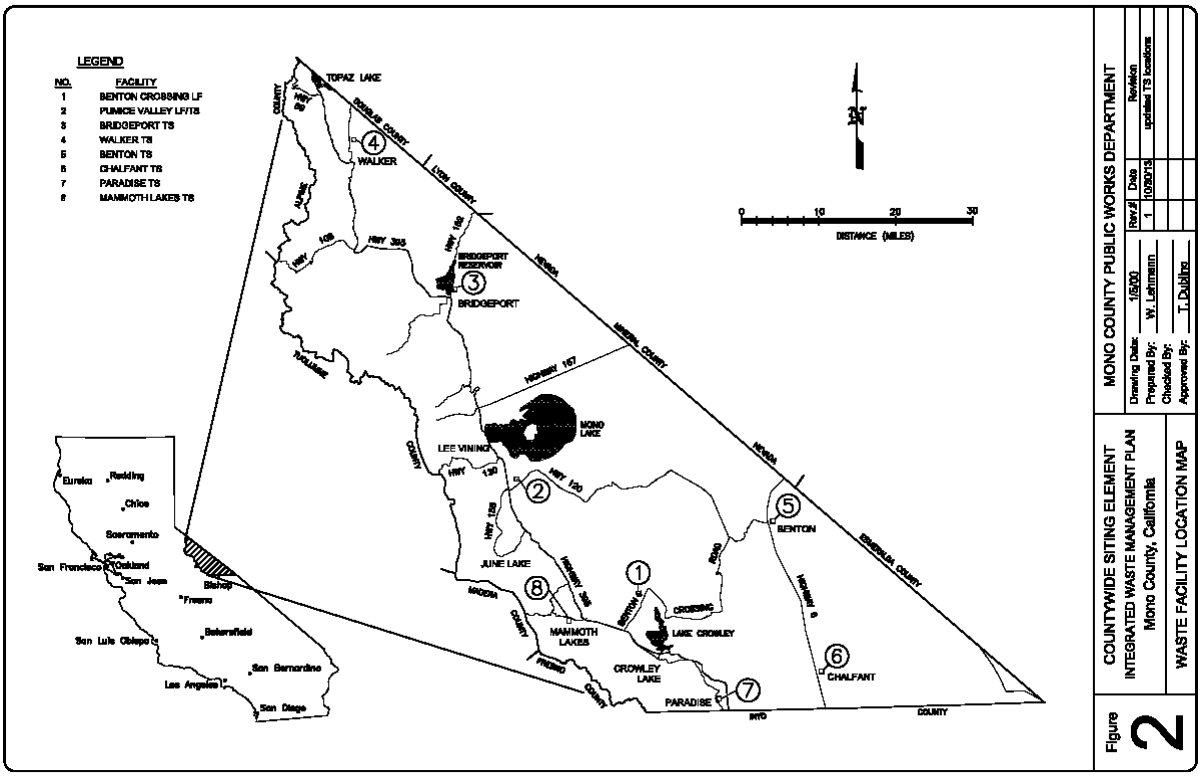
NDFE19: *Diversion requirements should be developed for each waste stream where there is a diversion need.*

NDFE20: *Provisions must be in place to allow for the amendment of diversion minimums to respond to changes in markets, regulatory mandates or other issues.*
NDFE21: *Amendments to diversion minimums should trigger commensurate changes in compensation to operators.*

Anticipating the future

NDFE22: *RFPs should require projects to be able to meet today's needs, as well as accommodate future technology such as waste-to-energy, anaerobic digestion or biomass.*

Exhibit 1—Existing Waste Facilities within Mono County



Appendix A-Facility Descriptions[ii]

<u>Nondisposal Facilities Within Mono County (at least 5% recovery of total volume)</u>
Name of Facility: Benton Crossing Landfill (SWIS 26-AA-0004)
Type of facility: Solid Waste Disposal Site
Facility Capacity: 500 tons per day
Anticipated Diversion Rate : 25%
Participating Jurisdictions: Mono County, Town of Mammoth Lakes
Location of Facility: 899 Pit Road, Crowley Lake, CA 93546

Name of Facility: Benton Transfer Station (SWIS 26-AA-0015)
Type of facility: Transfer Station
Facility Capacity: 15 tons per day
Anticipated Diversion Rate : 45%

Participating Jurisdictions: Mono County
Location of Facility: 400 Christie Lane, Benton CA 93512

Name of Facility: Bridgeport Transfer Station (SWIS 26-AA-0009)
Type of facility: Transfer Station
Facility Capacity: 25 tons per day
Anticipated Diversion Rate : 38%
Participating Jurisdictions: Mono County
Location of Facility: 50 Garbage Pit Road, Bridgeport, CA 93517

Name of Facility: Chalfant Transfer Station (SWIS 26-AA-0010)
Type of facility: Transfer Station
Facility Capacity: 15 tons per day
Anticipated Diversion Rate : 49%
Participating Jurisdictions: Mono County
Location of Facility: 500 Locust Street, Chalfant, CA 93514

Name of Facility: Paradise Transfer Station (SWIS 26-AA-0007)
Type of facility: Transfer Station
Facility Capacity: 15 tons per day
Anticipated Diversion Rate : 8%
Participating Jurisdictions: Mono County
Location of Facility: 9479 Lower Rock Creek Road, Paradise, CA 93514

Name of Facility: Pumice Valley Transfer Station (SWIS 26-AA-0017)
Type of facility: Transfer Station
Facility Capacity: 15 tons per day
Anticipated Diversion Rate : 25%
Participating Jurisdictions: Mono County
Location of Facility: 200 Dross Road, Lee Vining, CA 93517

Name of Facility: Walker Transfer Station (SWIS 26-AA-0012)
Type of facility: Transfer Station
Facility Capacity: 25 tons per day
Anticipated Diversion Rate : 49%
Participating Jurisdictions: Mono County
Location of Facility: 280 Offal Road, Coleville, CA 96107

Nondisposal Facilities Outside Mono County Jurisdiction (at least 5% recovery of total volume)
Name of Facility: Mammoth Transfer Station and Recycling Center
Type of Facility: Transfer Station
Estimated Amount of Waste Mono will transport to facility: Negligible.
Location of Facility: Mammoth Lakes

Transfer Stations Outside Mono County (less than 5% recovery of total volume)
Name of Facility: D&S Waste Transfer Station

Location of Facility: Smith Valley, NV

[i] State of California, Department of Finance, *E-4 Population Estimates for Cities, Counties, and the State, 2011-2013, with 2010 Census Benchmark*. Sacramento, California, May 2013

[ii] Anticipated Diversion based on 2012 calendar year diversion of total waste received.

APPENDIX B

HOUSEHOLD HAZARDOUS WASTE ELEMENT of the MONO COUNTY INTEGRATED WASTE MANAGEMENT PLAN

Mono County, California

Recommended for Adoption by the
Mono County Solid Waste Task Force

January 2015

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TABLE OF CONTENTS

1.0 INTRODUCTION

Hazardous chemicals are prevalent in modern society, not only in the commercial and industrial sectors, but also in the residential sector. Hazardous substances can be found throughout the home, garage, garden and hobby shop as constituents in products such as cleaners, paints, pesticides and glue. Once these hazardous products are no longer needed by the consumer, they become Household Hazardous Waste (HHW). Improper disposal of HHW can pose a risk to human health and the environment. Thus, HHW requires special handling.

A substance is classified as a hazardous waste by the Department of Health Services (DHS), California Code of Regulations (CCR) Title 22, if it demonstrates one of the following characteristics:

- Ignitability: flammable (e.g., lighter fluid, spot and paint removers).
- Corrosivity: eats away materials and can destroy human and animal tissue by chemical action (e.g., oven and toilet bowl cleaners).
- Reactivity: creates an explosion or produces deadly vapors (e.g., bleach mixed with ammonia based cleaners).
- Toxicity: capable of producing injury, illness, or damage to human, domestic livestock, or wildlife through ingestion, inhalation, or absorption through any body surface (e.g., rat poison, cleaning fluids, pesticides, bleach). Such products include toxic pesticides, caustic drain openers, ignitable paint thinners and other reactive or explosive materials.

By educating people about how to properly dispose of HHW, and providing adequate collection programs, a jurisdiction will reduce the amount of HHW that is improperly disposed of in the garbage, down the sewer, into storm drains, or directly onto the ground.

2.0 HHW MANAGEMENT GOALS AND OBJECTIVES

All household materials that have hazardous waste characteristics have been targeted for diversion since these materials are not accepted at sanitary landfills. The specific objectives of the Household Hazardous Waste Management Element are as follows:

2.1 Short-Term Planning Objectives (2014 - 2019)

- Reduce the amount of HHW disposed in County landfills.
- Reduce the amount of HHW generated within the County by advocating the use of products not harmful to the environment.
- Cooperate with the Town of Mammoth Lakes and adjacent counties to develop regional approaches to the management and disposal of HHW that will result in a lower management cost to each.
- Initiate public education programs addressing HHW management, usage and alternatives.

2.2 Medium-Term Planning Objectives (2014 - 2030)

- Promote the recycling and/or re-use of HHW by the County and general public.
- Continue cooperation with adjacent counties to implement regional HHW management plans.
- Continue education and public information programs implemented during the short-term planning period.

3.0 EXISTING CONDITIONS

3.1 Generation

The 1992 Household Hazardous Waste Element of the Integrated Waste Management Plan quantified HHW generation within Mono County (including the Town of Mammoth Lakes) as follows:

Material	Total Generation (pounds per year)
Waste Oil	14,000
Solvents	10,000
Pesticides	10,000
Dyes & Paints	64,000
Inorganic Liquids	2,000
Miscellaneous	16,000
Total	116,000

3.2 Programs

Since the development of the 1992 HHW Element, the County has implemented several programs that were identified at the time the Element was adopted. These programs, as they exist today, are described below.

3.2.1 Education

The County utilizes grant funds (when available) to promote awareness of HHW disposal options throughout the County. Over the years, this has been accomplished with direct outreach through booths at local events, print advertising, web presence on the County's website, as well as printed handouts and receipts from the Transfer Stations and landfills.

3.2.2 Load-Checking

Mono County implements a load checking program at the gatehouse of all County landfills and transfer stations. The effort is carried out primarily on self-haulers by gate attendants. This load checking program succeeds in directing hazardous waste to its proper disposal area, and increases awareness of the dangers and regulation of hazardous waste.

For commercial loads, spot-checkers regularly inspect loads of municipal solid waste and construction and demolition waste. When hazardous waste is identified, it is re-located to the proper disposal area.

3.2.3 Permanent HHW Collection Facility

The County constructed a Permanent HHW Collection Facility (PHHWCF) at the Benton Crossing Landfill in 2007. This facility is utilized as a central aggregating point for all HHW collected from the County's Batteries, Oil and Paint (BOP) sites, temporary sites, and mobile events throughout the County.

3.2.4 Temporary HHW Facilities (BOP only)

The County maintains 6 sites at County Transfer Stations that collect batteries, oil, and paint (BOP). The Town of Mammoth Lakes has a 7th location, at the Mammoth Disposal Transfer Station within the Town. These sites are utilized for the temporary collection and storage of batteries, oil and paint until the materials can be safely transported to the PHHWCF at Benton Crossing.

3.2.5 Mobile Events

As funding permits, the County implements mobile collection events throughout. These events are implemented with County staff and County equipment. In recent years these events have been funded through CalRecycle HHW grant opportunities.

3.3 Collection

The results of these programs have been well-documented over the years since the first HHW Element was adopted. Annual reports have proven that Mono County programs have been successful in collecting a significant amount of HHW and removing the material from the waste stream.

In 2013, Mono County collected over 220,000 pounds of HHW. At 15.4 pounds per capita, the County's efforts ranked third out of California's 58 counties.

In 2014, the county collected over 290,000 pounds of HHW for recycling or proper disposition.

4.0 HOUSEHOLD HAZARDOUS MANAGEMENT ALTERNATIVES

The program alternatives that were considered in early HHW Elements include the following:

4.1 Collection Programs

4.1.1 Periodic Collection Programs.

One or two day collection ("round-up") events are generally preceded by an intensive public information campaign designed to inform the public when and where the event would take place, to identify what types of materials would be accepted and how those materials should be packaged when brought to the collection site. Residents can bring their HHW (generally up to 5 gallons or 50 pounds per household per trip) to the facility. All HHW received is packed in drums that are sealed and removed from the site at the end of the event.

4.1.2 Permanent Collection Facility

A permanent HHW collection facility accepts HHW delivered by city residents at a fixed location. These facilities are generally open year-round. Permanent facilities are usually sited to allow access from major population centers and can be designed to incorporate recycling and source reduction opportunities. Recycling may be accomplished by accumulating volumes of materials such as used oil, latex paint, or batteries for reprocessing into new materials. Source reduction opportunities include the establishment of a waste exchange program. In fact, the DHS and CIWMB encourage the exchange of materials as a means of waste reduction as long as safeguards are maintained. The facility would be open on a regular schedule for a limited number of hours per week.

A trained County employee would be available during the hours of operation to inspect, receive and pack the HHW. The quantity received from anyone household would be limited to 5 gallons or 50 pounds per day. Current State regulations require that the stored material remain on site no more than one year. Arrangements would be made with a licensed hazardous waste disposal firm to service the facility.

Although trucks from the disposal firm make weekly trips down the Route 395 corridor, the servicing schedule would be coordinated with other counties and municipalities along the route that have implemented similar programs in order to make the removal of the packed HHW from all of the facilities as efficient as possible.

4.1.3 Mobile Programs

A mobile collection unit consists of a custom-made trailer equipped with an office, laboratory and waste packaging and storage areas. The unit is moved to pre-scheduled locations and collects HHW for a maximum of two days per site. The operation and activities at the collection site are similar to those for a periodic collection event. The annual schedule of collections and the locations of the mobile unit should be made available to the public.

4.1.4 Fee-for-Service, Door-to-Door, or Curbside Collection

Fee for Service: These programs involve charging the residents a flat fee or a fee based on the types and quantity generated. Door-to-Door Programs: Collection of HHW would be made on a regular schedule or on request. A custom collection vehicle would be required that would include facilities for analyzing, handling, packaging and transporting the material to be received. Curbside Collection: HHW would be placed at the curb and collected by a custom vehicle on a regular schedule.

4.1.5 Load Checking Programs

Loads of waste are checked (usually on a random basis) at a landfill or transfer station to screen for the presence of any hazardous materials. Logs of the loads sampled and the results of the inspections are kept by the facility operator and reported to the CIWMB. The landfill operator would inspect in-coming loads of self-haul waste (usually delivered in autos or pick-up trucks, and would conduct random inspections of loads from commercial collection vehicles.

4.1.6 Recycling Program For Waste Oils, Paints and Batteries

A recycling program for HHW targets materials that can be readily recycled and can reduce the high costs of disposal at a permitted hazardous waste facility. Many communities have integrated recycling programs into their existing collection events, drop-off centers, or door-to-door pickup programs. The recycling alternative considered for the County targets waste oil, paints and batteries. By recycling HHW the County can help divert these materials from disposal and preserve resources.

4.1.7 Public Education and Information Program

To secure the cooperation and participation of the public, a comprehensive and ongoing HHW information and education program is required. This program would include periodic items in the local media that would address:

- Identification of HHW
- Effect of improper HHW disposal on the environment
- Proper handling and disposal of HHW
- Alternatives to the use of toxic products in and around the home

The program would also include posters in prominent locations in each one of the population centers and inserts in County mailings such as tax or utility bills.

Countywide public education activities may also include the following:

- Develop and distribute a guidebook that would assist the County in answering questions from residents on proper management and disposal of hazardous materials in the home.

The guidebook would contain suggestions for alternative less-toxic products. A directory of public agencies and organizations involved with management of toxics would also be included in the guidebook.

- Update and distribute a calendar of County-sponsored HHW collection events and a list of County contacts.
- Establish contact with retailers to discuss the role they can play in HHW education.
- Establish school contacts to integrate hazardous waste curriculum into the schools.
- Advertise HHW collection programs in the County.
- Post signs inside buses, at bus stops and on billboards and place posters in stores.
- Provide media coverage including public service announcements and press releases to area papers, TV and radio stations and community newsletters.
- Distribute inserts in garbage, utility or tax bills.
- Distribute fliers at libraries, community meetings, landfill entrance facilities, churches and schools.
- Print advertisements on grocery bags.
- Provide a Hotline telephone number and establish an appointment mechanism. Use the appointment telephone call as an opportunity to educate residents.

- Determine if a substance is hazardous. Explain its hazardous nature.
- Emphasize less-toxic alternative products and methods.
- Expand work with retailers including: workshops for retailers about less-toxic alternative products and shelf labeling; provide HHW posters; provide auto parts stores, nurseries and hardware stores with signs and handouts or both, on the safe use and disposal of hazardous products.

5.0 EVALUATION OF PROGRAM ALTERNATIVES

This section presents a standard criteria and evaluation of alternatives that can be used when considering changes to, or enhancements of existing County programs in the future.

5.1 Collection Programs

5.1.1 Periodic HHW Collection Programs

Effectiveness in Reducing HHW in the Waste Stream:
Collection events are considered moderately effective at diverting HHW because they offer residents disposal and recycling options for their HHW. They also result in increased awareness about the dangers of improperly disposing of hazardous materials. However, because the events are held only from time to time they do not provide residents with an ongoing option, thus limiting the effectiveness.

Program Cost:
$77,OOO/event (based on similar programs with crew on site two days, one day collection, 500 households served).

Institutional Factors:
A contract is issued for each event and the contractor must be licensed to manage the event. The host community must obtain a permit from the California Department of Health Services. A permit-by-rule permitting procedure has been proposed by the Department of Health Services.

Consistency of Local Policies:
Collection events are consistent with local policies.

Facility Needs:
Collection events do not require expansion or development of facilities.

Availability of Markets:
Collection events divert latex paint, oil and batteries from the waste stream through recycling. Non-recyclable HHW collected through the events is recycled or incinerated by authorized processors. Ongoing waste exchanges where residents can obtain usable products that otherwise would be discarded are not ideal at collection events due to the short duration and transient nature, although they are possible.

Ease of Implementation:
The event must be preceded by a comprehensive and intensive public education program. The program cost vs. the amount of material actually collected is a major disadvantage of this type of program.

Hazards:
Potential public health risks and safety hazards associated with periodic collection events include spills, fires, leaks, or explosions resulting from improper collection, storage, handling, or transport of hazardous materials. However, proper equipment, operation and health and safety training of event workers minimize these potential hazards.

Program Flexibility:
Due to operational limitations, collection events have a limited ability to respond to changing conditions. In addition, collection events do not allow for flexibility in recycling option such as accumulation of larger volumes of material, or the establishment of waste exchange programs.

Shift in HHW Generation:
This alternative is not expected to create shifts in waste type generation.

5.1 .2 Permanent HHW Collection Facility

The County currently maintains a Permanent HHW Facility at the Benton Crossing Landfill. Upon closure of Benton Crossing Landfill, the permanent HHW Facility would need to be relocated and re-established at an alternate location.

Effectiveness in Reducing HHW in the Waste Stream:

A permanent collection facility is effective in reducing the amount of HHW disposed of in the landfills by offering residents ongoing disposal, recycling and source reduction options.

Program Costs:

Costs associated with developing and operating a permanent HHW collection facility are considered high. To reduce disposal fees, items such as paint, oil and automotive batteries can be recycled and a waste exchange program may be implemented.

Institutional Factors:

Permitting requirements for a permanent HHW collection facility may present a temporary barrier to the implementation of this alternative.

Consistency with Local Policies:

A permanent facility is identified as a disposal option in the Mono County Hazardous Waste Management Element.

Facility Needs:

This alternative requires the development of a collection and storage facility. A HHW facility must meet specific state and federal safety and operating standards. A facility should be designed to prevent spills or leaks and prevent incompatible wastes from mixing and should include explosion proofing, grounding columns, proper containment, sufficient ventilation and adequate emergency response and safety equipment. A permanent facility should be situated on an impervious surface and fenced for security. An area for analyzing unknowns is also needed. Tracking records accounting for all wastes managed at the facility should be maintained.

Availability of Markets:

End uses for selected HHW are considered relatively stable. Reuse of products can be promoted through waste exchanges or organized referrals. Non-recyclable HHW is disposed of properly at permitted hazardous waste disposal or incineration facilities.

Hazards:

Potential public health risks and safety hazards associated with a permanent facility include spills, fires, leaks, or explosions resulting from improper collection, storage, handling, or transportation of hazardous materials. However, proper facility siting, equipment, operation and health and safety training for facility staff would minimize any potential hazards. Therefore hazards are considered known and considered controllable.

Program Flexibility:

A permanent facility is considered highly flexible because it can accommodate changing social conditions by increasing or decreasing the days or hours of operation as needed. A permanent facility can process participants more efficiently that 1-day collection events because of the dedicated staffing and operational characteristics of the facility. Recycling opportunities are enhanced because of the ability to accumulate material over a longer period, resulting in larger volumes that are attractive to recyclers. The location of the facility adjacent to an existing County facility would allow for the part-time use of an employee already on the County payroll.

Change in HHW Generation:

No change in waste generation is expected to result from implementation of this program.

5.1.3 Temporary HHW Collection Facilities

The County currently maintains 6 Temporary HHW Collection Facilities, one at each Transfer Station.

Effectiveness In Reducing HHW In the Waste Stream:

These types of programs have the same limited effectiveness as periodic collection events.

Program Cost: The costs for the advertising, logistics and coordination of the program would be in the range as those for a periodic event. Actual cost of the event would be higher because of the need for a more specialized vehicle.

Institutional Factors:

Same as for a periodic collection event.
Consistency With Local Policies:
The program would be consistent with the County policy of minimizing the amount of HHW entering the waste stream.
Facility Needs:
No permanent facility in the vicinity of the County would be required.
Availability of Markets:
Same as for periodic collection events.
Ease of Implementation: Same as for periodic collection events.
Hazards:
Same as for periodic collection events.
Program Flexibility:
High
Change in HHW Generation: None anticipated

5.1 .4 Fee-for-Service, Door-to-Door, or Curbside Programs

Effectiveness in Reducing HHW In the Waste Stream:
Fee for service program have the effect of discouraging participation. Door-to-door and curbside collection event are effective in reducing the amount of HHW entering the waste stream since customized, personal collection service is provided.
Program Cost:
The cost per household served would be extremely high given the high capital costs of the program and the limited number of households to be served.
Institutional Factors:
Identification of a program operator, establishment of a contractual
relationship with the County if the operator was a private firm, permitting.
Consistency With Local Policies:
There are currently only limited curbside trash collection programs in the County unincorporated areas.
Facility Needs:
A facility for the storage of the collected materials would be required.
Availability of Markets:
Markets for collected materials would be the same as those for
permanent collection facilities.
Ease of Implementation:
Implementation will be hampered by the lack of any existing refuse collection systems.
Hazards:
Potential public health risks and safety hazards associated with collection programs include spills, leaks, or explosions resulting from improper collection, storage, handling, or transportation of hazardous materials. However, proper equipment operation and health and safety training for collection personnel will minimize any potential hazards. However, because of the transportation of collected material throughout the County, the potential hazards are greater than for a permanent facility. Hazards would also be caused by the setting out of materials for collection.
Program Flexibility:
High
Change in HHW Generation:
None

5.2 Load Checking Programs
Mono County currently maintains a load checking and spot-checking program at all County sites. These programs, while of low cost, are not effective in removing small quantities of HHW from the waste.
Effectiveness in Reducing the Amount of HHW in the County Landfills:

Moderate
Program Costs:
The assigned landfill operator would be responsible for inspecting in-coming loads and conducting random inspections of loads from commercial collection vehicles.
Institutional Factors:
The success of this program is dependent on the implementation of the County's plans for consolidating, enclosing, and staffing the existing landfills. Landfill operators will require training and record keeping procedures must be established.
Consistency With Local Policies:
This program would be consistent with the County's policy of eliminating HHW from the landfills.
Facility Needs:
None
Availability of Markets:
N/A
Hazards:
None anticipated. All inspectors will be trained in the proper identification and handling of HHW.
Program Flexibility:
High
Change in HHW Generation:
None anticipated.

5.3 Recycling Program For Waste Batteries, Oil and Paint (BOP)
Effectiveness in Reducing the Amount of HHW Disposed in County Landfills:
BOP Recycling programs are very effective in reducing the volume and weight of hazardous materials disposed of at sanitary landfills and hazardous waste disposal facilities.
Program Cost:
Recycling BOP reduces the costs of disposal for HHW collected during collection events, door-to-door events, or at a permanent facility. No specific costs are associated with a recycling program because it can be implemented in conjunction with these other collection programs.
Institutional Factors:
Institutional barriers are anticipated to have little impact on this alternative. Effective January 1, 1991, pursuant to AS 2597, HHW recycling facilities will no longer need a hazardous waste permit if materials accepted are limited to; (1) latex paint, (2) used oil, (3) antifreeze, (4) spent lead acid batteries, (5) nickel-cadmium, alkaline, carbon-zinc and other small batteries. Section 25250.11 (a), Health & Safety Code, exempts from its HHW permit requirements "any person who receives used oil from consumers or other used oil generator," as long as no more than 20 gallons of used oil are received at a time and containers hold no more than 5 gallons each. The DHS will allow a facility collection event to bulk latex paint if it is properly authorized to accept it as one of its household hazardous wastes. Government Code Section 66798.9 (Statute, 1989) provides immunity for local agencies operating HHW programs unless the agencies act negligently. Additional immunity from state liability is provided in Health & Safety Code, Section 25366.5, for local governments or their contractors who are running HHW facilities and events.
Consistency with Local Policies:
Recycling BOP is consistent with the County's policy of recycling and providing cost effective collection options for HHW.
Need for New Facilities:
A storage facility is needed to recycle BOP. Recycling BOP can be integrated into existing facilities and programs, including curbside collection programs, drop-off centers and periodic, mobile and permanent collection facilities.
Availability of Markets:
Section 5.2 describes the available markets for recycled BOP.
Ease of Implementation:
Recycling operations can be relatively easy to implement with existing or planned programs.

Hazards:
Recycling BOP produces minimal hazards. Some hazards are associated with latex paint. Latex paint that has been stored for many years may contain mercury or lead. Older latex paint, improperly labeled paint, paint that is not in its original container and possibly contaminated paint should be disposed of instead of recycled to reduce potential hazards. Other potential public health risks and safety hazards associated with recycling programs include spills, fires, leaks, or explosions resulting from improper collection, storage, handling, or transportation of hazardous materials. However, proper design, equipment and health and safety training can minimize any potential hazards.
Program Flexibility:
Recycling programs are generally flexible to changing conditions. The volumes of materials accepted can fluctuate based on demand and public awareness. Increasing the frequency of pickup by the end users can address these fluctuations.
Change in HHW Generation:
This alternative is not expected to create shifts in waste type generation.

5.4 Public Education and Information
Education and public information are important elements of HHW programs. Successful programs require ongoing efforts to inform residents of the hazards of some household materials and the proper avenues available for its disposal. The program should serve to educate consumers about the hazards of household products and the proper management of these products. An education program should encourage the use of less toxic products, buying household hazardous materials only in quantities that will be used and proper storage and proper disposal of HHW. An effective program will inform the community about the available recycling and disposal option, in addition to educating the public about the dangers of HHW and nonhazardous alternatives.
Effectiveness in Reducing HHW Disposal in the Landfills:
Public education and information are effective methods for increasing awareness about proper disposal of HHW and may increase participation during collection programs. Offering the community information about safer alternatives to HHW can reduce the amount of HHW being generated in the County. Education about safer alternatives to hazardous materials and information regarding collection events will work to help eliminate HHW from the waste stream entering the area landfills.
Program Cost:
The public education program for HHW can be part of a larger education program incorporating many components of the Integrated Waste Management Plan. Because the public education and information program is an integrated effort, the costs associated with the HHW element cannot be separated.
Institutional Factors:
There are no barriers to offering the public educational materials.
Consistency with Local Policies:
Education and public information are consistent with County policies.
Facility Needs:
No additional facilities are needed. Existing facilities could serve as locations for seminars and educational workshops.
Availability of Markets:
Not applicable.
Ease of Implementation:
A public education and information program is relatively easy to implement in the short-term planning period. The County will make use of existing mailings to residents and utilize the general media to the extent possible.
Hazards:
None
Program Flexibility:
A public education program should be flexible to account for changing conditions in demographics, products, etc. The program should serve to educate consumers about the hazards of household products and

the proper management of these products. An education program should encourage the use of less toxic products, buying household hazardous materials only in quantities that will be used and proper storage and proper disposal of HHW when the products are no longer needed.

Change in HHW Generation:

This alternative is not expected to create a significant shift in the type of HHW generation, but it may create an overall reduction in HHW generation.

6.0 PROGRAM SELECTION

Temporary BOP facilities have been developed at all County Transfer Stations. A Permanent HHW Facility for the collection of additional HHW products has been constructed and is fully operational at the Benton Crossing Landfill. Education and outreach programs are selected an ongoing. Mobile events are conducted, time and resources permitting.

These facilities are staffed by employees trained in the proper identification, handling, and management of household hazardous waste.

In 1992, the Local Task Force identified the selected programs based on what would provide the most cost effective service for County residents, with an adequate level of convenience. Those programs have been implemented over time, and are currently ongoing.

Considering the current success of the existing programs, and the ability of the Solid Waste Enterprise Fund to fund the ongoing operation of the programs and to avail itself of grant opportunities, it is believed that all existing programs, with existing funding mechanisms, represent the highest and best programs for meeting the County's HHW collection needs for the next planning period.

7.0 PROGRAM IMPLEMENTATION

The Solid Waste Division of the County Department of Public Works is responsible for program implementation. Selected programs are currently implemented, and no further efforts are expected at this time. The intent is to continue with existing programs and the monitoring and evaluation of those programs. The expected closure of Benton Crossing Landfill creates a distant need to site and relocate the existing PHHWCF.

8.0 MONITORING AND EVALUATION

To effectively monitor the success of the selected programs, several tasks should be performed:

- Comply with CalRecycle reporting requirements, specifically Form 303
- Consider effectiveness of programs by comparing pounds per capita of HHW collection to comparable counties within the state.
- Periodically survey program participants to determine who is participating and if buying practices have changed to reduce the quantities of HHW generated.
- Attempt to quantify any source reduction of HHW.

9.0 EDUCATION AND PUBLIC INFORMATION

9.1 Objectives

9.1.1 Short Term-Objectives (ongoing)
• To inform the public of the toxic nature of materials used in and around the home
• To inform the public of the proper means of disposing of HHW
• To encourage the use of alternatives to HHW

9.1.2 Medium-Term Objectives (ongoing)
• To continue existing public education activities
• To promote a decrease in the amount of HHW generated

9.2 Existing Conditions

The existing education and outreach programs include print advertising, outreach at special events, materials distributed at County Transfer Stations, information distributed on gate receipts, as well as existing signage at the County sites. During mobile collection events, materials are distributed and opportunities for disposal are provided to the general public.

9.3 Program Implementation

Two specific audiences will be targeted:

• Consumers of household products that contribute to HHW generation
• School children

The County will assume responsibility for coordination of the HHW public education and information program, but will rely on the school administration, teaching staff and local merchants for much of the implementation. The County will distribute general program guidelines and objectives and provide the schools with access to sources of information on the proper use and disposal of household toxics. The County will also provide local merchants with the program guidelines and objectives and will supply the merchants with information or sources of information on the toxic-containing products that they sell.

Monitoring and evaluation of the program will be performed by observing the participation in the permanent HHW collection facility and the amount of HHW discovered in annual reviews of the waste disposal characterization.

10.0 FUNDING

The County has received CalRecycle grants for the construction of the PHHWF, as well as some enhancements since it was constructed. Continuing operations, outreach, and training are funded in part through CalRecycle OPP Grants. The County received an HD20 grant for improvements to our collection infrastructure, outreach, and mobile events. Disposal costs and remaining operational costs are funded by the Solid Waste Enterprise Fund.

Future funding for the HHW programs will continue to come from the available grant opportunities and the Solid Waste Enterprise Fund. Should the PHHWCF need to be relocated, the County will seek a grant for that purpose.

Final Draft

SOURCE REDUCTION AND RECYCLING ELEMENT

For

Mono County, California

July 1992

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FINAL DRAFT OF THE

SOURCE REDUCTION AND RECYCLING ELEMENT

for

MONO COUNTY, CALIFORNIA

July, 1992

Prepared for:

Mono County Department of Public Works

Prepared by:

VECTOR ENGINEERING, INC.

and

AURORA ASSOCIATES

The Administrative and Preliminary Drafts of this document were originally prepared under contract with Solution Resources, Inc. and Clements Engineers, Inc. Since the original inception of this project, both principal authors of this document have left their respective places of employ to pursue opportunities with other professionals. Both Mr. Charles Kuhn and Mr. Joseph Reisdorf have continued to serve the County of Mono and Town of Mammoth Lakes in preparing and finalizing this document. If questions should arise regarding this transition, please do not hesitate to contact the County of Mono (619/932-5252) or Mr. Kuhn at Vector Engineering (702/883-7065) or Mr. Reisdorf at Aurora Associates (213/933-3541).

Mr. Kuhn and Mr. Reisdorf would like to thank the following for your cooperation and participation during the course of this project:

Mono County Department of Public Works
Mono County Solid Waste Local Task Force
The Town of Mammoth Lakes
Douglas Disposal, Inc.
Resort Refuse, Inc.
Mammoth Disposal, Inc.
Mono County Planning Department

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Section I

EXECUTIVE SUMMARY

1.0 INTRODUCTION

Local governments throughout the United States are finding themselves accepting the responsibilities of newly defined Federal and State mandates addressing the source reduction, recycling, composting, transformation and landfilling of our solid wastes. In numerous areas of the country, for the first time, local governing bodies are being identified as the new solid waste managers for their jurisdiction.

These newly mandated responsibilities include such requirements as defining policies, guidelines and programs to manage the complex and integrated programs which contribute to the development of an effective system of solid waste management. Solid waste problems that an entire nation grapple with are now being laid at the feet of local government, with the accompanying mandated requirements of program implementation and conformance.

The State of California took the step towards passing the responsibility of solid waste management to the local government level in 1989 with the passage of Californias' Integrated Solid Waste Management Act, more commonly identified by the acronym, AB 939. The text of this law declared that the responsibility for solid waste management is a shared responsibility between the state and local governments and that the state shall oversee the design and implementation of local integrated waste management plans. As such, the state mandated that each county and city shall prepare and submit a countywide integrated waste management plan which will provide specific program alternatives and implementation recommendations for programs addressing each of the following:

- Source Reduction;
- Recycling;
- Composting;
- Handling of Special and Household Hazardous Wastes;
- Public Information and Education programs;
- Disposal Capacity remaining at permitted solid waste disposal landfills; and
- Funding programs to support these solid waste infrastructure requirements.

The law went further to state that each jurisdiction shall identify by waste type, generator source and volume the amount of solid waste material being disposed of, and generated by each given jurisdiction within the State.

In fulfillment of the mandates of this law and for the further development of an effective program for the environmentally safe handling and disposal of solid wastes within the jurisdiction, the County of Mono is pleased to submit its final draft Source Reduction and Recycling Elements to the Local Task Force established per Article 7.0, Section 18761 of the Text of Planning Guidelines for Countywide Integrated Waste Management Plans, the Mono County Board of Supervisors and the California Integrated Waste Management Board.

This planning document will explore the range of actions which have been taken, and have yet to be taken at the local level. The solid waste programs addressed by this document in order to achieve the required solid waste diversion levels of AB 939 will be specifically tailored for the varied characteristics, and within the fiscal constraints, of the jurisdiction. Policies will be explored, programs evaluated and recommendations made that will lessen the jurisdictions' reliance on landfilling, reduce the volume of the solid waste stream, increase the recycling of reclaimable materials and dispose of the remaining throw away materials manufactured by our society in the most environmentally responsible manner possible.

However, it must be recognized that local governments have been delegated a regional and national responsibility and that local controls and mechanisms can attempt to solve only minor problems arising from these problems. The accepting of local responsibility can address the disposal end of the equation, but it is not capable of controlling the production side of the economic equation which is the true source of our wastes. Human behavior and consumption patterns will to a large extent control the destiny of the waste reduction programs outlined in this plan. A majority of the challenge facing this, and other jurisdictions, will be to address these behavioral patterns of the local consumer. It is recommended and anticipated that the greater responsibility of addressing production trends and mechanisms will be strongly addressed at the State and Federal levels.

2.0 DESCRIPTION OF PLANNING AREA

Due to the widely varying and large geographic area that Mono County encompasses, it is believed to be essential to the complete appreciation of the programs discussed in this planning document that a basic understanding of the natural topography and environmental setting of the jurisdiction be presented within this document. It is important to acknowledge that Mono County is an environmentally sensitive and

naturally pristine geographic area. An expansion of the readers knowledge of this environmentally sensitive and ecologically invaluable region through a review of the following data will serve to benefit the best interests of the jurisdiction and the State of Californias' review and enforcement agencies.

2.1 Geographic Setting

The County of Mono is located on the eastern slopes of the Sierra Nevada Mountain range with a varied topography which ranges in elevation from 5,000 to 14,000 feet. The county is bordered on the north by Alpine County and the State of Nevada, on the east by the State of Nevada, on the south by Inyo County and on the west by Fresno, Madera and Tuolumne Counties. An area map is provided in as Figure 1 for your reference.

The countywide area is some 3,028 square miles in size, making the county the 19th largest in geographic size among the 58 California counties. The County has a projected 1990 permanent population of 10,335 (California Department of Finance Population Estimates and Projections, 1986). This equates to a population density of one person for each 0.29 square miles within the jurisdiction.

One incorporated community is located within the county, that being the Town of Mammoth Lakes which encompasses approximately one-half of the total countywide population. The Town is located in the southern section of the county, approximately fifty (50) miles north of the city of Bishop in Inyo County. Several smaller, characteristically rural communities lie throughout the county. From the northern border of the county heading in a southern direction these communities include the population centers of Topaz, Coleville, Walker, Bridgeport, Lee Vining, June Lake, Lake Crowley, Tom's Place, Paradise Valley and located along the eastern border of the county are Chalfant and Benton.

Although large in geographic area among California county jurisdictions, a large expanse of the county's land is in public ownership. Table I-1 displays an approximate division of the land holders and percent of holdings throughout the countywide area.

Climatic fluctuations between the north and south portions of the county are dramatic. The western boundary of the county which is predominated by the high Sierra Nevada Mountain Range receives a considerable amount of precipitation as heavy snowfalls during the winter season. The eastern county is composed of vast high desert ranges and mountain peaks which may soar to over 14,000 feet (the White Mountain range east of Benton and Chalfant). Annual

seasonal rainfall varies from 35 to 40 inches within the western sector of the county to approximately 12 inches in the regions east of the Sierra range. Temperatures in the county range from lows of -20 to -30 degrees Fahrenheit in the winter to highs of 80 to 90 degrees Fahrenheit in the summer season.

Table I-1

Public Land Holdings in Mono County

Public Agency	Percent of Landholdings
Federal Government [1]	75.0%
City of Los Angeles	3.2%
State of California	0.7%
Other Government Entities	0.2%
TOTAL PUBLIC OWNERSHIP:	**79.1%**
TOTAL PRIVATE OWNERSHIP:	**20.9%**

[1] Includes the Bureau of Land Management and U.S. Forest Service.

The scenic beauty and varied topography of the area makes the region one of the most visited and enjoyed recreation areas in the State. Over two million visitors each year (California Department of Parks and Recreation, 1989 Visitor Attendance Report and U.S. Department of Interior, U.S.F.S. Inyo and Toiyabe National Forest Visitor Statistics, 1990) enjoy the varied recreational pursuits of world class skiing, hiking, camping, fishing, water sports and hunting available within the Countywide areas. Such recreational enchantments as the Walker River Canyon, the ghost town and National Historical Monument of the Town of Bodie, the endangered Mono Lake, Tioga Pass which provides access to Tuolumne Meadows in upper Yosemite Park, June Lake and June Mountain Ski Resort, the Hoover, Minaret and John Muir Wilderness areas, Mammoth Mountain Ski Resort and the headwaters of the San Joaquin River are just a few of the natural attractions and wonders found in this area.

Numerous State and Federal campgrounds are located within the Countywide area offering a multitude of recreational activities. Specifically, the Walker River Canyon is considered one of the best fly-fishing locations in the nation. The Hoover Wilderness area provides backpacking access to upper Yosemite Park near Tuolumne Meadows. Mono Lake is considered one of the natural wonders of California with ancient Tufa formations dotting its' shorelines. Both Paoha and Negit

Islands in the center of Mono Lake are considered primary breeding grounds for inland seagulls. These seagulls' preservation is dependent on preserving the environmental quality of the surrounding waters. June Lake loop is renowned for the four high mountain pristine lakes of Silver Lake, Grant Lake, Gull Lake and June Lake. Visitors can take advantage of the many boating marinas and fishing opportunities on these waters.

Mono County is considered by many to be a shining gem within the California crown. Preservation of its' numerous lake shorelines, campgrounds, wilderness areas, water quality and historical sites will be assured through the development of a comprehensive solid waste management program **to protect against litter, water pollution and other potential environmental impacts of improper solid waste handling.**

2.2 Demographics

The Countywide area is largely rural in nature with population concentrations being located along the North/South corridor of U.S. 395 in the towns of Walker, Bridgeport, Lee Vining and June Lake. Other population areas include the communities of Benton and Chalfant located in the eastern sector of the County near the Nevada State border, the U.S.M.C. High Mountain Warfare Training Center located north of Bridgeport and associated Marine housing located in north of Walker, and two areas of native-American housing, one near the town of Walker and the other near the town of Benton.

A significant impact on the solid waste infrastructure of the countywide area is the extremely large tourist population which visits the jurisdiction to enjoy the many recreational pursuits of the region. This extreme transient population is due in large part to the numerous winter visitors attracted to the world class ski facilities of Mammoth Mountain and June Mountain Ski Resorts. Over one million visitors utilize the facilities at Mammoth Mountain each year with an estimated 100,000 plus visiting June Mountain.

It has been reported (Town of Mammoth Lakes General Plan, 1989.) that during major ski weekends and holidays of the year over 29,000 skiers utilize the available facilities, pushing the total countywide population to near 40,000. Twenty year projected future skier population, which includes an expansion of the Mammoth Mountain resort and development of a new resort within the Mammoth Lakes region, projects the transient population to 48,000 on peak ski weekends of the year.

It may also be anticipated that due to the attraction to the numerous summer recreational facilities available, the same peak populations as observed during the winter season will also occur during the peak summer season.

Significant increases in transient population numbers are anticipated for the countywide area during the long-term planning period. This increase is anticipated from both the continued natural appeal of this geographic area as well as proposed large scale residential/commercial development in the Lee Vining area and a projected significant increase in visitation to the June Lake area. These developments are summarized following:

- a large development of some 878 acres for utilization as both a commercial and residential community of is planned for an area just north of Lee Vining in the Mono Basin area. Anticipated density is 690 housing units of both single-family and multi-family structures. The project has received planning approval from the county and an Environmental Impact Report (EIR) has been completed on the project. Maximum buildout of the project is anticipated within 10 to 20 years.

- a significant increase in tourism is projected for the community of June Lake, with a projected per day population density projected for some 15,800 persons on peak weekends and holidays by 2010. (June Lake Area Plan, November 1989). The permanent population is expected to increase to a total of approximately 1,000 to 1,200 persons during the same period.

Projected growth rate for the unincorporated area is 0.58% per year which will result in a total service base of some 8,400 individuals within the long-term planning period. Projected population growth through 2010 is presented in Table I-2.

Table I-2

Projected Population Growth for Mono County

Year	Countywide	Unincorporated	Incorporated
1990	10,335	5,136 [1]	5,199 [2]
2000	13,558	6,759	6,799
2010	16,800	8,400	8,400

[1] Mono County General Plan, Update 1987.
[2] Mammoth Lakes General Plan, 1989.

Number of resident units and average number of persons per household are displayed in Table I-3.

Table I-3

Number and Average Size of Households in Mono County [1]

	Unincorporated	Incorporated	Countywide
Single Family Units	2,046	2,173	4,219
Multi-Family (2 - 4)	145	1,042	1,187
Multi-Family (5+)	414	3,934	4,348
Mobile Homes	639	159	798
TOTAL LIVING UNITS:	**3,244**	**7,308**	**10,552**

[1] State of California, Department of Finance, Demographic Research, 1990.

3.0 INFRASTRUCTURE COMPOSITION

Infrastructure of the countywide area does not differ significantly from other rural communities within the state. The usual complement of local and state departments operate within the county providing essential services and support mechanisms. A brief summary of these services follows.

The county is served by two school districts offering K through 12 programs with an approximate student population of some 1,200 students. Eastern Sierra School District serves the county area from the north border, south to Lee Vining and east to Benton. Mammoth Unified School District serves Mammoth Lakes south to the Inyo County line and east to Chalfant. No community college or other college training facilities are available. Combined staff for the two districts is approximately 170 persons.

Two hospitals serve the county, Mono County Hospital located in Bridgeport serving the north county, with a second facility located in the Town of Mammoth Lakes for service to much the same area as served by the school district described above. Total staff to serve both facilities is approximately 110. The largest employer in the countywide area is Mammoth Mountain Ski Resort, also the operator June Mountain Ski Resort. During peak season, Mammoth Mountain employs over 2,220 employees, and maintains a full time staff of 500 employees throughout the year. The second largest employer in the area is the county itself.

The State of California, Department of Transportation maintains various road maintenance and snow removal stations throughout the county, these station also providing housing units for staff. The Federal government is a large employer in the area due to the wide expanse of Forest Service lands found throughout the county. Inyo and Toiyabe National Forest holdings predominate the scenic areas of the region.

Due to the large complement of transient visitors to the county, the economy largely revolves around providing support services to the tourist trade. In effect, local economic conditions are heavily reliant on national economic trends and climatic fluctuations. The drought conditions currently plaguing the State of California has had devastating impacts on local economic conditions in the county due in large part to the loss of revenues normally generated during the winter months and peak ski season.

Commercial services in all communities of the county are predominantly support services for tourism, such as motels/hotels and condominiums, restaurants and bars, automotive services, small retail gift stores of assorted inventories and recreational supply outlets. Lack of compilation of census data in past years by the county prevents a thorough detailing of the numbers of commercial enterprises by type found within the unincorporated area.

4.0 SOURCE REDUCTION AND RECYCLING ELEMENTS

The remaining portion of this Executive Summary shall be devoted to summarizing the Source Reduction and Recycling Elements (SRRE) prepared for Mono County. Title 14, Chapter 9 of the CCR and the Planning Guidelines and Procedures for Preparing and Revising Countywide Integrated Waste management Plans specify the required content and format of the SRRE. The components that address source reduction, recycling, composting and special wastes are mandated to contain the following formats:

- Goals and Objectives
- Description of Existing Conditions
- Evaluation of Alternatives
- Program Implementation
- Monitoring and Evaluation
- Costs and Revenues

The remaining components of education/public information, disposal facility capacity, funding and integration each follow their own individualized format. Each component is still mandated to address existing conditions, selected programs, program implementation, monitoring and evaluation.

5.0 WASTE GENERATION STUDY

A quantitative waste generation study was performed on the Mono County waste stream in order to identify the current disposal waste stream, determine the percent diversion and develop a complete profile of waste generation in the unincorporated area. The waste generation study determined that a total of 14,220 tons per year are being generated by the County. This quantity of material being generated is summarized in the following two tables as disposed and diverted materials by waste category.

Table I-4

Quantity of Disposed Materials by Waste Category

Waste Category	Tons/Year
Paper	3,450
Plastic	1,201
Glass	1,262
Metal	903
Yard Waste	615
Other Organics	4,280
Other Wastes	1,431
Special Wastes	510
Total Disposed by Waste Category	**13,650 TPY**

Table I-5

Quantity of Diverted Materials by Waste Category

Waste Category	Tons/Year
Paper	2.25
Plastic	1.29
Glass	64.00
Metal	127.46
Yard Waste	0.00
Other Organics	300.76
Other Wastes	75.00
Special Wastes	0.00
Total Diversion by Waste Category	**571.76**

6.0 SOURCE REDUCTION

Source reduction activities were developed in order to stimulate action by local government and the private sector to reduce the waste stream through education, regulation and legislative incentives or a combination of all three approaches. Existing source reduction activities in the unincorporated area of the County are virtually non-existent (.002% diversion through source reduction). Those source reduction programs selected for implementation within the County include the following:

- Procurement Policies at County offices
- Submittal of Source Reduction Plans by private businesses
- Implement waste reduction policies at government offices (double-sided copying, re-use of scrap paper, etc.)

It is anticipated that these source reduction programs will divert 2% of the generated waste stream through the short-term planning period.

7.0 RECYCLING

Approximately 4.0% of Mono County's waste stream is currently diverted from local landfills. The bulk of this diversion occurs through recycling programs. Portions of the County's waste stream currently being diverted includes redemption beverage glass containers, aluminum cans, PET bottles, scrap metal, food waste, tires, inert materials, white ledger paper, manure, newspaper and corrugated containers. The goal

of this component is to increase the current level of recycling and expand those programs into diverting other material types than listed above.

Programs adopted for implementation by the Local Task Force within the preliminary draft of the SRRE are noted following. However, since the adoption of the preliminary draft of the SRRE, the County has successfully petitioned the California Integrated Waste Management Board for a reduction in diversion requirements during the short-term planning period from 25% to 15%. Those recycling programs that are now identified for implementation by the county within the short-term planning process are highlighted within the following list.

- Placement of Collection Bins at Recreational Centers
- Placement of Collection Bins in Walker and Bridegport
- Collection and Processing of Corrugated Material
- Buy-back Center in Benton
- Increased Recycling at US Marine Corp Base

It is anticipated the recycling programs selected for implementation during the short-term planning period will divert 9.5% of the waste stream generated within the unincorporated area of Mono County.

8.0 COMPOSTING

Composting the controlled biological decomposition of organic waste to a stable humus-like material. As a waste diversion alternative, composting provides the opportunity to greatly reduce the quantity of green wastes entering the waste stream. Mono County's waste stream is composed of a significant quantity of wood waste, land clearing debris and slash material. However, a lower than anticipated quantity of more easily compostable yard materials such as lawn clippings and shrubbery trimmings were identified in the waste stream. Based on this identification, the primary objective of the composting component for Mono County was to identify and evaluate programs for processing of the bulky materials that could potentially be composted through an aggressive regional programs.

The programs that were evaluated within the composting component included the following:

- Mobile or Roving Grinding Operation to process materials at landfill sites
- Regional Sharing of Grinding Equipment
- Private Enterprise Operation of a Grinding/Composting Program
- Establishment of a Pelletizing Operation from the Processed Green Waste

No composting program was selected for implementation within the unincorporated area of the County due to the difficulty and cost of processing the material for a traditional composting operation.

9.0 SPECIAL WASTE

Special waste have ben defined as those relatively large, identifiable materials that have the potential to be segregated, reused, recycled or disposed in a manner uniquely suited to that waste. The four waste types addressed in this section of the plan have unique disposal requirements or can be managed as a separate waste stream to reduce hazard to public health. The four wastes are: 1) tires; 2) construction/demolition debris; 3) infectious waste; and 4) asbestos.

Asbestos and infectious wastes are addressed through increasing public education efforts to eliminate the disposal of these materials in Class III landfills, or establish special handling programs at the sites to segregate these materials from the open disposal areas. The programs identified for diverting tires and construction and demo debris include:

- Establish a Drop-off Collection Box for Tires to be periodically collected and transported by Oxford Tire Recycling
- Separate Wood and Metals from Construction and Demolition debris

The separation of wood and metals program has since been dropped as a selected alternative due to the County's successful petition for reduction in diversion requirement and the cost for implementing this program.

10.0 EDUCATION AND PUBLIC INFORMATION

An education and public information program is an essential part of implementing a successful SRRE program. The purpose of the SRRE is to take an integrated approach to waste management in order to meet the mandated reduction levels. To achieve participation in these program education and public information will be required. The following alternatives were selected for Mono County's plan:

- Identify and Agency Responsible for Implementation
- Establish a Liaison Committee to Develop and Implement Programs
- Identify Revenue Sources
- Develop Informational Materials

- Schedule media Time and Public Service Announcements
- Evaluate Existing Educational Materials for Public School Systems
- Distribute Informational Flyers

11.0 DISPOSAL FACILITY CAPACITY

The disposal facility capacity component shall identify and describe all existing permitted solid waste landfills and transformation facilities within the jurisdiction. The component shall also include a solid waste disposal facility needs projection necessary to accommodate solid waste generation for a fifteen (15) year period commencing 1991. This projection indicated that Mono County will not need additional disposal capacity during the 15-year planning period. However, the plan does identify the potential for four of the smaller landfill sites serving the unincorporated area being modified to transfer station operations during the medium-term planning period.

12.0 FUNDING

The funding component is intended to demonstrate the jurisdictions' capability to meet the costs of program planning and development and for the implementation of the programs necessary to meet the diversion goals as outlined with AB 939. Mono County currently supports the solid waste enterprise through a land based parcel fee and General Fund Appropriation. This fee is utilized to generate operating funds for the County Department of Public Works, the lead on solid waste management and facilities for the Countywide area. These funds are jointly generated by both the unincorporated and incorporated areas of the jurisdiction. For the fiscal 1990/91 year, the solid waste budget was $1,050,000, with approximately 52% being generated through the parcel fee.

Section II

PLANNING GOALS

1.0 INTRODUCTION

The primary purpose of this section is to establish a planning hierarchy that will be utilized to govern the development and final recommendations of specific programs which will be expanded upon within this document. Planning goals defined here were developed with the assistance of the joint Mono County/Town of Mammoth Lakes Local Task Force (LTF).

Though not formally defined within the regulations, it is the opinion of the consultants preparing this plan that defining overall document goals is of primary importance to the ultimate successful utilization of the document within the implementation phases. Formal goals and objectives which will guide the drafting of the SRR Elements are defined within Article 6.2, Section 18731 (a),(b),(c) of the regulations. Those requirements will be addressed and satisfied within the individual sections of this plan specifically speaking to that particular component. With the endorsement of the Mono County Local Task Force the following goals have been defined and adopted to guide the development of the County Source Reduction and Recycling Elements.

2.0 DEFINITION OF PLANNING GOALS

A goal, as defined by Webster's dictionary, is **"a purpose"**. (Webster's II New Riverside University Dictionary, Copyright 1984, pp. 299.). The purpose of defining a solid waste hierarchy for a specific jurisdiction such as Mono County is to provide the initial foundation upon which short-, medium- and long-term program development can be implemented. In order to achieve this plateau, the following goals have been formally defined and adopted by the LTF for the jurisdiction of Mono County.

- **To preserve the environmental and ecological quality of life within the jurisdiction by promoting the safe collection, processing, diversion and disposal of solid wastes generated from within the jurisdiction.**

- **To develop jurisdictional specific alternative programs for effective management of solid wastes that will meet, and eventually exceed diversion requirements.**

Section III

INITIAL WASTE GENERATION STUDY

1.0 INTRODUCTION

As with any effective policy development, an understanding of the principles involved is governed by a familiarity with its basic components. In developing solid waste management policy, identification of those components of economic value which may be separated, processed and returned to commerce must occur. The best case scenario for the non-reusable fraction of the waste stream may then be identified whether it be landfilling, transformation or processing by alternative means.

The basis of foundation on which the Initial Waste Generation Study mandated by AB 939 is formulated is the identification of specific waste material types composing a local jurisdictions' waste stream stratified into eight major waste categories as identified by Section 18722, (j) (1-8) of the Emergency Regulations (Title 14, California Code of Regulations (CCR), Chapter 9. Planning Guidelines and Procedures for Preparing and Revising Countywide Integrated Waste Management Plans, February, 1991.) Additional requirements include identifying the source of generation of these wastes over a continuous six month sampling period to demonstrate seasonal variations in waste stream characteristics (Section 18722 (i) (1-2).

The following narrative shall describe the sampling methodology utilized to fulfill the requirements of the above cited regulations. Concise details will be provided on disposal sites servicing the areas in unincorporated jurisdiction, existing collection services in these areas, disposal sites and/or areas sampled, calculation of sampling parameters and specific sampling methodologies employed and results of two separate sampling periods completed. Results will be presented from the two sampling periods as independent periods and as combined results from both sampling periods.

The jurisdiction of Mono County is confident that the methodologies employed and the completeness of design of this initial waste characterization study, which will ultimately be integrated into the Waste Generation Analysis of the Source Reduction and Recycling Elements, will meet all requirements as set forth under Title 14 (CCR), Chapter 9, Article 6.1, Section 18722 and 18724.

2.0 MONO COUNTY SOLID WASTE DISPOSAL SITES

There are six (6) permitted solid waste disposal sites and one (1) permitted small scale transfer station serving the countywide area of Mono County. Two of the landfills are operated and maintained by private contract. The Public Works Department of Mono County operates and maintains the remaining four, with the transfer station being serviced by the commercial refuse hauler from the Town of Mammoth Lakes.

The six landfill disposal sites all utilize the open pit/trench and cover method of operations. Cover and compaction is provided once per week during the winter season of November through April and two times weekly from May through October. The transfer station is serviced once per week, the solid waste generated being hauled to one of the landfills and disposed of with other Municipal Solid Waste (MSW) within the pit.

Complete landfill and transfer station characteristics, capacities and methods of operations will be discussed within the disposal facility capacity component of this plan. Refer to Table III-1 for summary descriptions of the existing disposal sites and service area each is located within. Note that the Benton Crossing Landfill services the Town of Mammoth Lakes. It will be further discussed and documented within the Solid Waste Disposal study, but for the purposes of this discussion it has been estimated that approximately 90% of the MSW, construction and slash waste and other special wastes entering the Benton Crossing site are generated within the jurisdiction of Mammoth Lakes, an incorporated Town with the County.

3.0 COLLECTION SERVICES

Due to the rural nature, sparse population densities and long-haul distances to disposal sites, there has been to date no coordinated movement towards the establishment of franchised collection within the unincorporated area of the county. The majority of residential solid waste is self-hauled to landfill sites that are within relatively close proximity to the generator. Commercial refuse hauling service is available and provided to the commercial sector by three service providers.

Northern Mono County commercial businesses enterprises only, from Topaz to Bridgeport are serviced by Douglas Disposal, Inc., operating out of South Lake Tahoe, California and the Minden/Gardnerville area of Nevada. Approximately 2,000 compacted cubic yards of waste collected by Douglas Disposal is exported from the county to the State of Nevada on an annual basis.

Table III-1

Permitted Disposal Sites in Mono County

Disposal Site	Operation	Land Owner	Operator	Acres	Service Area
Walker Landfill	Pit Burial Bulky Storage	BLM	County	40 20	North County
Bridgeport Landfill	Pit Burial Bulky Storage	BLM	County	40	Bridgeport Area
Pumice Valley Landfill	Pit Burial Septic Pit Bulky Storage Slash Area	LA DWP	Private	40	Lee Vining/ June Lake
Benton Crossing Landfill	Pit Burial Septage Bulky Storage Slash Area	LA DWP	Private	90	South Co./ Mammoth Lks
Benton Landfill	Pit Burial Bulky Storage	BLM	County	10	Benton
Chalfant Landfill	Pit Burial Bulky Storage	BLM	County	10	Chalfant
Paradise Valley Transfer Station	Transfer Station	LA DWP	Private	50 Yard Roll off	Paradise/ Swall Meadows

Notes:

Pit Burial - Open trench accepting Municipal Solid Waste (MSW).

Bulky Storage - Open collection and separation area for green waste, construction and demolition waste, white goods, tires and auto bodies.

Septage - Accepts septage from commercial haulers, campers and trailers.

Slash Area - Separate collection area for green waste, tree stumps, land clearing debris.

The Mono Basin communities of Lee Vining and June Lake are serviced by Resort Refuse, Inc. of June Lake. Resort Refuse provides commercial services to the majority of business enterprises in the region and disposes of all collected refuse at the Pumice Valley landfill site. Southern county areas of Lake Crowley and Paradise Valley are serviced by Mammoth Disposal, Inc. of Mammoth Lakes. Mammoth Disposal services the transfer station at Paradise Valley and disposes of all collected refuse at the Benton Crossing landfill.

Private collection services are provided by an independent collector in the Walker vicinity. Mosleys' Collection Service provides hauling of residential refuse to the communities of Topaz, Coleville and Walker. Limited commercial service (six accounts) is also provided by Mosleys' in the town of Walker. All refuse collected by Mosleys' service is disposed at the Walker landfill site.

4.0 DISPOSAL SITES SAMPLED

For the Fall and Winter Season sampling periods in Mono County, four (4) representative disposal areas were sampled. Those areas sampled included Lee Vining/June Lake area serviced by the Pumice Valley landfill, south county area served by Benton Crossing landfill, Bridgeport vicinity serviced by the Bridgeport landfill and the north portion of the County including Walker, Coleville and Topaz serviced by the Walker landfill.

Due to the small volume of solid waste disposed at the Chalfant and Benton sites, no sampling was performed at these sites. It was assumed that the wastes disposed at these sites would be representative of the wastes generated and disposed of at similar areas of the county, specifically the Mono Basin, Bridgeport and Walker areas. This assumption was made due to the similar geographic and demographic composition of these two communities with other vicinities of the County. Specifically, Benton and Chalfant enjoy the same isolated environment, small population base, and being located along transportation corridors near the White Mountains and Bishop, Inyo County.

The roll-off at the Paradise Transfer station is transported and dumped at the Benton Crossing landfill. Due to the fact that the Benton Crossing solid waste stream was being sampled (i.e. Mammoth Lakes waste stream), the Paradise Transfer station was assumed to be representative of the data accumulated from this portion of the study and would not require individual sampling.

A total of twenty-one (21) sorts were utilized through the Fall and Winter seasons to characterize the commercial, residential and industrial waste stream of the unincorporated area of the County. The number of sorts separated by distinct area and generator type are displayed in Table III-2. Also note, that a separate summer season sorting period was executed for both the County and Town of Mammoth Lakes. This data is presented as an addendum within the appendices of this report.

Table III-2
Mono County Disposal Sites Sampled

Generator Type	Disposal Area	Number of Sorts
Commercial	Mono Basin (Lee Vining/ June Lake)	10
	Walker	1
	South County	10
Residential	Mono Basin	1
	Bridgeport	6
	Walker	2
	South County	8
Industrial	Mono Basin	1
	South County	1

5.0 SAMPLING METHODOLOGY

Per Section 18722 (I) of the regulations, Quantitative Field Analysis was utilized to characterize waste categories, waste types and quantities of solid wastes generated within the jurisdiction and diverted or disposed in solid waste landfills or transformation facilities.

All generator categories were sampled in a like manner, data being collected in the field from the sources of generation. The process involved the physical separation and sorting of residential, commercial and industrial solid wastes and the physical measurement and recording of the weight of the materials carefully segregated into the identified waste types and categories as set forth in Section 18722 (j)(1-8).

The methodology utilized for this study employed the sampling procedures outlined in Appendix 1 of Article 6.1, entitled, "General Guidelines for Sampling When Performing a Quantitative Field Analysis for a Solid Waste Generation Study" (9/90). The methods outlined will closely follow the format established within the guidelines and supplementary preparation tools prepared and distributed by the CIWMB.

5.1 Sampling Sources and Sites

For the countywide jurisdiction, data was collected from both the source of generation and permitted disposal facilities. The disposal sites and geographic areas sampled were previously discussed. An overview is provided of sampling areas and methods as follows:

5.1.1 June Lake/Lee Vining: route sheets were obtained from the local service provider, Resort Refuse, Inc. Specifically selected commercial enterprises were identified. Resort Refuse was requested to pickup bins (i.e. approximately 6 cubic yards) at various types of commercial businesses, which were common to a particular category of commercial generator (i.e. restaurants, motels, grocery, retail, etc.) and deliver them to the sorting area. Sampling methods employed followed ASTM methods

5.1.2 Paradise Valley, Lake Crowley, Tom's Place: comparative data derived from the Town of Mammoth Lakes, located in the southern sector of the county, during the same sampling periods will be utilized. The residential population of this area is more sparsely located than the density of the Town of Mammoth Lakes, but receives much of the tourist population that is heading north to Mammoth Lakes.

5.1.3 Bridgeport vicinity: sorting occurred at the landfill disposal site. Uncompacted, uncovered trash bags were removed from the pit to the sorting area until such time as significant sort size had been accumulated with sorting proceeding per ASTM methods. Additional samples were obtain by diverting self-haul residential traffic from the pit to the sorting area where they wer quested to empty their household trash onto tarped areas. Each individual was quer d as to the area they resided and type of waste generated (residential vs. commercial). All persons interviewed reported waste being generated in the Bridgeport or Mono City area (unincorporated area) and all being residential generators.

5.1.4 Walker vicinity: sorting occurred at the landfill disposal site. As previously discussed, residential and a small amount of commercial hauling is provided by an independent hauler in the Walker area. A sorting schedule was coordinated with this hauler to assure that residential refuse was delivered to the sorting site for field analysis per ASTM methods. Residential refuse was delivered to the site, as well as a small volume of commercial wastes for sorting and data recording.

5.2 Identify Populations

The population of residential units in the unincorporated area has been previously identified. Due to there being no business license tracking system in place for the unincorporated area of the county, it is difficult, at best, to quantify the number of commercial and industrial units within the jurisdictional area.

No organized recycling, composting or source reduction programs are in place to serve the commercial and industrial populations of the county. A single AB 2020 site is located in the community of Walker with minimal amounts of aluminum can collection occurring within the residential sector by non-profit and community action groups.

5.3 Stratify the Populations

Due to the small permanent population and population density of the jurisdiction, no stratification of the population was performed, with sampling being conducted on the population as a whole. Refer to the *Executive Summary Section* for existing and projected population numbers.

5.4 Random Sampling

An unbiased sampling method was utilized by determining the largest commercial types within the commercial category and selecting those commercial types for specific sorting. The basis of this method is formulated from the fact that the jurisdictions' economic viability relies heavily on the tourist trade with a considerable fraction of the areas commercial composition being contingent upon these services. By determining the greatest concentration of visitors to portions of the county area it is possible to determine where in the county the greatest degree of commercial activity will be concentrated. Based upon data obtained from the visitor attendance report for California State Park Units in various counties for 1989 compiled by the California State Department of Parks and Recreation, it was determined that the greatest degree of tourist activity within the unincorporated area, and thus commercial services to support this commercial activity, occurred in the Mono Basin area of Lee Vining and June Lake. The remainder of the jurisdiction will experience more traditional residential waste generation from the permanent residents.

Based upon this information, sampling methods were developed that concentrated on sorting the commercial generators which cater to the tourism trade in the June Lake/Lee Vining area, with an emphasis on residential generators placed on the Bridgeport and Walker vicinities.

5.5 Sample Size Determination

The ASTM methodology utilized for the calculation of the number of samples required for a representative stratification of the waste stream.

Per article Nine (9), Section 1.1, Calculations of the ASTM designation, the number of sorting samples (n) required to achieve a desired level of measurement of precision is a function of the component(s) under consideration, and the confidence level. The number of sorting samples is determined by the following formula, where n is equal to:

$$(t^* \; s/e \; (x))^2$$

with t^* being the student t statistic corresponding to the desired level of confidence, **s** is the estimated standard deviation, **e** the desired level of precision and **x** is the estimated mean.

Suggested values of **s** and **x** by the author, for specific waste components are listed in Table C of the ASTM methodology. Values of t^* are listed in Table D for 90% and 95% confidence levels.

The number of samples are determined for the selected conditions and components using equation 1, listed above. For the purpose of estimation, the value of t^* for $n = \infty$ is selected from Table D of the ASTM journal article. Since the required number of samples will vary among the components for a given set of conditions, a compromise is required in terms of selecting a sample size.

Based on the results of the initial waste characterization study executed for the County during the fall season, mixed paper was identified as being the predominate waste type for both commercial and residential generators, and thus the selected governing component. The use of mixed paper as the governing component must satisfy the requirement of a 10% precision level or a second governing component must be selected and the calculation repeated for determination of sample size. The following calculations demonstrate that mixed paper does satisfy a 10% precision level for both the commercial and residential waste generator categories.

$$n = (t^* \; s/e \; (x))^2$$

1. Utilizing Mixed Paper as the governing component.
2. The desired confidence level is 90%.
3. A precision of 10% is desired.

s = 0.05 (Table C of ASTM Procedures)

Mean = 0.22 (Table C of ASTM Procedures)

e = 0.10

$t^*(\infty)$ = 1.645 (Table D of ASTM Procedures)

$$n_o = [\ 1.645 * (0.05) / (0.10)(0.22)\ ]^2$$
$$= [\ .08225 / .022\ ]^2$$
$$= [\ 3.74\ ]^2$$
$$= 14$$

The number of samples determined by using the estimated **t*** must be verified to be within plus or minus 10% of the recalculation using an actual **t*** as determined by the estimated sample size of 14. If the values are within 10%, the larger value is selected as the number of samples to be sorted.

t^* = 1.771 (Table D of ASTM Procedures)

$$n = (t^* s/e\ (x))^2$$

$$n = [\ 1.771 * (0.05) / (0.10)(0.22)\ ]^2$$
$$= [\ .08855 / .022\ ]^2$$
$$= [\ 4.025\ ]^2$$
$$= 16$$

Since 16 is within 10% of 14 when rounded down, 16 samples are selected for analysis for both the commercial and residential generators. The 10% level of precision is selected for Mono County due to the small population base and limited funds available for the solid waste generation study. Any adjustment of this precision to a lower degree would make the study prohibitively expensive for a jurisdiction of this size.

Based on the Fall season waste characterization results, the largest component from the industrial generator was selected as the governing waste type to derive a sample size by ASTM procedures. When executing the procedure a total sample size of some 271 sorts is calculated, making this determination outside the bounds of reasonability. Therefore, minimal industrial sorting was performed on the waste stream due this generator type being of minimal impact on the total waste stream of the jurisdiction. The ASTM calculation is as follows:

1. Utilizing Wood Waste as the governing component.
2. The desired confidence level is 90%.
3. A precision of 10% is desired.

s = 0.06 (Table C of ASTM Procedures)
Mean = 0.06 (Table C of ASTM Procedures)
e = 0.10
t* = 1.645 (Table D of ASTM Procedures)
n = [t* s/(e . x)]

n_o = [1.645 * (0.06) / (0.10)(0.06)] ^{2}
= [.0987 / .006] ^{2}
= [16.45] ^{2}
= 271

Due to 271 exceeding all sample sizes in Table D of the ASTM procedures, the infinite student t statistic is again utilized, resulting in a repeat calculation of 271 sorts.

5.6 Physical Sampling Procedures

Physical separation and sampling of commercial generators was accomplished either according to, or closely approximating ASTM procedures and methodologies.

Following collection of specifically identified trash receptacles by the commercial refuse hauler, the load was delivered to the sort site and deposited onto waiting tarps. The site was covered with ground tarps, cordoned off to prevent visual disturbances and interference from wind and was equipped with safety equipment including rubber gloves, protective eye coverings, water and fire extinguisher. Receptacles with which to collect the waste material types were placed in close proximity to the tarped site. Each receptacle was a single 20-gallon curbside collection container constructed of molded PVC plastic. The tare weight on each container was four pounds. Approximately 30 to 40 of these containers would be utilized per each sort.

Separation of the deposited refuse pile closely followed ASTM methodologies of sectioning and quartering of the refuse. A team of from two to three sorters were assigned one-quarter of the pile in order to divide the pile into the waste types listed in section 18722 (j). An additional waste type of single-use plastic diapers was added to the major waste category of "Other Wastes".

Like waste types were collected in containers until such time as that quarter of the pile had been sampled from the top to ground level, assuring proper collection of the heavier fraction of the refuse which tends to aggregate at or near the bottom of the pile.

Upon completion of sorting the quarter to ground level, the containers were moved to the scale. The scale was a portable, balance scale capable of measuring to the nearest one-half pound. The volume of all sorted materials was measured in weight and recorded on data load sheets, closely approximating the design of the sample form contained in the ASTM procedural guidelines.

Sample weight size per sort was closely held to the 200 to 300 pound range recommended by both Klee and Carruth (Albert J. Klee and Dennis Carruth, Sample Weights in Solid Waste Composition Studies, Journal of Sanitary Engineering Division, August 1970, pp 945-54.) and ASTM specifications. Due to none of the selected loads being compacted via transfer vehicles or heavy equipment at landfill disposal sites, uniform samples were more easily obtained when quartering the volume of materials into sortable fractions.

Tare weights of the containers were carefully measured after each sort and either adjusted accordingly or the container was washed and cleaned to remove excess material which was adding to the weight of the receptacle. Following completion of the sorting and measuring of the waste types, the materials were physically re-deposited into the collection vehicle for transport to, and disposal at the nearest landfill disposal site.

As previously discussed, residential sorting occurred at the landfill sites. Refuse material was either collected directly from the pit, residential self-haulers entering the facility or with the assistance of independent collection firms. Materials were deposited into one large pile until volume was attained which would allow the sectioning and quartering of the pile according to ASTM methods. Remaining procedures of volume measuring and recording were similar to those exercised with the commercial sampling.

Industrial sampling was also conducted via Quantitative Field Analysis, the sampling methods being the same as those utilized for residential generator sorting.

5.7 Sample Results

Data from the Fall, Winter and combined sampling periods are contained in Appendix D, E and F respectively. Tables in Appendix A cover the Fall Season sampling period. Appendix B tables tabulate the Winter Season sampling period. Those tables in Appendix C depict both sampling periods with all data combined. The tables contained in each appendices are formulated in similar fashion in order to allow an expedient comparison of similar and dissimilar data points. Each table is summarized for your information following.

- Description of Sampling Statistics - describes the number of ts, sample sizes, mean sample and standard deviation.
- Summary of the Sampling Period by Sort.
- Displays the Waste Stream Composition of all Generator Cat es and an Aggregate Total Composition for the Total Solid Waste Strea
- Graphic Representation of the Mono County Waste Stream b enerator and Aggregate Total.
- Waste Stream Composition as a Combined Aggregate Total of All Generators.
- Waste Stream Composition by Commercial Generator.
- Waste Stream Composition by Residential Generator.
- Waste Stream Composition by Industrial Generator.

That data represented by the last four tables of each appendices reports mean quantity of each waste type on a composition by percent, weight basis for each waste category and each category as a mean quantity of the total waste stream composition. Those quantities from the two sampling periods are reported as total mean values in the tables contained in Appendix C.

5.8 Seasonal Variations

As previously discussed, sampling periods were executed to cover the Fall and Winter seasons of the year in Mono County. The fall season in Mono County is marked by rapidly falling temperatures, reduced tourist trade due this temperature change and potentially the first early snow fall of the year. The winter season is characterized by average day temperatures ranging from the low teens to mid thirties. Prolonged periods of below freezing weather is not uncommon and in fact represents more the norm than the exception. Winter also welcomes the numerous tourists visiting the area for the snow skiing conditions, which directly impacts both the composition and quantity of the waste stream.

The first sampling period took place in late October/early November, with the second occurring in early February. Based on the sample size determination calculated previously in this document, and given the extreme drought conditions found in the state impacting the number of visitors and thus, waste generation in the area, an additional sampling period to cover the Summer period was performed. Given the previous two sampling periods executed, this degree of sampling more than adequately provided a representative characterization of the quantities and types of wastes disposed of within the jurisdiction.

Per Section 18722 (i)(2), Seasonal Variations, that data which shall quantify the seasonal variations in solid waste generation is presented within Appendix D.

Certain assumptions were made regarding the seasonal changes of the waste stream. For the County jurisdiction these included such items as the following:

- an increase in tourism to the recreational campground facilities away from the ski resorts through the spring and summer months, increasing the percent composition of newspaper, redemption glass and aluminum cans and PET bottles;
- with an increase in camping and outdoor pursuits in the spring and continuing into the summer months, an increase in food containers carrying perishable food items (i.e., HDPE, tin cans, film plastics, hard plastics, etc.);
- an increase in construction activity beginning in spring and continuing through summer, resulting in an increase of wood waste and inert materials;
- an increase in auto shred parts from the private sector beginning to maintain their vehicles in more favorable weather conditions;
- an increase in manure due to horse/mule pack trips;
- and, an increase in yard waste materials, both from the jump in construction projects and more frequent maintenance of residential yards and garden spaces.

5.9 12-Month Sampling Period

Based on the 12-month extrapolated waste stream characteristics described above and in the table in Appendix D, a calculation can be made to determine the composition by quantity of the solid waste stream for an annual year of disposal as required by Section 18722, (i)(1) Sampling Period. This data is presented in the table within Appendix E.

The calculations are based on the following:

5.9.1 the five solid waste disposal sites serving the unincorporated area of the county are measured either on quarterly or biannual basis to determine the quantity of waste disposed at the site and for recalculating the remaining holding capacity of each pit. This data is presented in Table III-3.

5.9.2 from this data, a total disposal quantity for all five sites can be calculated and a percent contribution from each site determine by the percent of the total waste stream contributed by the particular disposal site.

5.9.3 because disposal site measurements occur at either quarterly or biannual periods of the year, a determination of the percent contribution by period of the year can also be made. These results of this determination are presented in Table III-4.

5.9.4 based on this data, a percent of the waste stream generated within a given period of time may then be applied to each of the twelve months based on peak tourist visitation periods.

Table III-3

Annual Waste Disposal at Landfill Sites in Mono County

Landfill	Cubic Yards	Tons[1]	Period
WALKER	1,562	585.6	July - Dec 1989
	931	349.1	Jan - Mar 1990
	1,031	386.6	Apr - June 1990
Annual Disposal	3,524	1,321.5	3.62 Tons/day
BRIDGEPORT	4,070	1,526.3	July - Dec 1989
	4,221	1,582.3	Jan - June 1990
Annual Disposal	8,291	3,109.1	8.52 Tons/day
PUMICE VALLEY	4,481	1,680.4	Jan - Sept 1989
	5,503	938.6	Oct - Dec 1989
	2,154	807.8	Jan - Mar 1990
	1,845	691.9	Apr - June 1990
Annual Disposal	10,983	4,118.6	11.28 Tons/day
BENTON	203	76.1	July - Dec 1989
	485	181.9	Jan - June 1990
Annual Disposal	688	258.0	0.71 Tons/day
CHALFANT	1,327	497.6	July - Dec 1989
	157	58.9	Jan - June 1990
Annual Disposal	1,484	556.5	1.52 Tons/day
TOTAL UNINCORPORATED	24,970	9,363.8	25.65 Tons/day

[1]Compaction ratio of 750 lbs/Cu.Yd. for inplace MSW based on determination made by Mono County engineer, responsible for calculating increase in fill on quarterly or biannual basis.

Based on the figures in Table III-3, the percent contribution and actual quantity of generation per season of the year is calculated. The actual total quantity of MSW disposed of within the jurisdiction includes an additional 998.63 Tons generated from the U.S. Marine Corp High Mountain Training Camp and an estimated 5% of the MSW disposed of at the Benton Crossing

landfill, or an additional 718.37 Tons/Year. This amounts to 11,080.77 Tons of MSW disposed of per year. Table III-4 presents a brief summary of the seasonal contribution of each season, with a month by month basis outlined in Appendix G.

Table III-4

Seasonal Contribution to the Total Waste Stream

Season	Months	Percent	Tons
FALL	October - December	25.69%	2,846.65
WINTER	January - March	22.40%	2,482.09
SPRING	April - June	22.41%	2,483.20
SUMMER	July - September	29.50%	3,268.83

6.0 SOLID WASTE DISPOSAL STUDY

Over 11,080 Tons of Municipal Solid Waste (MSW) are disposed of within the jurisdiction of Mono County on an annual basis. The percent composition of the waste stream by waste types has been identified in previous articles of this section. Disposal quantity by waste type and generator will be reported within this article the plan.

The contribution to the total quantity of MSW generated within the jurisdiction by generator is determined as follows.

6.1 through periodic measurements by county staff, the total quantity of MSW disposed of within the open pits of the landfill disposal sites is determined;

6.2 based on this quantity calculation and the report of MSW exported from the county by Douglas Disposal, a total MSW disposal volume for the jurisdiction is determined;

6.3 a per capita generation value of 3.6 pounds was determined from a sampling of residential generator receiving curbside disposal can pickup by Mammoth Disposal in the Town of Mammoth

Lakes. Though this number is relatively small (i.e., representing some 100 customers), due to the similarity in jurisdictional area, this per capita quantity is applied to the County jurisdiction.

6.4 based on the existing population of the jurisdiction of 5,136, a generation quantity applicable to the permanent residential sector of the population can be calculated by multiplying the total population by 3.6 pounds per person per day;

6.5 the difference between the total quantity of solid waste generated in the jurisdiction and that quantity attributable to the permanent residential population can be assumed to be generated by the commercial generators, comprised mostly of support services for the tourist trade, and a small percent of the total MSW can be attributed to the industrial generators;

6.6 industrial generators would constitute a small percent of the MSW due to these waste types not being dumped into the MSW pits, but being segregated in separate areas at the landfill facilities (the industrial contribution would be assumed to be no more than five percent (5.00%) of the total MSW disposed at the landfill sites).

The following calculations are provided in support of these statements.

MSW Disposed in County	=	10,082.17 Tons/Yr
Total MSW Disposal (in-County + exported)	=	11,080.77 Tons/Yr
Per Capita Waste Generation	=	3.6 lbs./Person/day
Permanent Population Generation	=	3,374 Tons/Year
Commercial/Industrial Contribution	=	7,152 Tons/Year
Industrial Contribution @ 5.0%	=	554 Tons/Year

Based on the above figures, the following percent contributions by generator to the MSW stream will be utilized to determine the total weight as of all solid wastes disposed at Mono County permitted landfill sites. These figures will be presented in the table found within Appendix H. The percent contributions by generator category are summarize below in Table III-5 for reference purposes.

Table III-5

Summary of Waste Generator Contribution to the Waste Stream

Generator	Percent of Waste Stream	Annual Tons
All Generators	100.0%	11,080
Residential	30.5%	3,374
Commercial	64.5%	7,152
Industrial	5.0%	554

Other solid waste materials which are disposed of and attributable to the jurisdiction are construction and slash (i.e. green waste such as land clearing debris) wastes. These materials are a difficult waste type to track due to several factors that include:

- none of the permitted solid waste landfills are manned, fenced or gated allowing free access on a 24-hour basis;
- no scales are available, even if the sites were staffed, to weigh or approximate the quantity of material;
- no determination of the quantity these materials received at the sites are made by county staff; only the active trenches are measured for change in elevation to determine quantity of disposal since the last determination; and
- the material is burned on an "as-needed" basis when the quantity has reached beyond an acceptable level.

Of the six sites in the county, only the site which services the Town of Mammoth Lakes is manned and gated. The landfill personnel record the number of vehicles, vehicle type and material type that enter the landfill on a daily basis. From these log sheets maintained by the operator, the quantity of construction and slash material disposed of at the site can be accurately calculated and verified. This quantity of material can then be applied to the county jurisdiction when certain parameters are compared such as population, anticipate growth and on-going development.

Each vehicle that enters the site is recorded as to its' type and material being transported. The compaction ratios of each vehicle have been previously studied and documented by the county and is referenced in County of Mono Landfills Methods of Operation, March 9, 1989. The types of

vehicles, capacities and compaction ratios are listed in Table III-6. Vehicle and material type counts were obtained and tabulated for an annual period from January through December of 1990 with those results being presented in Table III-7.

Table III-6

Vehicle Descriptions for Hauling of Construction/Slash Wastes

Vehicle Type	Capacity in Yards	Compaction (lbs. per yard)
Pick-Up Truck	0.75	200
Semi-Truck	20.00	300
Bob-Tail	5.00	150
Roll-Off	40.00	300
10-Wheel Truck	15.00	300
End-Dump	20.00	300

Table III-7 presents a breakout of the disposal quantities of construction and slash materials on a per truck type on an annual basis. Based upon the above data, the calculations utilized to determine quantity generated of construction and slash material is as follows:

v = Capacity of vehicle in Cubic Yards

c = Pounds per Cubic Yards

n = Number of Vehicle trips to Landfill

t = 2000 pound/Ton

Tons per Vehicle Type = [((v * c) * n) / t]

Table III-7

Construction and Slash Material Generated at Benton Crossing Disposal Site (Annual Basis in Tons)

	Construction		Slash	
	Vehicle Count	Tons of Material	Vehicle Count	Tons of Material
Pick-Up	1,316	98.70	646	48.45
Bob-Tail	760	285.00	1,055	395.63
Roll-Off	572	3,432.00	0	0
10-Wheel	123	276.75	319	717.75
Semi	67	201.00	597	1,791.00
TOTALS:	2,838	4,293.45	2,617	2,952.83
MONTHLY MEAN:		357.79		246.07
ANNUAL DISPOSAL:		7,246 Tons		

Through interviews with contractors, Forest Service employees, Mammoth Mountain staff and others, it has been determined that 95% of the construction and slash waste disposed of at the Benton Crossing landfill is generated from within the Town of Mammoth Lakes. Roughly 5%, or 214.67 Tons of construction waste and 147.64 Tons of slash material for a total of 362.3 Tons is attributed to the county jurisdiction.

The anticipated growth rate of the county jurisdiction is projected at only 0.58% per year over the long-term planning period while the Town is projected at thirty-eight percent (38.0%), or 1.9% on an annual basis. Based upon anticipated growth the Town will generate 3.28 times as much construction and slash waste over the county area in the next twenty-year planning period. Utilizing this assumption to calculate the quantity of construction and slash materials disposed of at the county disposal sites results in a calculation determining that some 2,209.23 tons of material is additionally disposed of by the jurisdiction.

Together with the 5% volume of material from the Benton Crossing landfill, the assumed additional disposal quantity attributable to the County from generated construction/slash material is 2,571.5 TPY. Additional sources of generation which must be accounted for as a source of generation from within the jurisdiction are those wastes which are generated from within the

jurisdiction but are disposed of outside of the jurisdiction (i.e., exported). Those wastes generated at the U.S.M.C. High Mountain Training Facility at Pickle Meadows is such an example.

Per actual quantity projections from the commanding officer of the Training Base, the facility and accompanying off base housing units generate 998.60 Tons of MSW per year. This disposal quantity is applied towards the total solid waste disposal value for the unincorporated county area. When calculating the quantities of MSW attributable to the different generator categories, this quantity was factored into the total MSW quantity disposed. The following table summarizes the total quantity of solid waste disposal under existing regulations.

Table III-8

Total Solid Waste Disposal Volume for Mono County Tons/Year

Material Type	Total Waste Stream	Percent of Total Waste Stream
MSW:	11,080	
Disposal sites	10,082	
Exported	999	
Residential	3,374	24.7%
Commercial	7,152	52.4%
Industrial	554	4.0%
CONSTRUCTION	1,523	11.2%
SLASH	1,047	7.7%
TOTAL DISPOSAL	3,650	

7.0 SOLID WASTE DIVERSION STUDY

To compile a summary of the existing waste diversion activity in the unincorporated areas, the following classifications of businesses and organizations were contacted:

- Waste Haulers
- Major Grocery Stores
- Cloth Diaper Services
- Schools
- Major Industries
- Rendering Companies
- Operators of Certified Redemption Centers
- Restaurants and Bars
- Scrap Metal Dealers
- Used Clothing Stores and Shoe Repair Shops
- Government Agencies
- Recyclers of Horse Manure

All of the businesses within these classifications were contacted either in person, or via mail survey with telephone follow-up to determine the extent of any existing waste diversion activities. The information obtained from each included the following:

- Name of Business
- Types of Materials Collected (cans, glass, etc.)
- Quantities of Materials Collected (monthly or annual averages)
- Sources of the Materials
- Purchaser of the Collected Material

Actual quantities were provided from each source contacted so that no extrapolation of sample data was required. Information on the source and destination of the collected materials was used to avoid any double counting. The results of the diversion survey are reported by material type and program in Appendix I.

8.0 SOLID WASTE GENERATION DETERMINATION

As defined within Section 18722 (g), the total solid waste generated by a jurisdiction shall be the sum of the total solid waste disposed plus the total solid waste diverted from permitted solid waste landfills through any combination of existing source reduction, recycling and composting programs. Expressed as an equation within the regulations, the total solid waste generated by a jurisdiction shall be computed as follows:

GEN = DISP + DIVERT

where:

GEN	=	the total quantity of solid waste generated within the jurisdiction
DISP	=	the total quantity of solid waste generated within the jurisdiction which is disposed in permitted solid waste facilities
DIVERT	=	the total quantity of solid waste generated within the jurisdiction which is diverted from permitted solid waste disposal facilities through existing source reduction, recycling and composting programs

Using the figures derived in the solid waste characterization and disposal study and the solid waste diversion study, the total quantity of solid waste generated within the jurisdiction of the unincorporated area of Mono County is determined as follows:

GEN = 13,6502 Tons/Year + 571 Tons/Year

GEN = 14,223 Tons/Year

9.0 15-YEAR SOLID WASTE GENERATION DATA PROJECTIONS

Section 18722, (c) states that all solid waste generation studies shall include a 15-year projection of the solid waste to be generated within the jurisdiction and diverted and disposed. The projection is to include the amounts, waste categories and waste types generated, disposed and diverted from disposal for each year of the 15 year period.

Both existing conditions at the time that the generation study is prepared and the conditions expected from the implementation of the jurisdictions SRR Element must be documented. Projections will be based on projected population increases obtained from the California Department of Finance. It is anticipated that Mono County will grow at approximately 0.58 percent per year over the next 20 year period. Of major impact will be the increased number of visitors to the area which will bring additional pressures to bear on the local infrastructure. Visitor pressures will be calculated by using a 40% increase in visitor population over the next twenty years as cited in the June Lake Area Plan. An average stay of five (5) days per visitor is anticipated with a current per capita waste generation of 2.5 pounds per person per day. Those tables in Appendix I contain the representative data for the 15-year projections.

Section IV

SOLID WASTE GENERATION ANALYSIS

1.0 INTRODUCTION

Per the requirements of Article 6.2, Source Reduction and Recycling Elements, Section 18732, each jurisdiction preparing a SRR Element shall prepare a solid waste generation analysis based upon the data developed in the waste characterization study of this plan. This portion of the plan shall be used to identify the volumes of waste categories currently being diverted and disposed within the jurisdiction, those materials currently being disposed which could be diverted and a list of materials disposed of within the jurisdiction which cannot be diverted from disposal.

2.0 DIVERTED AND DISPOSED MATERIAL BY WASTE CATEGORY

The quantity of materials, by waste type, currently being diverted form disposal within the jurisdiction of Mono County has been summarized in the tables contained in Appendix G. That data is repetitively presented following.

Table IV-1

Diverted Materials by Waste Categories

Waste Category	Tons/Year
Paper	2.25
Plastic	1.29
Glass	64.00
Metal	127.46
Yard Waste	0.00
Other Organics	300.76
Other Wastes	75.00
Special Wastes	0.00
Total Diversion by Waste Category	570.70

The volume of materials being disposed of within the jurisdiction has been previously represented in the Solid Waste Disposal Study and more specifically, the 15-Year Projection Table for 1991 contained in Appendix H. That information is summarized by waste category following.

Table IV-2

Disposed Materials by Waste Categories

Waste Category	Tons/Year
Paper	3,450.0
Plastic	1,201.4
Glass	1,261.6
Metal	903.1
Yard Waste	614.8
Other Organics	4,279.7
Other Wastes	1,431.2
Special Wastes	510.4
Total Disposal by Waste Category	13,652.3

It should be noted that these are the volumes of material identified through the waste characterization study only. Those additional materials such as slash material, wood waste and construction waste, white goods and auto bodies which do not normally show up in MSW being sampled are not inclusive of the total volume indicated here. Per the requirements of 18732 (a), the above summary reflects only those volumes as identified through the quantitative field analysis study carried out on the MSW stream of Mono County.

3.0 DISPOSED MATERIALS WHICH COULD BE DIVERTED

Those materials which are currently being disposed of within the jurisdiction, but which are recoverable and have been identified within the MSW stream by the initial waste generation study are presented following. Programs outlined in the Model Component Format section immediately following will more fully detail the proposed programs for development which would target these specific waste types.

Table IV-3

Recoverable Materials Currently Being Disposed

Waste Type	Tons/Year
Corrugated	1,260.11
Newspaper	820.50
HDPE	214.34
Other Recyclable Glass	876.48
Yard Waste	565.21
Wood Wastes	621.18

Those materials listed above are those waste types that have no program in place within the jurisdiction to recover or capture their volumes before disposal in one of the permitted landfill disposal sites within the jurisdiction. Other materials which were identified within the initial waste generation study, but have recovery and/or collection programs in place include the following list. Table IV-4 presents the anticipated diversion through the short and medium-term planning periods.

Table IV-4

List of Materials Targeted for Diversion for Short and Medium-Term (TPY)

Waste Type	Short-Term (TPY)	Medium-Term (TPY)
Aluminum Cans	120	0
CRV Glass	300	25
Other Glass	300	25
PET	15	20
HDPE	20	20
Other Plastics	30	370
Newspaper	175	0
Cardboard	545	220
White Ledger Paper	15	0
Mixed Paper	20	50
Food Waste	0	735
Wood Waste	20	2,240
Yard Waste	0	300
Textiles and Leather	0	50
Tires	0	100
Inert Solids	0	500
Ferrous Metals	0	320
Totals	1,560	4,975

The presence of these waste typed in the MSW stream indicates that ongoing program development and enhancement must occur throughout the unincorporated county area.

4.0 DISPOSED MATERIALS WHICH CANNOT BE DIVERTED

Specific materials identified in the initial waste generation study are not capable of diversion from the waste stream for a variety of reasons. These barriers to diversion center on the following within the jurisdiction of Mono County.

4.1 Difficulty in establishing collection mechanism in dispersed population areas.

4.2 Low generation volumes.

4.3 Long-haul transportation costs for marketing of collected commodities.

4.4 No centralized processing facilities or regions within close transportation proximity (relative to long-haul distances and cost of transport).

4.5 Lack of available markets for certain identified waste types.

4.6 Extreme fiscal impact and manpower constraints upon a small populated, rural jurisdiction.

The question of best diversion return for the dollar invested must ba addressed with extreme caution in a small, rural-oriented community of limited resource capability. The fiscal constraints placed on this County to implement an environmentally sound and efficient waste reduction policy is extreme. The population base is small, impacting the application of usage fees (i.e. local taxes) and implementation of other more creative funding mechanisms such as sales tax increases and/or bonding issues.

This directly impacts the range of waste types which can be targeted for diversion, as each waste reduction decision must be carefully analyzed and the best reduction return for the least amount of invested dollar put into place within the County area. The materials which are not being identified for diversion for the reasons articulated in the above discussion above are listed following.

4.7 Waste Types Not Targeted for Diversion

- Mixed Paper
- High Grade Paper

- Other Paper
- Film Plastics
- Other Plastics
- Non-Recyclable Glass
- Bi-metal Containers
- Ferrous/Tin Cans
- Non-ferrous Containers
- Food Waste
- Infectious Wastes
- Ash
- Auto Shred Parts
- Other Special

Waste types which were not identified in the MSW stream through the initial waste generation study are not listed above.

5.0 WASTE GENERATION

Table IV-5 presents the total annual waste disposal by waste type and generator source, the waste diversion by waste type, and the total waste generation by waste type for the County unincorporated area.

Table IV-5

Mono County Waste Generation - Tons/Year

Component	Disposal				Diversion	Generation
	Residential	Commercial	Industrial	Total		
Corrugated	354.0	618.4	81.3	1,053.7	0.0	1,053.7
Mixed Paper	473.9	1,065.8	46.9	1,586.6	0.0	1,586.6
Newspaper	287.7	344.2	9.4	641.3	0.0	641.3
Ledger	0.0	1.4	0.0	1.4	2.3	3.7
Other Paper	82.5	72.0	12.5	167.0	0.0	167.0
Paper	**1,198.1**	**2,101.9**	**150.0**	**3,450.0**	**2.3**	**3,452.3**
HDPE	76.3	86.6	3.1	166.0	0.0	166.0
PET	22.7	20.1	3.1	45.9	1.3	47.2
Film Plastics	180.8	241.7	21.9	444.4	0.0	444.4
Other Plastics	160.6	353.2	31.3	545.1	0.0	545.1
Plastic	**440.4**	**701.6**	**59.4**	**1,201.4**	**1.3**	**1,202.7**
Refillable	0.0	0.0	0.0	0.0	0.0	0.0
CA Redemption	145.1	314.4	21.9	481.4	64.0	545.4
Other Containers	296.7	380.2	15.6	692.6	0.0	692.6
NR Glass	3.6	9.0	75.0	87.6	0.0	87.6
Glass	**445.5**	**703.6**	**112.5**	**1,261.6**	**64.0**	**1,325.6**
Aluminum Cans	80.7	167.6	3.1	251.4	35.6	287.0
Bi-Metal	12.6	40.9	3.1	56.6	0.0	56.6
Ferrous Metals	151.6	257.6	56.3	465.5	91.8	557.3
Non-ferrous	10.8	90.7	28.1	129.7	0.0	129.7
Mixed Metals	0.0	0.0	0.0	0.0	0.0	0.0
White Goods	0.0	0.0	0.0	0.0	0.0	0.0
Metals	**255.7**	**556.8**	**90.6**	**903.1**	**127.4**	**1,030.5**
Yard Waste	**92.6**	**381.6**	**140.7**	**614.8**	**0.0**	**614.8**
Food Waste	421.7	1,127.5	15.6	1,564.8	20.5	1,585.3
Tires & Rubber	120.6	37.4	37.5	195.5	0.1	195.6
Wood Wastes	83.5	348.4	1,300.2	1,732.1	0.0	1,732.1
Manure	21.6	0.0	6.3	27.9	280.0	307.9
Misc. Organics	54.0	69.3	9.4	132.7	0.0	132.7
Diapers	51.1	205.0	0.0	256.1	0.0	256.1
Textiles	154.1	194.6	21.9	370.6	0.2	370.8
Organics	**906.8**	**1,982.1**	**1,390.9**	**4,279.7**	**300.8**	**4,580.6**
Inert Solids	0.0	108.7	1,059.6	1,168.3	75.0	1,243.3
HHW	117.0	124.0	21.9	262.9	0.0	262.9
Other Waste	**117.0**	**232.7**	**1,081.4**	**1,431.2**	**75.0**	**1,506.2**
Ash	9.0	76.9	6.3	92.1	0.0	92.1
Auto Parts	0.0	61.6	12.5	74.1	0.0	74.1
Auto Bodies	0.0	0.0	0.0	0.0	0.0	0.0
Other Special	136.1	126.7	81.3	344.1	0.0	344.1
Special Waste	**145.1**	**265.2**	**100.0**	**510.4**	**0.0**	**510.4**
Total	**3,601.3**	**6,925.5**	**3,125.6**	**13,652.3**	**570.8**	**14,223.1**

Section V

SOURCE REDUCTION COMPONENT

1.0 INTRODUCTION

Source Reduction is any action that avoids the creation of waste by reducing waste at its source, including reducing packaging, reducing the use of non-recyclable materials, replacing disposable materials and products with reusable materials and products, reducing the amount of yard wastes generated and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic and other materials. It requires manufacturers and consumers to take an active role in reducing the amount of waste that is produced through changes in production methods and consumption patterns. Many of these changes are beyond local control; however, source reduction activities can be stimulated at all levels of government and the private sector through education, regulation or legislative incentives or disincentives or a combination of all three approaches.

2.0 SOURCE REDUCTION OBJECTIVES

The materials targeted for diversion through source reduction activities include paper (ledger, corrugated, mixed paper), plastic, glass, and wood waste.

2.1 Short Term Objectives (1991-1995)

- To reduce the amount of solid waste generated by 1% by 1995.
- Develop and adopt a County ordinance/resolution establishing a waste reduction and recycling policy.
- Develop and implement procurement/solid waste policies and practices in which preference is given to purchase of recyclable and reusable products.
- Investigate the types of local incentives that can be implemented to promote business/industry source reduction activities.
- Study the feasibility and impact of developing land-use/zoning ordinances that encourage source reduction.

2.2 Medium Term Objectives (1996-2000)

- Reduce the amount of solid waste generated by an additional 3.3%.
- Monitor state and national source reduction legislation on an ongoing basis.
- Review and update procurement/waste management policy annually in order to remain current with new products and technology.
- Review and update source reduction education/public relations program annually.
- Continue to provide technical assistance and information to waste generators on an ongoing basis.

3.0 EXISTING CONDITIONS

Existing source reduction activities in the County unincorporated areas consist of the use of shoe repair shops and used clothing stores by the area residents. These source reduction activities contribute to an approximately .0013% reduction in the amount of waste that is landfilled. More detailed information is provided in Appendix I.

4.0 SOURCE REDUCTION ALTERNATIVES

The following types of source reduction programs have been found to be successful in reducing waste generation in some communities:

- Waste collection and disposal rate modification
- Economic incentives such as loans, rebates, reduced license fee, deposits
- Technical assistance and instructional or promotional alternatives
- Regulatory programs regarding procurement practices
- Land use and development standards that promote source reduction
- Adoption of bans on products and packaging that result in excessive amounts of waste

The programs that have been identified for consideration by Mono County are the following:

4.1 Economic Incentives/Disincentives

Businesses would submit source reduction plans by the second quarter of 1993 and annual updates thereafter to the County Public Works Department for review and approval. Those businesses failing to submit a plan that is subsequently approved would pay a waste impact

surcharge to be determined by resolution of the Board of Supervisors. Businesses submitting plans but failing to reduce waste in accordance with the AB 939 objectives and schedules would pay a waste impacts surcharge to be determined by resolution of the Board.

The Board would also determine which businesses would be required to submit source reduction plans. Likely criteria would include number of employees or annual sales volume.

4.2 Technical Assistance, Instructional and Promotional Alternatives

Through this program technical information and advice would be provided to residents on backyard composting, environmentally conscious shopping, and re-use of products in the home. Businesses, industries, and schools would be provided with technical assistance through the following activities: providing information to business on County procurement and solid waste management policies; developing and distributing recycled product information brochures; conducting a media/PR campaign to promote source reduction and recycling to the public/business.

4.3 Regulatory Alternatives

The Board of Supervisors would approve the establishment of the procurement/solid waste policies and land-use planning/zoning ordinances.

4.3.1 Procurement/Solid Waste Policies

- Adopt procurement and solid waste policies.
- Develop a specific policy regarding the use of double-sided copying and options for the re-use of scrap paper.
- Inform vendors and employees of the new policies.
- Establish cooperative purchasing contract with other public agencies.
- Monitor effectiveness.

4.3.2 Land-Use Planning/Zoning Ordinances

- Inform business/community groups and political leaders of need for planning and zoning changes.
- Develop/adopt land-use master plan and source reduction element.

- Review/develop zoning policies to accommodate composting and thrift and repair shop businesses.
- Develop/adopt land-use conditions to require xeriscaping for new commercial/multi-family developments as a means to reduce yard waste sources.
- Develop/adopt requirements for use of compost.
- Develop/implement monitoring and evaluation system.

5.0 SOURCE REDUCTION AND PROGRAM EVALUATION

5.1 Economic Incentives

Waste Reduction Effectiveness: This factor would be difficult to estimate until the first set of plans are submitted by businesses.

Program Cost: Minimal

Institutional Factors: Establishment of new County procedure. Coordination and communication with business community.

Consistency With Local Policies: The County does not currently require businesses to submit source reduction plans.

Need for New Facilities: None

Markets: N/A

Ease of Implementation: Monitoring of the program effectiveness would be difficult to achieve since there is no point at which any of the waste generated or collected from local businesses is weighed or measured. Many of the businesses share waste disposal bins and several of the bins are collected by a single front-loading truck. Any monitoring of the reductions in the waste generated would have to be voluntary self-monitoring.

Environmental Impacts: No significant environmental impacts anticipated.

Program Flexibility: High

Change in Waste Generation: Plans submitted by businesses would be monitored to ensure that the use of substitute materials or planned changes in operations would not cause a shift in waste generation.

5.2 Technical Assistance

Waste Reduction Effectiveness: Not available

Program Cost: $1,000 - $3,000 per year for materials, advertising and promotion. No new increase in County staff.

Institutional Factors: Development of sources of information. Communication and coordination with business community. Allocation of staff time.

Consistency With Local Policies: This program would be consistent with the County's objective of reducing solid waste generation rates.

Need for New Facilities: None

Markets: N/A

Ease of Implementation: County personnel would be required to collect information or develop access to information sources that would serve as the basis for the technical information to be provided to local businesses. Responsibility for the dissemination of technical information to local businesses would have to be assigned to existing personnel.

Environmental Impacts: No significant environmental impacts anticipated.

Program Flexibility: High

Change in Waste Generation: None

5.3 Regulatory Alternatives

Waste Reduction Effectiveness:

Use of double-sided copying for at least 80% of the documents copied by County personnel - 2.0 tons/year

Use of double-sided copying in the schools and County Hospital would also produce reductions in copier paper usage and disposal.

Program Cost: None

Institutional Factors: Communication of program to County staff.

Consistency With Local Policies: This program would be consistent with County policies.

Need for New Facilities: None

Markets: N/A

Ease of Implementation: Dependent on the features available on the copiers at each location.

Environmental Impacts: No significant environmental impacts anticipated.

Program Flexibility: High

Change in Waste Generation: None

6.0 SELECTION OF SOURCE REDUCTION PROGRAMS

Program selection was based on consideration of the following factors:

- County resources available for program implementation
- Waste reduction potential
- Program cost and impact on existing County operations

The County staff and Local Task Force members considered the source reduction options available to the County and selected the following programs for implementation:

6.1 Reduction in the Use of Ledger Paper

The County offices would implement a policy of using scrap paper for casual or personal notes in lieu of the use of new materials and of encouraging double-sided copying..

6.2 Technical Assistance to Local Businesses

Because of the limitations on staff availability and constraints within the County operating budget, the County would not implement any separate technical assistance programs, but would instead encourage local business and merchant associations to assume responsibility for this task. To the extent necessary the County would initiate this process through meetings and written communication with local merchants and business leaders.

6.3 Business Waste Reduction Plans

Businesses would be required to prepare and submit source reduction plans. However, the effectiveness of this program would be limited because of the inability to accurately monitor the effectiveness of the individual source reduction plans. The County would impose a waste impact surcharge on those businesses failing to submit acceptable source reduction plans but does not anticipate the imposition of any surcharges for failure of businesses to achieve specific source reduction objectives until a more effective monitoring system is developed.

7.0 PROGRAM IMPLEMENTATION

The following table describes the tasks and steps that will be required to implement the selected programs.

Table V-1

Source Reduction Program Implementation

Implementation Tasks	Schedule
Business Waste Reduction Plans	
Meetings with merchant & business groups	April 1993
Distribute forms	May 1993
Receive forms & compile results	June 1993
Distribute forms for annual reports	April 1994
Receive annual reports & compile results	June 1994
Technical Assistance	
Meet with merchant & business groups	September 1992
Follow-up & coordinating meetings	March 1993
Reduction in Paper Use	
Draft policies	October 1992
Staff training	Nov - Dec 1992
Review options for ordnances	Jan - March 1993
Meet with schools	Feb 1993
Monitoring & evaluation	Begin April 1993

The quantities of materials expected to be diverted through these programs are shown in Table V-2:

Table V-2

New Source Reduction Diversion

Material	Total Tons Per Year	Percent of Total Generation
Ledger	5	0.04
Corrugated	45	0.32
Mixed paper	20	0.14
Glass	10	0.07
HDPE	10	0.07
Mixed Plastics	30	0.21
Wood	20	0.14
Total	140	1.00

8.0 MONITORING AND EVALUATION

This section describes how the County would monitor and evaluate the source reduction programs and determine whether the goals and objectives are achieved.

8.1 Reduction in Ledger Paper Use

The County staff would monitor the usage of copier paper and would report to the Board on an annual basis the details of the use of recyclable and reusable products and source reduction activities.

The County would survey staff yearly to gather data pertaining to changes in behavior that contribute to increased solid waste diversion/source reduction activities and knowledge of reusable products. Data would be kept on items normally disposed at the landfill but now reused

8.2 Technical Assistance

Technical assistance, instructional and promotional monitoring and evaluation would consist of comparing the amount of waste generated against existing generation rates, conducting annual surveys of businesses to gather data regarding the level of satisfaction with public awareness programs, knowledge of source reduction activities, and changes in business practices that contributes to decreased solid waste generation.

8.3 Business Waste Reduction Plans

The number and amount of waste impact surcharges imposed would be monitored.

The effectiveness of the Source Reduction Plans would be monitored by each of the businesses. Reports on the effectiveness of the plans would be submitted to the County with the annual updates of the plans.

Section VI

RECYCLING COMPONENT

1.0 INTRODUCTION

Recycling is a process that requires the separation of materials from the waste stream and then the re-use or conversion those materials to other or similar uses. Material recycling is not achieved unless both steps of the process are completed.

This recycling component addresses the following factors:

- which materials should be targeted for separation from the waste stream
- how these materials should be separated from the waste stream
- the means that should be used to transport these materials to markets

The factors that most directly affect the feasibility of recycling programs in the unincorporated areas of Mono County are the small and sparsely settled population and the distance of the population centers from markets for recovered materials. This component has been designed to respond to these constraints.

2.0 OBJECTIVES

Short-Term Planning Period (1991 - 1995)

- Increase the redemption rates for cans and bottles that have a CA redemption value.
- Initiate a program to recover 30% of the corrugated and 50% of the newspaper currently in the waste stream.
- Recover 20% of the recyclable glass in the waste stream.
- Coordinate County activities with programs currently underway at the U.S. Marine Corps base.

Long-Term Planning Objectives (1996 - 2000)

- Explore the opportunities for mixed paper recycling
- Explore the opportunities for food waste composting or reduction
- Work with personnel at the U.S. Marine Base to increase the overall recycling rate of thebase from 15% to 30%
- Initiate a program to recover up to 75% - 80% of the used tires from the waste stream
- Increase the rate of corrugated recycling to 60% - 70%
- Recover up to 75% of the recyclable glass from the waste stream

3.0 EXISTING CONDITIONS

At present, approximately 4.0% of the waste generated in the unincorporated areas of the County is diverted from the local landfills. There are no County supported or sponsored programs in place. A summary of the quantities of material diverted from the County landfills is found in the following Table:

Table VI-1

Mono County Unincorporated Areas
Existing Material Diversion

Material	Tons/Year
Redemption Glass	64.0
Aluminum Cans	35.6
PET Bottles	1.3
Ferrous Metal	91.8
Food Waste	20.5
Tires	0.1
Inert Materials	75.0
White Ledger Paper	2.3
Manure	280.0
Newspaper	0.0
Corrugated	0.0
Total	570.6

3.1. There is one Certified Redemption Center in the unincorporated areas - located in Walker and operated by the Antelope Senior Center. This facility accepts aluminum cans and glass and PET bottles that carry the CA redemption value. The redemption center also accepts HDPE and scrap metals (ferrous and non-ferrous). The facility is not equipped to handle paper, corrugated, or large quantities of scrap glass.

Material is received from residents in the Walker vicinity, the public schools and some residents in Bridgeport, the Marine Corps Base near Pickle Meadows and from the Indian housing areas in the north part of the county.

3.2. The Certified redemption center operated by Mammoth Disposal in the Town of Mammoth Lakes receives approximately 25% of its cans and bottles from residents in the unincorporated areas of the county.

3.3. The U.S. Forest Service has programs for office paper recycling and for recovering some of the scrap metal from its maintenance yard

3.4. There are a limited number of tires taken to recycling operations in Reno, Nevada.

3.5. Kitchen grease is collected by a rendering company from a number of restaurants in the area.

3.6. Some grocery stores in the southern part of the county collect CA redemption glass, aluminum and plastic. These materials are taken to redemption centers in Bishop.

3.7. The California Department of Transportation crushes and re-uses a portion of the asphalt materials generated during highway construction projects.

3.8. Scrap metal dealers in Bishop and Benton remove a significant quantity of auto bodies, white goods and other scrap metal from the County landfills and industries located throughout the County.

3.9. There is no recycling of newspaper or corrugated in the unincorporated areas.

3.10. Manure from several riding stables throughout the County is collected and taken to Mammoth Mountain for land application.

3.11. As the U.S. Forest Service renews the leases for the concessions operating on its land, the leases would be revised to require the concessionaires to provide collection containers for redemption glass and aluminum containers.

4.0 ALTERNATIVE PROGRAMS

Following is a listing of the alternative programs that have been identified for possible implementation in the County during the short-term planning period.

4.1 Source Separation Programs

There are no curbside or mobile collection programs planned for the unincorporated areas of the County. Any source separation activities would be associated with the utilization of the drop-off and buy-back centers.

4.2 Drop-off Programs

4.2.1 Collection Bins at Primary Recreation Centers

To provide an opportunity for residents and visitors to participate in the recycling of glass, plastic and aluminum beverage containers, 6-yard bins would be placed at the following locations:

- Grant Lake
- Silver Lake
- June Lake Community Center
- Pine Cliff Resort
- Big Rock Resort and June Lake Fire Department
- Mono Lake Visitors Center
- Nicely's Restaurant
- Lundy Lake Campground
- Lee Vining Campground
- June Mountain Ski Resort

The bins would provide collection opportunities in recreation areas that experience high volumes of visitor and local traffic. The 6-yard bins would be serviced by either a local refuse hauler or County crews.

A privately-operated processing facility is being planned in the Lee Vining area. The material from the bins would be transported to this facility for sorting, storage and eventual transportation to market.

4.2.2 Collection Bins at Primary Population Centers

There are currently no collection or drop-off programs for recyclable materials in the Benton or Bridgeport areas. The certified redemption center in Walker is not equipped to handle large quantities of glass and does not currently accept newspaper or cardboard.

Twenty (20) yard roll-off bins would be located at the certified redemption center in Walker and also at a location in Bridgeport - either adjacent to the County Courthouse or in the parking lot of Buster's Market on Rt 395. A 6-yard bin would be located in Benton.

The bins in Bridgeport and Benton would provide opportunities for the collection of aluminum, glass, HDPE, PET and newspaper. The bin at the Walker redemption center would enable the center to accept larger quantities of redemption glass and to begin accepting scrap glass and newspaper.

The 20-yard roll-offs would be serviced by the County. The 6-yard bin in Benton would be serviced by either the County or a private hauler. All material would be taken to the sorting facility being planned in the Lee Vining area.

4.2.3 Collection and Processing of Corrugated Waste

The primary generators of corrugated waste in the central county area are the Mono County Hospital, Buster's Market and the other retailers in Bridgeport and the Marine Corps base at Pickle Meadows. The separated corrugated could be baled at either the sorting facility planned in the Lee Vining area or with a baler located at the existing County facilities in Bridgeport.

Transportation of the corrugated to Bridgeport rather than to the Lee Vining area may be more efficient. During the winter months the stored bales would have to be protected from rain or snow with a tarp or a more permanent shelter. When a truck load (approximately 22 tons) of baled corrugated was accumulated, arrangements would be made with either a local hauler or a recycling center operator in Carson City or Bishop to transport the bales to a market.

4.2 Buy-Back Recycling Centers

4.2.1 Certified Redemption Centers in Bridgeport and Benton

The Benton area currently has an active senior's program that utilizes a County-owned meeting facility adjacent to the fire station. There are currently no redemption centers available to the residents of this area. The coordinator of the senior's program has expressed interest in the establishment of a redemption center.

There is no active senior's program in the Bridgeport area. If a program was initiated, it could serve as the host organization for the operation of a certified redemption center. Leadership from the Inyo/Mono Area Agency on Aging would be required.

The establishment of buy-back centers would increase the redemption rate of those items that carry a redemption value. However, it is likely that a buy-back center in Bridgeport would divert some materials from the Walker center.

4.3 Manual Material Recovery Operations

Manual recovery operations would be utilized to sort the material from the drop-off bins and roll-offs. Plans are underway for the development of a privately-owned manual sorting facility in the Lee Vining area.

4.4 Mechanized Material Recovery Operations

No feasible mechanized material recovery operations were identified for implementation in the County during the short-term planning period.

4.5 Salvage at County Landfills

4.5.1 Separation of Wood and Metals from Construction and Demolition (C&D) Debris

Individuals bringing construction and demolition debris to the County landfills would separate recyclable materials such as wood and ferrous metals from the other (C&D) debris. Separate areas for wood and ferrous metals would be designated at the landfills. Signs at the landfills would indicate the separation requirements.

A public information program would include material regarding the proper handling and separation of C&D debris. Individuals or contractors applying for building permits would be given information regarding the C&D debris program.

County employees would process the separated wood along with the material from the slash piles at the landfills. Ferrous metals would be hauled to local scrap metal dealers. County employees would also be required to recover some wood and ferrous metals from unsorted piles of construction and demolition debris at the landfill.

At large-scale construction sites, as a condition for receiving a building permit the contractor would locate separate bins for the collection of wood and ferrous metal waste. All other waste would be placed in a common bin.

4.6 Other Programs

4.6.1 Expanded Recycling Program at the U.S. Marine Corps Base

The U.S. Marine Corps is undertaking a program to increase the recycling activity at the base. The base includes both barracks and storage facilities. The resident population is 225 - 250. During training exercises, the population of the Base can increase to 4,000 - 5,000.

Coordination of the County program with that of the base would increase the efficiency of both programs. Separated newspaper, corrugated and white paper from the base would be added to the County program. Transportation of the separated materials from the base to the County baling facility in Bridgeport or the sorting facility in the Lee Vining area could be carried out by the base personnel, a private hauler, or the County.

4.6.2 Implementation of a Recycling Franchise in the Northern and Central Portion of the County

A mechanism would be required to secure hauling and sorting services for the materials to be separated from the waste stream in the central and northern parts of the County. The specific needs would be:

- servicing of the bins at the campgrounds and recreation areas
- servicing of the 20 yd. roll-offs to be located in Walker and Bridgeport

- collection of corrugated waste from the primary generators in Bridgeport
- servicing of the bins to be located in Benton
- hauling of all materials to the processing facility in the Lee Vining area and/or the corrugated baling facility in Bridgeport
- sorting and/or baling of all materials collected
- arrangements for the storage and marketing of the collected materials

The establishment of a franchise for the provision of recycling services would serve as a vehicle for the County to guarantee a revenue stream to the hauler and processor. As a result, the hauler/process would be able to make the necessary investment in facilities and equipment that would be required to provide the needed services.

Franchises typically are for a specific term (usually long enough to allow the franchisee to recover its capital investment) would include provisions for renewal, levels of service to be provided and fee and payment provisions.

5.0 RECYCLING PROGRAM EVALUATION

5.1 Collection Bins at Primary Recreation Centers

Waste Reduction Effectiveness: 2.5%

Program Cost: Bins - $3,300
Hauling - $10,000 - $12,000/Yr.

Institutional Factors: A collection system would be required. Responsibility can be assigned to either the County or to a local hauler on a fee basis. A north county franchise for the implementation of all recycling services is a mechanism that the County could employ to secure the required collection, transportation and sorting services.

Distribution of the revenue from the sale of materials would be negotiated between the County and the operator of the sorting facility. Coordination would be required with the operators of the various recreation areas and with local merchants and concessions.

Consistency With Local Policies: The National Forest Service would require all future concessions on Park lands to provide collection bins for beverage containers.

Need For New Facilities: A sorting/separation facility would be required to process the materials for market.

Markets: If the materials are separated by type and color, markets are available in the either Bishop or Carson City.

Ease of Implementation: Successful implementation would be dependent on the allocation of funds for the purchase of the bins, development of a transportation system to a sorting facility and completion of the sorting facility in the Lee Vining area. The County has applied to the California Department of Conservation for a grant that would be utilized for start-up funds.

The U.S. Forest Service will be requiring concessionaires to provide collection bins for certain recyclable materials. This program will be coordinated with the Forest Service's plans.

Environmental Impacts: No significant adverse environmental impacts are anticipated.

Program Flexibility: Co-mingled collection of the materials would provide maximum program flexibility.

Change in Waste Generation: None

5.2 Collection Bins at Population Centers

Waste Reduction Effectiveness: 3.0%

Program Cost: Bins: $7,000
Hauling: $4,500 - $6,000/Yr.

Institutional Factors: Coordination with the Antelope Valley Senior Center and the operator of Buster's Market regarding the placement and servicing of the roll-offs; transportation arrangements for County crews; start-up of the sorting/separation facility in the Lee Vining area.

Consistency With Local Policies: This program would not be inconsistent with local policies or ordinances.

Need For New Facilities: A material sorting/separation facility would be required.

Markets: If the materials are properly sorted by type and color, markets are available in Bishop and Carson City.

Ease of Implementation: The County has applied to the California Department of Conservation for a grant to provide start-up funds for the program.

Environmental Impacts: No significant impacts.

Program Flexibility: Co-mingled collection of materials would provide for maximum program flexibility.

Change in Waste Generation: None.

5.3 Collection and Processing of Corrugated Waste

Waste Reduction Effectiveness: 2.0%

Program Cost: Hauling & Collection: $7,500 - $9,500/Yr.
Separate Baling Facility in Bridgeport
Baler: $200/month (lease option)
Bins: $5,000
Shelter: $2,500
Labor: $5,000/Yr.

Institutional Factors:

- Location of an area for a baler adjacent to the County facilities in Bridgeport
- Part-time labor for the weekly operation of the baler
- Transportation and collection arrangements
- Coordination with local merchants, the Mono County Hospital and the U.S. Marine Corps regarding separate collection of corrugated
- Coordination with the waste hauler now serving the Marine Base and Mono County General Hospital.

Consistency With Local Policies: Operation of a baling facility in Bridgeport would have to be coordinated with other County operations.

Need For New Facilities: A baling facility at either Bridgeport or in the Lee Vining area would be required.

Markets: Baled corrugated would be picked up by the operators of recycling facilities in either Bishop or Carson City. However, it is likely that the value of the material would have to be used to off-set the cost of transportation to market.

Ease of Implementation: The generators of corrugated waste in the Bridgeport area have been contacted regarding the separation of the material from their normal waste stream. All have expressed an interest to accept this material.

Environmental Impacts: No significant impacts.

Program Flexibility: High

Change in Waste Generation: None

5.4 Redemption Centers in Bridgeport and Benton

Waste Reduction Effectiveness: .5%

Program Cost: Bins - $1,000
Scales - $500

Institutional Factors: Organization of a senior's program in Bridgeport; application for certification; development of markets and transportation to either Carson City and/or Bishop.

Consistency With Local Policies: There is no senior's program in Bridgeport.

Need For New Facilities: Sorting and processing would take place at the centers.

Markets: Markets are available in Bishop or Carson City.

Ease of Implementation: Development of a senior's program in Bridgeport would require support from the Inyo/Mono Area Agency On Aging; both centers would have to apply for and receive State certification; the involvement of local seniors in the programs would have to be secured.

Environmental Impacts: No significant impacts

Program Flexibility: High

Change in Waste Generation: None

5.5 Manual Sorting Facility in the Lee Vining Area

Waste Reduction Effectiveness: This program would be required to achieve the waste reductions projected for items 5.1 and 5.2.

Program Cost: $50,000 (approximate)

Institutional Factors: Securing commitments from the County to haul and process the bins of materials; establishment of a transportation and collection system and the required cost reimbursement mechanism.

Consistency With Local Policies: This program is not inconsistent with any local plans or policies.

Need For New Facilities: Land is available; a structure and equipment is required.

Markets: If the recovered materials are separated by type and color, markets are available in either Bishop or Carson City.

Ease of Implementation: Start-up funds have been applied for from the California Department of Conservation.

Environmental Impacts: No significant impacts are expected. Study would be required at implementation.

Program Flexibility: High

Change in Waste Generation: None

5.6 Sorting of Construction and Demolition Debris at Landfills

Waste Reduction Effectiveness: 760 Tons/Yr. - 5.6% of waste stream

Program Cost: Voluntary separation of wood and ferrous metals would be encouraged at all landfills and at large construction sites. However, County labor would be required to achieve the diversion levels desired. Handling of the separated materials would also be required.

Labor (County employees or contractor): $4,500-$5,000/Yr.
Loader and operator (rental): $12,000/Yr.

Institutional Factors: Coordination with local building and demolition contractors.

Consistency With Local Policies: This program would be consistent with the County objectives of reducing waste generation rates. The County has signs at the landfills requesting voluntary separation of C&D debris.

Need For New Facilities: None

Markets: Ferrous metals - Brown Maintenance & Supply, Bishop; Benton metal salvage

Ease of Implementation: Dependent on the cooperation of building and demolition contractors. Enforcement of separation at the landfills can be most easily accomplished if the County implements its proposed policy of consolidating and staffing the County landfills.

Environmental Impacts: No significant environmental impacts anticipated

Program Flexibility: High

Change in Waste Generation: None

5.7 Recycling Program at the U.S. Marine Corps Base

Waste Reduction Effectiveness: 2.0%

Program Cost: Separation and transportation may be provided by the Marine Corps. The County would have to provide collection bins and baling equipment and labor (see item 5.3).

Institutional Factors: Coordination with MC Base personnel and waste hauler servicing the base.

Consistency With Local Policies: This program would not be inconsistent with any current County policies.

Need For New Facilities: A baling facility would be required.

Markets: If the material is relatively free of contaminants and baled, markets are available in Carson City and Bishop. If the material is picked up by the recyclers from Carson City or Bishop, it is likely that the County or Marine Corps would not receive any revenue for the materials.

Ease of Implementation: The Marine Corps has indicated an interest in developing a base-wide recycling program.

Environmental Impacts: No significant impacts.

Program Flexibility: High

Change in Waste Generation: None

6.0 PROGRAM SELECTION

The selection of programs for implementation was based on consideration of the the following factors:

- Resources available to the County
- Cost of program implementation
- Waste diversion potential
- Ability to involve other agencies or expand existing programs

The programs selected for implementation during the short term planning period by the County and the Local Task Force are listed in Table VI-2:

Table VI-2

Recycling Programs - Short Term

Program	Annual Tons Diverted	Percent of Total Generation
Bins at Recreation Centers	360	2.5%
Bins in Walker & Bridgeport	425	3.0%
Corrugated Collection	280	2.0%
Buy Back Center in Benton	75	0.5%
Recycling at USMC Base	280	2.0%
Total	**1,420**	**10.0%**

7.0 PROGRAM IMPLEMENTATION

The County Public Works Director will be primarily responsible for program implementation. The implementation schedule for these selected programs is provided in Table VI-3.

Table VI-3

Program Implementation

Implementation Tasks	Schedule
Bins at Recreation Centers	
Complete program planning & funding	October 1992
Finalize agreements with program operator	October 1992
Public information program	March 1993
Equipment purchase	April 1993
Bin placement & program start-up	June 1993
Bins in Walker & Bridgeport	
Complete program planning & funding	October 1992
Finalize agreements with program operator	October 1992
Public information program	March 1993
Equipment purchase	April 1993
Bin placement & program start-up	June 1993
Corrugated Collection	
Complete program planning & funding	October 1992
Finalize agreements with program operator	October 1992
Public information program	March 1993
Equipment purchase	April 1993
Bin placement & program start-up	June 1993
Buy-back Center in Benton	
Finalize planning	January 1993
Arrangements with program operator	March 1993
Equipment purchase	May 1993
Public Information program	June 1993
Program start-up	July 1993
Coordination With U.S.M.C. Base	
Coordination meetings	August 1992
Program follow-up	April 1993

8.0 MONITORING AND EVALUATION

Records would be kept of the quantities of material received from the bins at the recreation center in Walker and Bridgeport and from the Buy-Back center in Benton. The amount of corrugated collected would also be recorded.

A separate record system would be established with the personnel at the USMC Base.

Contingency plans will include increased public education, new or alternative locations for collection bins, and more coordination between the County and the other public agencies in the County.

9.0 RECYCLING PROGRAMS - 1996 TO 2000

The programs listed in Table VI-4 have been identified for investigation by the County during the medium-term planning period. These programs would be intended to enable the County to achieve a 50% County-wide recycling rate by the year 2000.

Table VI-4

Medium Term Recycling Programs

Program	Material Diverted	Annual Tons Diverted	Percent of Total Generation
Recycling of Mixed Plastics	Mixed Plastics	350	2.5%
Additional Cardboard Recycling	Cardboard	200	1.4%
Chipping of Slash and Wood Waste	Wood	1,000	7.0%
C&D Debris Recycling	Inert Solids	500	3.5%
	Ferrous Metals	300	2.1%
	Wood	1,200	8.4%
Tire Recycling	Tires	100	0.7%
Total		**3,650**	**25.7%**

Section VII

COMPOSTING COMPONENT

1.0 INTRODUCTION

Composting organic yard wastes offers an efficient, environmentally safe and cost effective method for communities to apply to successful integrated waste management plans. It allows for the development of a multi-faceted program involving diversion from landfilling, processing into usable end-products and revenue generation from the finished marketable commodity. Most importantly, composting of yard wastes is a proven, viable waste management alternative that complements landfill disposal and directly results in reduced disposal costs and environmental impacts.

Individual jurisdictions must move forward in first evaluating the volume of their waste streams attributable to potentially compostable yard wastes and secondly, analyze the cost benefits to be derived from extending the disposal facility's useful life span and reducing solid waste fee assessments.

A very large percentage of the waste stream, both locally and on a national basis, can be composted. Given the significant proportion of the waste stream that yard waste, wood waste and land clearing debris represents for Mono County, the philosophy of identifying these wastes as disposable and easily degradable must be altered. That fraction of the waste stream that is compostable must be recognized as representing a significant component with an economic value that may be easily separated, processed and returned to commerce.

Considerable evaluation should also be expended to identify and properly evaluate market potentials. which will be the ultimate determination of the success or failure of any recycling program. As stated within Section 18736.1, this is a primary objective for both the short-term and medium-term planning periods for the Composting component.

2.0 COMPOSTING OBJECTIVES

2.1 Short-Term Planning Period (1991-1995)

- Seek to utilize the slash and wood waste generated within the countywide jurisdiction to initiate a grinding, co-composting operation.
- Evaluate implementation of a roving grinding operation to chip and screen green slash waste and dried construction wood.
- Identify end-use markets through local and regional market exploration.
- Explore potentials of chipping wood waste for use at the co-generation facilities.
- Evaluate the sharing of equipment between the County and Town of Mammoth lakes for development of regional grinding/composting operation.

2.2 Medium-Term Planning Period (1996-2000)

- Increase the collection and processing of yard waste and leaf material to 75% of the total material type (i.e., yard waste and wood waste combined).
- Evaluate co-composting alternatives with food waste and mixed paper.
- Evaluate the potential for establishing a regional grinding operation that would "time-share" a portable grinder between the jurisdictions of Inyo and Mono Counties.

3.0 EXISTING CONDITIONS

No permitted composting or co-composting programs are operational within the Countywide jurisdiction. No countable diversion of yard waste, wood waste or slash material is occurring within the regional area.

4.0 COMPOSTING PROGRAM ALTERNATIVES

For the Mono County, alternative evaluation for composting programs center around the economic viability of initiating a program given the cost constraints of equipment acquisition and program start-up The primary alternatives under consideration for selection and implementation include the following:

4.1 Initiate evaluation of a roving grinding operation to assist in developing a composting program that targets chipped slash, dried wood waste and separated yard wastes for the compostable fraction. The costs of screening should be included. Current cost for a roving type operation that would process the above materials ranges from $16-18.00 per dry ton, with a minimum quantity of 500 dry tons.

4.2 Form a cooperative effort with the neighboring jurisdiction(s) to develop a composting facility at a regional site. The additional quantity of material and available economic resources from a regional cooperative effort would provide the County a realistic approach to the composting problem.

4.3 Evaluate the potential for establishing a facility that would manufacture combustible pellets from the slash and wood waste material for marketing in the local region.

5.0 COMPOSTING PROGRAM EVALUATION

The following programs will be carefully evaluated for cost return on investment and affordability to a small, rural jurisdiction given the extensive requirements of implementing other programs selected within these model components.

5.1 Roving Grinding Operation

Waste Reduction Effectiveness: 10.4% based on chipping 80% of slash

Program Cost: $18-20/Dry Ton, Minimum 500 Tons

Institutional Factors: A quality control program would be required at the landfills, presuming the disposal sites would be the location for the grinding operation. The vendor to perform the services would require identification and a contract put in place. Items such as material handling, disposition of end products and operations maintenance would be negotiated within the contract.

Consistency with Local Policies: Operating permits at the local landfills conducting the operations may need to be modified. Local land use policies are consistent with this type of activity at existing sites.

Need for New Facilities: New facilities would not be required if the grinding occurred at existing solid waste disposal facilities.

Markets: Markets for compost, soil amendments and landscape material are available within the local jurisdictions of Mammoth Lakes, County of Mono and Bishop. Additional market sources are the Federal and State governments, Mammoth Mountain Ski Resort and minimum enterprises in the regional area.

Ease of Implementation: Implementation must be governed by funding availability. Land space and material is readily available for initiating a pilot program.

Environmental Impacts: It would be anticipated that no significant environmental impacts would be encountered with this operation at the remote landfill locations. Noise, smell and dust would not be significant due to location. no increase in traffic to the landfill would be expected.

Program Flexibility: The program will be capable of handling slash material generated from land clearing activity, construction wood waste and clean wood waste from demolition projects. Expansion capabilities exist with potential composting options and land spreading availability through the Federal and State land owners in the areas.

Change in Waste Generation: No change in waste generation would be expected from the implementation of this program.

a) 2,240 Tons per Year: $50,000./Year
b) Additional $3-5.00 for Screening: $2,500/Year
c) Composting Operation Program operated by County (no cost available)

5.2 Regional Sharing of Grinding Equipment

Waste Reduction Effectiveness: 10.4%

Program Cost: Equipment and Operation (Data furnished by: Innovator, 120 Westdon Street, London, Ontario, N6C 1R4.)

a) Grinder cost of $150,000. Interest @ 13% per Year
60 Monthly payments of $3,412.31
Total Payments: $204,738.60

b) Annual Operating Costs.

Parts:	12 sets of hammers	$21,500
	4 sets of pins	$920
	3 sets of concave bars	$600
	1 set of wear segments	$700
	72 hammer pin bolts	$300
	1 drive chain	$600
	Total Parts:	$24,620
Fuel:	14,100 gals. @ 1.25/gal	$17,625
Maintenance:	Engine	$1,800
	Grinder	$1,800
	Hydraulics	$300

Total Annual Operating Cost (5 Years) $87,092.72

Split between two (2) jurisdictions: $43,546.36

Does not include additional support equipment, operating costs personnel and permitting requirements, which are estimated at an additional $5-$7/Ton.

Institutional Factors: A quality control program would be required at the landfills, presuming the disposal sites would be the location for the grinding operation. The vendor to perform the services would require identification and a contract put in place. Items such as material handling, disposition of end products and operations maintenance would be negotiated within the contract.

Consistency with Local Policies: In any regional sharing of equipment, a memorandum of understanding would be put in place between the jurisdictions make joint use of the equipment.

Need for New Facilities: New facilities would not be required if the grinding occurred at existing solid waste disposal facilities.

Markets: markets for compost, soil amendments and landscape material are available within the local jurisdictions of Mammoth Lakes, County of Mono and Bishop. Additional market sources are the Federal and State governments, mammoth Mountain Ski Resort and minimum enterprises in the regional area.

Ease of Implementation: Implementation must be governed by funding availability. Land space and material is readily available for initiating a pilot program.

Environmental Impacts: It would be anticipated that no significant environmental impacts would be encountered with this operation at the remote landfill locations. Noise, smell and dust would not be significant due to location. No increase in traffic to the landfill would be expected.

Program Flexibility: Usage of equipment would be arranged on a specific schedule to allow equal usage during peak seasons and periods of large generation.

Change in Waste Generation: No change in waste generation would be expected from the implementation of this program.

5.3 Establishment of Pellet Operation

(Figures reflect initial costs of establishing the facility only.)

Waste Reduction Effectiveness: 10.4%

Facility Cost: (based on acquisition of used equipment; does no include property costs)

a)	Pellet Mill (200 H.P., 3-roller)	$75,000
b)	Bagger	$20,000
c)	Bag Sealer	$8,000
d)	Dryer	$60,000
e)	Inlet Feeder	$20,000
f)	Truck Dumper (portable)	$50,000
g)	Loader	$40,000
h)	Scales	$30,000
i)	Pollution Control Systems	$40,000
j)	Hammermill	$10,000
k)	Shaker Screen	$10,000
l)	Equipment Installation	$25,000
Total Equipment Cost:		**$388,000**

In addition to property, the above cost does no reflect a building, construction costs, labor or ongoing maintenance. Estimated cost from project initiation to start-up is $500,000.

Institutional Factors: A private contractor would be identified to develop the requested facility. Funding might be arranged through bond issues, local grants, Block Grant programs of Economic Development programs.

Consistency with Local Policies: The facility would be consistent with local policy if all zoning ordinances and land use policies were developed to be consistent with the General Plan.

Need for New Facilities: New facilities would be required, if an existing structure could not be identified to house the new venture.

Markets: Markets for pellets would be readily available through the local population of Mammoth Lakes and the County region. Due to the large tourism population visiting the area and the inclement weather conditions during the winter season, it is anticipated that the vast majority of product produced could be effectively marketed in the local jurisdiction.

Ease of Implementation: Implementation would be the responsibility of the private contractor hired to develop the facility, or encouraged to invest in the community. Ease of development would be dependent upon numerous factors including, local acceptance and attracting a potential business investor into the area.

Environmental Impacts: It would be anticipated that no significant environmental impacts would be encountered with this operation.

Program Flexibility: Expansion of the program would be the ultimate responsibility of the private contractor. The waste stream source could be locked in with a disposal volume flow agreement put in place between the private enterprise and the County.

Change in Waste Generation: No change in waste generation would be expected form the implementation of this program.

6.0 COMPOSTING PROGRAM SELECTION

According to Section 18733.4, Selection of program, this portion of the component shall describe the alternatives selected, inclusive of existing programs and their expansion and new alternatives which shall assist the jurisdiction in meeting the established diversion mandates.

Due to high cost involved in initiating a composting program for the County, no program was selected for implementation. The County would move forward with evaluating a regional alternative with local jurisdictions that may involve the joint acquisition of processing equipment, sharing of available land space, transportation costs, identifying local markets, etc.

7.0 IMPLEMENTATION SCHEDULE

Due to no program being selected for implementation, no schedule for program implementation is provided. It is anticipated that the County shall begin discussions with the neighboring jurisdictions of Inyo County, Town of Mammoth Lakes, Madera County and possibly Toulumne County during the second quarter of 1993 regarding a regional approach to composting. This date is based upon the relative completion dates of County Integrated Waste Management Plans and Siting Elements due the CIWMB by January 1, 1993.

8.0 MONITORING AND EVALUATION OF COMPOSTING PROGRAM

The County Public Works Department shall be responsible for monitoring and evaluating the development of any regional cooperative agreements. Funding sources for executing the program would be identified as being the same used to support other model component requirements.

Section VIII

SPECIAL WASTE COMPONENT

1.0 INTRODUCTION

In general, special wastes are relatively large, identifiable materials from the general municipal solid waste stream that have the potential to be segregated, reused, recycled, or disposed in a manner uniquely suited to that waste. These wastes are usually generated by an easily defined group of commercial or industrial businesses and are frequently subject to regulation by multiple government agencies. Examples of special waste include, but are not limited to:

- Ash
- Sewage sludge
- Industrial sludge
- Asbestos
- Auto shredder waste
- Auto bodies

Prior to the implementation of AB 939, a "special waste" was a waste defined in the California hazardous waste regulation. AB 939 expands that original definition of "special waste" to include solid wastes as well as hazardous wastes. An AB 939 "special waste" is any solid waste which, because of its source of generation, physical, chemical or biological characteristics or unique disposal practices, is specifically conditioned in the solid waste facilities permit for handling and/or disposal. Special wastes are also any hazardous wastes specifically listed, classified, or granted a variance under Sections 66740, 66744 and 66310 of Title 22 of the California Code of Regulations (CCR), respectively.

The four wastes addressed in this section are those that represent relatively large tonnage in the special waste category, have unique disposal requirements, or can be managed as a separate waste stream to reduce hazard to public health. The four wastes are: tires, construction/demolition (C&D) debris, infectious waste and asbestos.

2.0 SPECIAL WASTE COMPONENT GOALS AND OBJECTIVES

Objectives for the County's special waste program are given in this section. The overall goal of AB 939 is to increase the quantity of waste diverted from landfills and transformation facilities and, for special waste, to reduce the hazard associated with special waste.

2.1 Short-Term Planning Objectives (1991-1995)

Tires

- Reduce the volume of tires that is landfilled.
- Encourage tire reuse such as retreading passenger vehicle tires.
- Encourage procurement of retread tires at companies operating vehicle fleets.
- Investigate the use of a procurement policy for retread tires on government vehicles.
- Consult with CALTRANS on the revision of bid specifications for road construction to allow consideration of recycled tires as a constituent of road base.

Construction and Demolition Debris

- Reduce tonnage of construction and demolition debris disposed at landfills.

Infectious Waste

- Educate the public and business community on the health hazards of improperly disposed infectious waste and provide examples of proper infectious waste management methods.
- Encourage infectious waste generators to use recyclable (e.g., launderable) materials wherever possible.

2.2 Medium-Term Objectives Planning (1995-200)

- Encourage research by the private sector for tire recycling and consider implementation of alternatives in future Request for Proposals.
- Research and evaluate availability of construction and demolition (C&D) debris recycling markets.
- Ban C&D debris from landfill.
- Maintain proper infectious waste management standards.

3.0 EXISTING CONDITIONS

3.1. There is a very limited amount of tire recycling conducted in the County unincorporated areas. Some used tires are transported to recappers in the Reno, Nevada area.

3.2. Infectious waste from Mono County General Hospital is autoclaved on site and sealed in four layers of plastic. The waste is disposed of in the Bridgeport landfill on the days that the material in the landfill pit is compacted and covered.

3.3. Most of the used motor oil is collected by Reno Drain Oil Service, located in Reno, Nevada. The operator of this firm estimates that approximately 7,500 to 10,000 gallons of waste oil are removed from the County unincorporated areas annually.

3.4. Construction and demolition debris is hauled by individuals or businesses to the County landfills (approximately 1,523 TPY).

3.5. Recently enacted State legislation (AB 1843) requires new and used tire dealers to collect and remit to the California Integrated Waste Management Board a fee of $.25 per used tire received from customers.

4.0 IDENTIFICATION OF SPECIAL WASTE MANAGEMENT ALTERNATIVES

The following section identifies and provides a brief description of alternatives for special waste management.

4.1 Establishment of Tire Diversion Programs

Oxford Tire Recycling operates a tire incineration and waste to energy facility in Modesto, California. The company operates a collection system for used tires throughout the central part of the State.

The parameters for the placement and servicing of bins by Oxford are as follows:

- 28 ft. bin would be placed at the preferred location (county landfill).
- The bin would accommodate approximately 850 tires (stacked).
- The bin should be filled approximately every six weeks.
- The cost to the municipality for servicing the bin would range between $475 - $550 per bin.
- Oxford would want to haul the 28' bins in pairs. Thus, a trailer from an other community would also have to be available for pick-up by Oxford at the same time.

As it is not likely that the County would generate sufficient quantities of tires at any one location to meet Oxford's standard conditions for placement of a trailer at the landfill, the County could consider stock-piling used tires and then order a pick-up by Oxford when a sufficient quantity was accumulated. The approximate cost for a truck, driver and laborer to pick up a load of tires would range between $1,300 and $1,500.

4.2 Separation of Wood and Metals from Construction and Demolition (C&D) Debris

Individuals bringing construction and demolition debris to the County landfills would be encouraged to separate recyclable materials such as wood and ferrous metals from the other C&D debris. Separate areas for wood and ferrous metals would be designated at the landfills. Signs at the landfills would indicate the separation requirements.

A public information program would include material on the proper handling and separation of C&D debris. Individuals or contractors applying for building permits would be given information regarding the C&D debris program.

County employees would process the separated wood along with the material from the slash piles at the landfills. Ferrous metals would be hauled to local scrap metal dealers. County employees would also be required to recover some wood and ferrous metals from unsorted piles of construction and demolition debris at the landfill.

At large-scale construction sites, as a condition for receiving a building permit the contractor would locate separate bins or roll-offs for wood and ferrous metals.

5.0 Evaluation of Alternatives

5.1 Ban on Disposal of Tires at Landfills, Alternative Disposal, Encourage Use of Retread Tires

Waste Reduction Effectiveness: 96 Tons/Year - 0.7% of waste stream

Program Cost: $3,000/Year for pick-up of tires by Oxford Tire Recycling

Institutional Factors: Contractual arrangement with Oxford or other tire recycler and cooperation of local tire retailers.

Consistency With Local Policies: This program would be consistent with the County's policy of waste reduction.

Need for New Facilities: None

Markets: Oxford Tire Recycling

Ease of Implementation: Dependent on success of public information and cooperation of local tire retailers and any residents who change and dispose of their own tires

Program Flexibility: High

Environmental Impacts: No significant environmental impacts anticipated

Change in Waste Generation: None

5.2 Construction & Demolition Separation

Waste Reduction Effectiveness: 760 Tons/Year - 5.6% of waste stream

Program Cost: Voluntary separation of wood and ferrous metals would be encouraged at all landfills and at large construction sites. However, County labor would be required to achieve the diversion levels desired. Handling of the separated materials would also be required.

Labor (County employees or contractor): $4,500 - $5,000/Year
Loader and operator (rental): $12,000/Year

Institutional Factors: Coordination with local building and demolition contractors.

Consistency With Local Policies: This program would be consistent with the County objectives of reducing waste generation rates. The County has signs at the landfills requesting voluntary separation of C&D debris.

Need for New Facilities: None

Markets: Ferrous metals - Brown Maintenance & Supply, Bishop; Benton metal salvage

Ease of Implementation: Dependent on the cooperation of building and demolition contractors. Enforcement of separation at the landfills can be most easily accomplished if the County implements its proposed policy of consolidating and staffing the County landfills.

Program Flexibility: High

Environmental Impacts: No significant environmental impacts anticipated

Change in Waste Generation: None

6.0 PROGRAM SELECTION

No programs were selected for implementation during the short term planning period. The programs that the County will consider for implementation during the medium term planning period are shown in Table VIII-1.

Table VIII-1

Medium Term Special Waste Programs

Program	Materials Diverted	Diversion Tons/Year	Percent of Total Generation
Tire Recycling	Tires	100	0.7%
C&D Debris Recovery	Wood	1,200	8.4%
	Inert Solids	500	3.5%
	Ferrous Metals	300	2.1%
Total		2,100	14.8%

7.0 PROGRAM IMPLEMENTATION

7.1 Tire Recycling

If tire recycling is banned at the County landfills and this program is implemented, a similar tire recycling program should be implemented in the Town of Mammoth Lakes.

The opportunity for the success of this program would be enhanced if the County proceeds with the proposed plans for the consolidation and staffing of the County landfills.

Responsible Agency: County Public Works Department

Implementation schedule: Medium Term

Implementation Tasks:

1. Consolidation and enclosure of landfills
2. Set-up collection arrangement with tire recycler
3. Provide information to used tire generators

7.2 C&D Debris Recovery

The equipment required for separation and handling of the C&D debris could be supplied by the County or by an independent contractor.

Responsible Agency: County Public Works Department

Implementation schedule: Medium Term

Implementation Tasks:

1. Consolidation of landfills
2. Provide information to C&D Debris generators
3. Purchase required equipment or execute contract with private firm

8.0 MONITORING AND EVALUATION

The success of the programs will be monitored as follows:

8.1 Tire Recycling

- Observation of the number of tires in the pit areas of the landfills
- Quantity of tires picked up for recycling
- Monitoring of the cost for removal of the tires

8.2 C&D Debris Recovery

- Amount of material separated from the construction and demolition debris
- Amount of source-separated construction and demolition debris brought to the landfill
- Monitoring of program cost

Section IX

PUBLIC INFORMATION / EDUCATION

1.0 INTRODUCTION

Successful recycling programs depend on widespread participation throughout the jurisdiction. The general public must be willing to support waste reduction and maintain that support over a long period of time. The key to maintaining this support is to educate the jurisdiction to the local solid waste situation and to the benefits of supporting efforts at improving methods of handling and disposing of waste. The education and public information component will provide the mechanism through which positive enforcement of the Source Reduction and Recycling components is achieved.

The jurisdiction must reach all sectors of the population, including the tourism population, in order to assure the reaching of the 25 and 50% mandates of the State. An effective program can lead to the development of a waste diversion behavioral pattern which can be applied at home, business and at play Educating the community and providing information which presents a sense of environmental concern can also assist in moving towards diversion goals without the requirement of mandatory actions or potentially unpopular local ordinances.

This information/education component shall address the following goals:

- educating the public to the why, how, what, when and wheres of recycling and source reduction;
- making the educational efforts community specific to generate enthusiasm and continued support; and
- to involve as many community individuals, organizations, clubs, etc to assist in selling the program to the community as a whole.

This last goal will particularly apply to the very active Senior Centers located in the jurisdiction. Through their representation, these Centers have expressed great desires to partake in the information and activity programs which could be effectively coordinated through their actions and active participation. The Seniors' participation could mark an essential portion of the ultimate success or failure of the source reduction programs to be widely accepted and undertaken within the area.

A promotion program must generate support and have the economic health to continue during the course of the year. This component shall address mechanisms for maintaining that course during the annual period.

2.0 COMPONENT OBJECTIVES

2.1 Short Term Planning Period (1991 - 1995)

- Inform the general public about the local solid waste situation.
- Initiate a program to explain what materials can be recycled and what materials are being collected in the local community for recycling. This could take the form of a local newsletter or flyers offered at common public gathering places (i.e. Post Office, Supermarkets, libraries, etc.).
- Develop alternative product usage guides for hazardous materials and promote a "non-hazardous material community".
- In conjunction with the local school district develop an educational program geared towards grammar school aged students. Additionally, develop programs and/or materials for presentation to older students in K7 through K12 range, similar to those developed and marketed by DOW Chemicals, entitled "Recycle This".
- Develop a booth presentation which can be easily transported to jurisdictional event such as Fair events, community activity days, special tourist promotion activities or permanent presentations at Forest Service and Park centers.

2,2 Medium Term Planning Period (1996 - 2000)

- Cultivate and establish a corporate sponsor who would be willing to finance the development of jurisdictional wide recycle, anti-litter and environmental preservation campaign literature geared specifically towards the tourist population visiting the jurisdiction. Such sponsors as Patagonia, Rossignol and other specialty recreational equipment providers should be targeted.

- Establish public recognition and achievement awards for the private sector which could be awarded on a biannual or annual basis.

3.0 EXISTING CONDITIONS

Limited educational and public information programs and activities are in place within the county jurisdiction. Informational and promotional advertisements are run on local radio and Cable television. Announcements are made regarding the single AB2020 site in the Town of Mammoth Lakes. With the advent of AB 939 and the regular meetings of the LTF, the local media has more recently pursued a more active role in running feature articles and stories in landfills and recycling activities within the jurisdiction.

4.0 SELECTION OF PROGRAM ALTERNATIVES

Following is a listing of program alternatives that have been identified for potential implementation within the unincorporated are of the county.

4.1 Involve a member of the community that is willing to provide the organizational support in making presentations and organizing special "recycle" events.

4.2 Introduce school aged children to recycling material and explore the potential of implementing a short school curriculum addressing recycling, source reduction, composting and solid waste management.

4.3 Specifically target the commercial sector to collect and recycle CA redemption containers.

4.4 Develop materials aimed at the tourist trade requesting their cooperation in separating their trash, not littering and making use of any recycling bins or containers which might be in easy access.

4.5 After appointing a lead person, develop a monthly newsletter that is mailed to community leaders and interested citizens reporting on recycling activities, special events or other topics.

4.6 Develop recycling and household hazardous waste materials that discuss alternatives to hazardous materials. Place these brochures in high public foot traffic areas such as the Post Office, grocery store, local retail outlets, etc.

4.7 Involve the local schools in such projects as cost-benefit analysis for product substitution.

4.8 Promote a half-day of day long seminar promoting recycling in the office place and other types of commercial programs.

4.9 Offer recycling awards and develop recycling events that promotes participation.

4.10 Involve the media through the sponsorship of media events such as recycling weeks, curriculum development, composting conferences and education days at central Town location(s), establish information booths at County Fairs and other events, have business recycling seminars and recycling awards.

4.11 Utilize the active Senior Centers within the jurisdiction to disseminate information and actively participate in educational opportunities for all sectors of the community.

4.12 Capitalize on existing mailers which reach a large sector of the population (i.e. property tax bills, garbage service bills, utility bills, etc.) to enclose informational inserts regarding recycling information or announcement of upcoming recycling events.

4.13 Establish an outreach program to the more rural areas of the jurisdictions which could take the form of trained individuals attending public meetings and/or community events held in the more remote and unaccessible areas.

Per the requirement of Section 18740 (c) of the regulations, specific waste generators will be targeted in educational and information programs based on results from the Initial Waste Generation Study. After compiling and analyzing the data from the two seasonal waste characterization data, the jurisdiction plans to target the following solid waste generators with the multi-faceted public education and information campaign.

- Commercial Generators - specifically target the commercial sector which provides both local community infrastructure support services and the tourism sector support services for the following items:

Local Support	*Tourism Industry*
• Corrugated	• Newspaper
• Newspaper	• PET
• Glass	• Glass
• Aluminum Cans	• Aluminum Cans
• Wood Waste	

- Residential Generators - target the residential sector with information regarding local recycling opportunities and source reduction programs currently in place within the community. Specifically target the following items:

    - Corrugated
    - Newspaper
    - HDPE/PET
    - Redemption and Other Recyclable Glass
    - Aluminum Cans
    - Diapers

- Industrial Generators - these generators would be specifically targeted for reduction of their wood waste and corrugated waste types.

5.0 PROGRAM IMPLEMENTATION

Successful implementation hinges on the participation of the commercial sector and the media. Keep the message fresh and identify a responsible agency or liaison committee to act as the management identity of the program. Identify an active participant at the local government level capable of addressing local officials and keeping them informed of progress, stumbling blocks or new directions.

5.1 Agency Responsible for Implementation

The agency responsible for implementing Public Education and Information programs for the County of Mono would be the Department of Public Works. Close coordination with the Antelope Valley Senior Center, Resort Refuse of June Lake and Douglas Disposal of South Lake Tahoe would assist in the implementation tasks.

5.2 Implementation Tasks

Due to limited budgetary resources at the disposal of the County, assistance from the private and volunteer sector of the population will be sought. Based on this assumption, the following implementation tasks are identified as being required for this component.

5.2.1 Staff from the Public Works Department would initiate the process of establishing a liaison committee of jurisdictional representatives willing to develop and implement education and information programs. It would be recommended that individuals from the public school system, commercial haulers, Senior Centers and interested citizens be solicited for committee membership.

5.2.2 Once the committee is in-place, establish directives and guidelines under which the committee is to function.

5.2.3 Identify various media sources serving various areas of the jurisdiction and involve them from program initiation. Further, solicit their cooperation in providing Public Service time for advertising and promotion of the program(s).

5.2.4 Identify funding availability, sources of revenues, other mechanisms of funding and realistic appraisals of the depth of the programs which can be sponsored and supported by the jurisdiction. Solicit contributions from private enterprises, corporate sponsors or other sources to support the program.

5.2.5 Identify all available existing waste reduction programs active in the jurisdiction relate to source reduction, recycling and composting.

5.2.6 Identify program priorities based upon financial resources, greatest percent of population reached, successes in similar jurisdictions and greatest impact on waste reduction activities.

5.2.7 Develop program implementation schedule and present to Public Works Department and County Board of Supervisors for authorization to proceed. Upon approval, begin process of material preparation, communications presentations and other identified instruments for effective program start-up.

5.3 Establish Short-Term and Medium-Term Schedule

Short Term Planning Period (1991 - 1995)

5.3.1 Identify members and establish liaison committee.

5.3.2 Identify revenue sources, evaluate finances available, solicit funds from identified sources.

5.3.3 Develop local conditions statement from Integrated Waste Management Plan and local commercial haulers.

5.3.4 Develop informational materials.

5.3.5 Schedule regular media time for Public Service Announcements.

5.3.6 Identify and evaluate existing materials available on the market place for implementations through all classes of the public school system.

5.3.7 Develop and disseminate waste reduction technique handouts, Household Hazardous Waste Alternative use products, home composting literature, guidelines to source reduction, etc.

5.3.8 Develop flyers specifically for distribution in the room provider service sector for the tourist population.

Medium Term Planning Period (1996-2000)

5.3.9 Create and establish recycling event booth and informational materials for display at special events, fairs, etc.

5.3.10 Develop a jurisdictional specific video on waste reduction programs, their progress, resources conserved and programs yet to be implemented.

5.3.11 Solicit corporate sponsorships for on-going revenue support of programs. Revenues would also be solicited from any on-going State or federal grant monies available in support of Public Information and Education programs.

5.3.12 Establish regular media events to announce on-going achievement awards for outstanding participation by private sector organizations and/or business enterprises.

5.4 Identify Program Costs and Revenues

5.4.1. Cost of Production for Jurisdictional Specific Information, Education and Promotion Materials

a)	8-Page Booklets: $0.20/Ea @ 5,000	=	$ 1,000.
b)	Single Page Flyers: $0.03/Ea @ 5,000	=	$ 150.
c)	Graphics for Printed Materials	=	$ 100.
d)	Newspaper Add (Qtr. Page, Bi-Monthly)	=	$ 1,200.
e)	Radio Spots (30 Second, Weekly)	=	$ 1,560.
f)	Banner for Booth Presentation	=	$ 100.
g)	Booth Materials	=	$ 350.
h)	Educational Curriculum (K - K12)	=	$ 450.
i)	Educational Videos (3 @ $60.00/Ea)	=	$ 180.
j)	Educational Wall Charts	=	$ 60.
k)	Misc. Educational Support Materials	=	$ 312.
	(*Includes:* i. litter bags, #1000 ii. stickers, #1000 iii. rulers, #144 iv. pencils, #576 v. erasers, #144)		
l)	Local Production of Video	=	$20,000.
m)	Reimbursed Expenses for Travel	=	$ 500.
n)	Mailing Expenses	=	$ 950.
	Costs for Info., Educ., and Promotion Materials Exclusive of Video Production:	=	$ 6,912./Yr.

5.4.2 Revenues and Revenue Sources

a)	County of Mono, Solid Waste Budget	=	$ 3,000/Yr.
b)	Private Sector Contributions	=	$ 250.
c)	Public Service Announcement, Contribution (@ 50%)	=	$ 1,380.
d)	School District Purchase of Educational Materials:	=	$ 1,002.
e)	Unknown Amount of Funding Availability from Grant Programs	=	$?,???.
f)	Unknown Increased Contribution from County in Advent of Half-Cent Sales Tax Implementation to Support Solid Waste Infrastructure	=	$?,???.
	Total Known Revenues Available	=	**$ 5,632./Yr.**
	CURRENT PROJECTED SHORTFALL/SURPLUS	=	**$ 1,280./Yr.**

6.0 MONITORING AND EVALUATION

6.1 Methods to Measure Education and Public Information Objectives

The objectives of the Education and Public Information component are to outline programs which will increase the publics' awareness and participation in waste reduction programs and techniques. Section 18740 (e)(1) of the regulations require that methods be identified to measure the achievement of the objectives identified in 1.1 through 1.7 above. To quantitatively measure the success of the programs, a monitoring in the increase of redemption material recycling at the AB2020 site in Walker would be appropriate. Additional support for measuring the objectives could be obtained by conducting random surveys at the existing redemption center and any new drop-offs or redemption centers which will be developed during the short-term planning period.

The random surveys would focus on the awareness of the general public to the types of programs available in the County and general knowledge of the solid waste conditions present in the jurisdiction. Any increase in the number of commercial businesses requesting corrugated recycling services would be recorded, this increase being attributed to an increase in the level of waste reduction information being made available.

Monitoring could also take the form of mail in surveys published in local newspapers or left in areas of high pedestrian traffic for volunteer pickup and completion by members of the general public.

Addition monitoring would be conducted at the annual waste characterization updates, by determining the reduction in volume of redemption and hazardous materials in the jurisdictions waste stream as compared to the increase in source reduction, recycling and composting services provided to the community.

6.2 Written Criteria to Evaluate Program

6.2.1 What is the quantity increase in materials being collected at redemption and voluntary drop-offs throughout the unincorporated area.

6.2.2 Analysis of mail-in surveys will be made to determine the increase in awareness of facilities and services provided.

6.2.3 The amount of funding obtained through private donations or grant programs.

6.2.4 Any increase in citizen groups requesting speakers to address their respective groups regarding local solid waste issues.

6.2.5 Based on annual reviews, what is the reduction in the total quantity of solid waste entering the landfills, quantity of recyclables and the quantity of special, hazardous and toxic wastes being disposed at the landfills.

6.2.6 Is there an increased participation rate of students in local clean-up programs, recycling activities, field trips, art contests or promotional campaigns held throughout the jurisdiction.

6.3 Responsibility Agencies for Monitoring and Evaluation

The lead agency for the Public information and Education component will be the Mono County Public Works Department. The liaison committee of public and private representatives will act as the reporting agency to the Department. The involvement of the Seniors Center n Walker and other community organization groups will further assist the committee in providing monitoring of the programs' success.

6.4 Monitoring and Evaluation Funding Requirements and Sources

Funding requirements for the monitoring and evaluation portions of the Public Information and Education component will center around record keeping, telephone surveys, written survey analysis and evaluation of participation and quantity increases at local recycling centers.

6.4.1 Funding requirements will be minimal and will extensively encompass staff time of one Public Works staff member to record minutes of liaison committee meetings, send notices of next meeting dates and finalize presented data from the committee into summary reports for presentation to the Director of Public Works, County Administrative Officer and Board of Supervisors.

6.4.2 Revenues and revenue sources will be the same as outlined in 4.4.2 above and will include the following:

- Private sector contributions
- Private service announcements from local media
- School district contributions
- Funding availability form Grant Programs
- Potential increased contribution from County in advent of half-cent sales tax increase
- General fund appropriations

6.5 Contingency Measures

It is difficult to place the burden of increased implementation on a County department that is already financially burdened by the impacts of substantial program implementation in other areas of solid waste management. However, it would be the intention of County staff to implement the following tasks on a carefully scheduled time table in conjunction with the Public Information and Education liaison committee if goals were not being achieved.

6.5.1 Evaluate further funding sources not already identified above.

6.5.2 Identify other local organizations, school groups or private citizens willing to take part in the information/education effort.

6.5.3 Based upon the large tourist industry in the County, actively solicit corporate sponsorship of solid waste programs with their names attached. Develop slogans and logos with the corporate sponsor and implement on a far-ranging basis.

6.6 Monitoring and Reporting Schedule

The Public information and Education liaison committee would meet at a minimum of once per month to develop and evaluate ongoing programs. As mentioned, biannual and annual reports would be submitted to the County Department of Public Works regarding the progress and direction of the liaison committee and the Public Information and Education component.

Section X

DISPOSAL FACILITY CAPACITY COMPONENT

1.0 INTRODUCTION

According to Chapter 9, Article 6.2, Source Reduction and Recycling Elements, Section 18744, Disposal Facility Capacity Component, the disposal facility capacity component shall identify and describe all existing permitted solid waste landfills and transformation facilities within the jurisdiction. The component shall also include a solid waste disposal facility needs projection necessary to accommodate solid waste generation for a fifteen (15) year period commencing in 1991. The discussion shall include identification of disposal facilities to be phased out or closed in the short and medium term planning periods and plans to establish new or expanded facilities within the same short and medium-term planning periods.

2.0 PERMITTED SOLID WASTE DISPOSAL FACILITIES

Seven (7) permitted solid waste disposal sites serve the County of Mono. Six (6) sites are landfill disposal sites and the seventh is a small volume transfer station. Table X-1 illustrates the total site capacity of each landfill site, the future total compacted in-place volume and the estimated closure date. Additional data regarding the owner and operator, permitted site acreage and permitted capacity is contained in Table X-2 which was presented within Section IV, Initial Waste Generation Study.

The quantity and waste types of solid waste disposed at these permitted solid waste disposal sites was contained in Section IV, Initial Waste Generation Study of this document. There are no current disposal fees in place at any of these landfill disposal sites.

Table X-1

Mono County Landfill Sites and Expected Closure Dates

Site	Waste In Place Cu. Yds.	Remaining Capacity Cu. Yds.	Site Life (Years)	Closure Date
Walker	45,300	200,000	26	2017
Bridgeport	88,000	499,9	58	2049
Pumice Valley	93,000	388,000	36	2027
Benton Crossing	377,128	843,000	18	2009
Benton	15,100	93,00	60	2051
Chalfant	24,700	99,50	40	2031

Table X-2

Permitted Disposal Sites in Mono County

Disposal Site	Operation	Land Owner	Operator	Acres	Service Area
Walker Landfill	Pit Burial Bulky Storage	BLM	County	40 20	North County
Bridgeport Landfill	Pit Burial Bulky Storage	BLM	County	40	Bridgeport Area
Pumice Valley Landfill	Pit Burial Septic Pit Bulky Storage Slash Area	LA DWP	Private	40	Lee Vining/ June Lake
Benton Crossing Landfill	Pit Burial Septage Bulky Storage Slash Area	LA DWP	Private	90	South Co./ Mammoth Lks
Benton Landfill	Pit Burial Bulky Storage	BLM	County	10	Benton
Chalfant Landfill	Pit Burial Bulky Storage	BLM	County	10	Chalfant
Paradise Valley Transfer Station	Transfer Station	LA DWP	Private	50 Yard Roll off	Paradise/ Swall Meadows

Notes to Table X-2:

Pit Burial - Open trench accepting Municipal Solid Waste (MSW).

Bulky Storage - Open collection and separation area for green waste, construction and demolition waste, white goods, tires and auto bodies.

Septage - Accepts septage from commercial haulers, campers and trailers.

Slash Area - Separate collection area for green waste, tree stumps, land clearing debris.

3.0 15-YEAR DISPOSAL FACILITY CAPACITY NEEDS PROJECTION

The formula used to determine the future disposal capacity needs of the County is as follows:

$$\text{ADDITIONAL CAPACITY (AC)}_{\text{Year}_n} = [(G + I) - (D + TC + LF + E)]_{\text{Year}_n}$$

The formula parameters are listed in Section 3.1. The results of the calculation of the capacity requirements for each year are presented in Section 3.2.

It is critical to note that the following comments regarding the formula parameter "G" that is defined as, "the solid waste generated during the nth year". The following discussion focuses not on the total quantity of solid waste generated within the jurisdiction but the amount of MSW disposed of within the active areas of the site and that is responsible for consuming capacity.

The objective of the Disposal facility Capacity component is to provide the local jurisdiction and the State with a projection of the remaining landfill space available. Each jurisdiction is to determine the remaining disposal space available at each landfill site taking into consideration such factors as population growth, regional construction and development, diversion increases, exportation, importation and transformation. The method developed to calculate the future capacity requirements is intended for more typical solid waste landfills where all the waste is tipped at the dump face or separated at transfer stations r more modern resource recovery facilities.

The Mono County landfills utilize an open trench for the disposal of MSW. Construction and demolition wastes, bulky items, slash material and white goods are segregated from the MSW and not disposed of in the landfill. The white goods and metals are hauled to local junk yards and the slash and wood wastes burned twice annually or as required and deemed safe by County and/or landfill operators. The residuals from the burn consist of ash, inerts such as rocks, concrete, and dirt and other non-biodegradable materials. These residual materials are not disposed of in the open trench/pit but are left on the burn site and piled over with additional wood and slash material.

Therefore, the future disposal facility capacity needs of Mono County will be calculated based on the volume of MSW which is disposed of within the trenches/pits of each landfill.

3.1 Formula Parameters

AC Additional capacity to meet the disposal needs of the County.

n Each year of the 15 year period.

G Total waste generated in the jurisdiction. For Mono County the value of G will be the amount of MSW generated each year, excluding construction and demolition debris and wood and slash material.

I Solid waste imported from the Town of Mammoth Lakes. This waste is received at the Benton Crossing Landfill.

D Solid waste diverted from disposal assuming implementation of the programs identified in the other components of the SRRE.

TC Solid waste disposed of at permitted transformation facilities. No wastes in the County are disposed of at transformation facilities.

E Solid waste exported from the County. Douglas Disposal exports approximately 1,000 tons of waste annually to landfills in the State of Nevada.

LF Remaining landfill capacity in the County.

3.2 Disposal Capacity Projections

Table X-3 provides the results of the calculation of the annual disposal capacity needs for each year in the planning period.

Table X-3

Disposal Capacity Need Projections

Year (n)	G	I	D	TC	LF	E	AC
1992	31,469	37,877	1,541	0	1,282,069	2,666	0
1993	31,653	38,050	1,551	0	1,216,930	2,682	0
1994	31,837	32,892	5,826	0	1,151,460	2,697	0
1995	32,022	33,535	5,861	0	1,095,255	2,713	0
1996	32,209	33,559	6,170	0	1,038,271	2,729	0
1997	32,394	32,953	8,095	0	981,402	2,744	0
1998	39,456	31,666	15,296	0	926,894	2,760	0
1999	39,684	27,060	20,014	0	873,829	2,776	0
2000	39,914	27,301	20,129	0	829,875	2,793	0
2001	40,147	27,832	20,247	0	785,582	2,809	0
2002	40,379	28,374	20,364	0	740,659	2,825	0
2003	40,612	28,929	20,482	0	695,095	2,841	0
2004	40,847	29,487	20,602	0	648,876	2,858	0
2005	41,086	30,064	20,721	0	602,001	2,874	0
2006	41,324	30,649	20,841	0	554,446	2,891	0
2007	41,562	31,247	20,962	0	506,206	2,908	0

3.0 SHORT-TERM AND MEDIUM-TERM PLANNING

During the short-term planning period it is expected that the Walker landfill and the Bridgeport landfill will be converted to transfer stations. These modifications will have no impact on disposal capacity needs of the jurisdiction. Roll-off containers will be placed at these sites to continue to handle the existing volumes and those anticipated with normal population growth in these areas.

Within the medium-term planing period it is anticipated that two additional sites, Benton and Chalfant will also go through a permit modification from a landfill classification to that of transfer station. Similar mechanics will be employed at these sites with roll-off containers situated at the sites so that existing and projected volumes will continue to be handled in a similar fashion.

The Pumice Valley landfill disposal site will be the likely facility to receive the refuse collected at the transfer stations once in place. Pumice Valley has a future expansion capacity of some 388,000 compacted cubic yards. The proposed impact on Pumice Valley is detailed through the medium-term planning period in the following table. It is anticipated that the Walker and Bridgeport sites will begin to impact Pumice Valley in 1995 with Benton and Chalfant beginning to impact in 1997.

Table X-4
Capacity Impact on Pumice Valley
Cubic Yards

Year	Walker	Bridgeport	Benton	Chalfant	Impact on Pumice Valley
1995	1,360.3	3,200.3	0	0	4,560.6
1996	1,368.2	3,218.9	0	0	4,587.1
1997	1,376.1	3,237.5	268.7	579.5	5,461.8
1998	1,384.1	3,256.3	270.2	582.2	5,493.5
1999	1,384.1	3,275.2	271.8	586.2	5,525.3
2000	1,400.2	3,294.2	273.4	589.6	5,557.4

Based on a calculated disposal volume of 4,239.4 compacted cubic yards at the Pumice Valley site before additional wastes are disposed of at the site, a 108% increase in volume disposed at the site would begin in 1995, moving to a 127% increase by the end of the medium-term planning period.

Section XI

FUNDING COMPONENT

1.0 INTRODUCTION

The funding component of the SRRE requires that each jurisdiction demonstrate the capability to meet the costs of program planning and development and for the implementation of the programs necessary to meet the diversions goals as outlined within the law. Specifically the funding component shall provide cost estimates for component programs scheduled for implementation in the short-term planning period. These requirements are being fulfilled within the definition of each individual component structure.

Within this component it will be prudent to identify funding not only for the short-term but medium-term planning period, as this period to time will most likely be the period of equipment acquisition and facilities development. It is also important to consider infrastructure development and the jurisdictions' local situation. A jurisdiction experiencing rapid development might evaluate developer fees as a revenue generation source.

The costs of program implementation that have been described within the model components must now have the interrelationship between program costs and funding sources breached. The availability of funds will drive the implementation of programs, this interrelationship being critical to he ultimate success of the program.

2.0 OBJECTIVES

Traditional objectives of solid waste funding programs has been to generate sufficient funds through the assessment of fees either at the gate or at the parcel to support on-going solid waste disposal activities. Funding options evaluated to support on-going solid waste operations must now support disposal sites, diversion activities, public education programs, hazardous waste collection and transportation programs and numerous other requirements of both the State and Federal law makers. Primary objectives of this component are the following:

2.1 Identify the mechanisms necessary to supply the required funding levels to support integrated solid waste management programs.

2.2 Provide cost estimates for component programs scheduled for implementation in the short-term planning period.

2.3 Identify sources of contingency funding for component programs.

2.4 Develop a system of providing long-term funding for capital improvement projects and contribution to closure and post-closure funds for the landfills.

3.0 EXISTING CONDITIONS

Solid waste management funds are currently generated in Mono County by the exercise of a solid waste fee assessment against each parcel in the Countywide area. The assessment was recently raised to $60.00 for Fiscal year 1990/91 to address an increasing solid waste budget. It should be noted that this assessment is utilized to generate operating funds for the County, Department of Public Works who is the lead on operations and management of the countywide solid waste facilities. However, the funds are jointly generated by both the unincorporated County area and the incorporated Town of Mammoth Lakes. The total solid waste budget then, is an accumulation from two separate jurisdictions, but is utilized to support the solid waste facilities which are common among the jurisdictions.

The assessment has met with large disfavor among the permanent residents of the area and is currently being reviewed for further modification. Revenues are also generated by applying a fee against new home starts in the countywide area.

The revenues generated through the solid waste fee assessment program from fiscal year 1987/88 through the present fiscal year are presented following.

	1987/88	1988/89	1989/90	1990/91
Mammoth Lakes	$137,597	$152,660	$146,990	$332,880
Mono County	$ 87,552	$ 97,602	$ 93,979	$212,826
TOTAL REVENUE	$225,552	$250,262	$240,969	$545,706

Of the total assessments applied against the parcels, it was calculated by Mono County Department of Public Works that 39% was generated from within the unincorporated area and 61% was generated from within the incorporated area.

Given the existing solid waste management infrastructure of six landfills and one transfer station in place within the County, the expenses incurred for the management of these facilities is proportionately high given the permanent population of the jurisdiction. Ongoing expenses to manage the facilities for fiscal year 1990/91 and to meet required state mandates (such as the AB 939 planning process) are detailed below:

1.	Solid Waste Disposal Fee ($1.00/Ton)	$ 13,000.
2.	Closure and Post Closure Trust Funds	$ 221,201.
3.	Chalfant Landfill SWAT Monitoring Wells	$ 90,000.
4.	Water Quality Monitoring	$ 120,000.
5.	Bridgeport and Benton SWAT Tests	$ 50,000.
6.	AB 939 Plan	$ 100,000.
TOTAL EXPENDITURES:		**$ 594,201.**

Based on revenues from the solid waste fee assessments of 545,706.00, and the six mandated required expenditures as outlined above, the County will show a deficit of 48,495 for Fiscal Year 1990/91 in their solid waste budget and not have adequate resources to fund program implementation in this fiscal year.

4.0 ALTERNATIVE FUNDING PROGRAMS

Per the requirement of Section 18746 (b) and (c) the following revenue sources are identified to support the implementation of proposed programs within the model components through the short term planning period. As noted in the Resources Guide to Integrated Waste Management, published by the California Integrated Waste Management Board, it is not required to show a breakdown of each component cost. This function has been performed within the model component Section of the planning document.

Funding options to be evaluated in order to support program implementation include the following:

4.1 Adopt a Countywide half-cent sales tax to fund integrated solid waste management programs. Applied against the current level of property owners and permanent residents of the

unincorporated area, this will result in revenues of approximately $150,000 generated from the unincorporated area of the County.

Based on sales tax revenues from the State Board of Equalization, for fiscal year 1988/89 a half-cent increase in sales tax would have generated a total of $575,634.00 in additional revenues for the combined unincorporated and incorporated areas of the County. Such a structure should have a greater political appeal to the jurisdiction, based on the high tourist population which frequents the area, resulting in the transient population supporting to a great extent the solid waste infrastructure of the jurisdiction.

4.2 Establish long-term franchise agreements with the solid waste operators and charge these fees per adjustment processes as outlined in the agreement. Long term franchise agreements will allow the haulers greater flexibility in providing the necessary services for collection and recycling by structuring a reward mechanism to haulers that participate in recycling services and/or objectives.

Franchise fees are customarily structured to be anywhere from one (1) to three (3) percent of the haulers net revenues, payable on agreed upon terms between the two parties. It is not possible to estimate the additional revenues which may be generated from this mechanism at this time, without a knowledge of commercial haulers receipts and operations expenses over a given period of time.

4.3 Evaluate the adoption and utilization of avoidance fee mechanisms to support recycling services and encourage further development of collection routes. This results in recyclers being compensated for their service to the public by reimbursing the avoided cost of disposal if that collected recyclable had been allowed to enter the waste stream. This is usually based as a percent of the existing actual disposal fee in place within the jurisdiction.

4.4 Increase the solid waste fee assessment or other recommended mechanism of revenue generation to support the implementation phase of 939 planning. The solid waste fee assessment structure could also continue to be utilized with the joint adoption of a half-cent sales tax, assuring adequate financial support for ongoing operational costs, mandated programs and implementation of new programs.

An increase in the existing fee or establishment of an ordinance or resolution implementing solid waste rates may have a profound impact on source generation of waste. An increase in service rates is actually required for consideration within the source reduction component as a reduction mechanism. Traditional fee rate schedules revolve around the variable can rate to reduce the level of generation. However, this method is not practical in a rural community of numerous self-haulers.

4.5 Explore the imposition of tipping fees at landfill sites which may take the form of gate fees for special waste items. Once again, the imposition of any solid waste fee will result in a source reduction activity, an allowable alternative under 939 regulations.

In rural jurisdictions this is not a recommended alternative due to the large expanse of open lands and increased potential for illegal dumping on these lands should a tipping fee mechanism be utilized.

4.6 Appropriations form the General Fund may also be earmarked for solid waste activities. Because of limitations on general fund tax increases under Proposition 13, local governments reliant upon general fund appropriations for waste management will face difficulties in any major budget increase.

4.7 Additional sources of funding to support solid waste infrastructure may include developer fees imposed on developers when they submit plans for residential, commercial or industrial communities.

4.8 State and Federal grant programs which offer both grant funds, low interest loans and technical assistance programs should be explored and every opportunity taken to prepare proposals and submit applications for available monies.

Other programs supported by the Department of Conservation, Division of Recycling and the California Integrated Waste Management Board include education and promotional grants and innovative or experimental program funding.

4.9 Funding of capital equipment acquisitions or facilities tend towards the traditional sources of Industrial Revenue Bonds, General Obligation Bonds, lease-purchase agreements between private vendors and local government and commercial bank loans or lines of credit.

It is important to note that the granting of extended franchise agreements allows the refuse hauler a more sound economic base to execute their business upon as bankable notes, collateral or lines of credit.

5.0 CONTINGENCY FUNDING

In the case of revenue short fall by the County jurisdiction, one of two likely alternatives would be implemented.

5.1 General Fund appropriations. Though politically unsavory, the ultimate decision of this mechanism would rest with the County Board of Supervisors.

5.2 Utilization of established Lines of Credits through private lending institutions. Though, once again satisfying the requirement of emergency fund availability, the "robbing Peter to pay Paul" scenario may prove both publicly and privately disagreeable to the degree that implementation would be greatly curtailed or completely limited.

5.3 The third contingency for funding would rest on increased private contributions or cooperate sponsorship of an ongoing program. Both of these alternatives would have limited chances of success and could not be adequately relied upon to satisfy the requirement of secured contingency funding sources.

Section XII

INTEGRATION COMPONENT

1.0 INTRODUCTION

Mono County petitioned the California Integrated Waste Management Board (CIWMB) to have the 1995 diversion level for the unincorporated area reduced from 25% to 15%. The County's petition was approved in December 1991. The programs in this Element that are identified for implementation during the short term planning period are intended to produce a waste diversion level of approximately 11%. These programs when combined with the existing diversion activities, will yield an overall diversion rate of 15% by 1995.

At the time that the County petitioned the Board, it also indicated that it did not believe that the a 50% diversion level could be feasibly achieved by the year 2000. The County stated its intention to petition the Board at a later date for a reduction in that diversion level as well. For planning purposes, the County has identified a series of medium term diversion programs that it will consider for implementation during the medium term. Further details on the programs and a closer examination of the feasibility of implementation will be undertaken by the County near the end of the short term planning period.

2.0 Program Priorities and Selection

Because of the rural, sparsely populated character of Mono County and the limited resources available for program implementation, the County had few program options from which to develop a waste diversion plan. Those programs that were selected for implementation were those which met the following criteria:

- Minimized the need for new facilities
- Could be implemented with a minimum of financial support or commitment of staff from the County
- Were expansions or additions to existing programs
- Maximized the recovery of materials with stable market value
- Involved the tourists and seasonal visitors to the County

The County's short term waste diversion plan will be based primarily on recycling (14%), with only a 1% waste diversion coming from source reduction. In general the County lacks the resources and an adequate monitoring and evaluation mechanism to support a greater reliance on source reduction.

3.0 Program Integration - Short Term

The County's waste diversion program for the short term is based on the continuation of the existing diversion activities by local residents and businesses and the implementation of the new programs which have been identified in this Element. Details of the short term integration plan are provided in Table XII-1. The programs to be considered for implementation during the medium term are listed in Table XII-2.

Table XII-1

Program Integration - Short Term

Program	Annual Tons Diverted	Percent of Total Generation
Existing Diversion	570.8	4.0%
New Source Reduction	140.0	1.0%
Bins at Recreation Centers	360.0	2.5%
Bins at Walker & Bridgeport	425.0	3.0%
Recycling at U.S.M.C. Base	280.0	2.0%
Corrugated Collection	280.0	2.0%
Benton Buy-back Center	75.0	0.5%
Total	**2,130.8**	**15.0%**

Table XII-2

Program Integration - Medium Term

Program	Annual Tons Diverted	Percent of Total Generation
Existing & Short Term Diversion	2,131	15.0%
New Source Reduction	390	2.7%
Mixed Plastics Recycling	350	2.5%
Corrugated Collection	200	1.4%
Slash & Wood Chipping	1,000	7.0%
Food & Yard Waste Composting	935	6.6%
C & D Debris Recovery	2,000	14.1%
Tire Recycling	100	0.7%
Total	**7,106**	**50.0%**

The materials targeted for diversion in the short term are listed in Table XII-3.

Table XII-3

Materials Targeted for Diversion - Short Term

Program	Annual Tons Diverted	Percent of Total Generation
Aluminum Cans	120	1.1%
Glass	600	4.7%
PET	15	0.1%
HDPE	20	0.1%
Mixed Plastics	30	0.2%
Newspaper	175	1.2%
Cardboard	545	3.8%
Ledger	15	0.1%
Mixed Paper	20	0.1%
Wood Waste	20	0.1%
Total	**1,560.0**	**11.5%**

3.0 PROGRAM IMPLEMENTATION

Table XII-4 provides an outline of the programs and primary tasks that will be required to implement the County's plan. For all programs, the County Public Works Department will be the agency primarily responsible for implementation.

Table XII-4

Program Implementation

Program	Implementation Tasks	Schedule
Source Reduction Program for County Offices	Draft policy Instruct County staff Monitor results	September 1992
Business Technical Assistance	Meetings with business and trade groups	Begin January 1993
Business Waste Reduction Plans	Distribute questionnaires Monitor Responses	January 1993 June 1993
Bins at Recreation Centers	Designate program operator Public information program Program start-up	October 1992 March 1993 June 1993
Bins at Walker & Bridgeport	Designate program operator Public information program Program start-up	October 1992 March 1993 June 1993
Corrugated Collection	Designate program operator Public information program Program start-up	October 1992 March 1993 June 1993
Benton Buy-back Center	Designate program operator Public information program Program start-up	January 1993 June 1993 July 1993
Coordination With U.S.M.C. Base	Initial Meetings Follow-up meetings	August 1992 April 1993

4.0 PROGRAM COSTS AND FUNDING

The anticipated implementation costs for the selected programs are summarized in Table XII-5.

Table XII-5

Program Implementation Costs

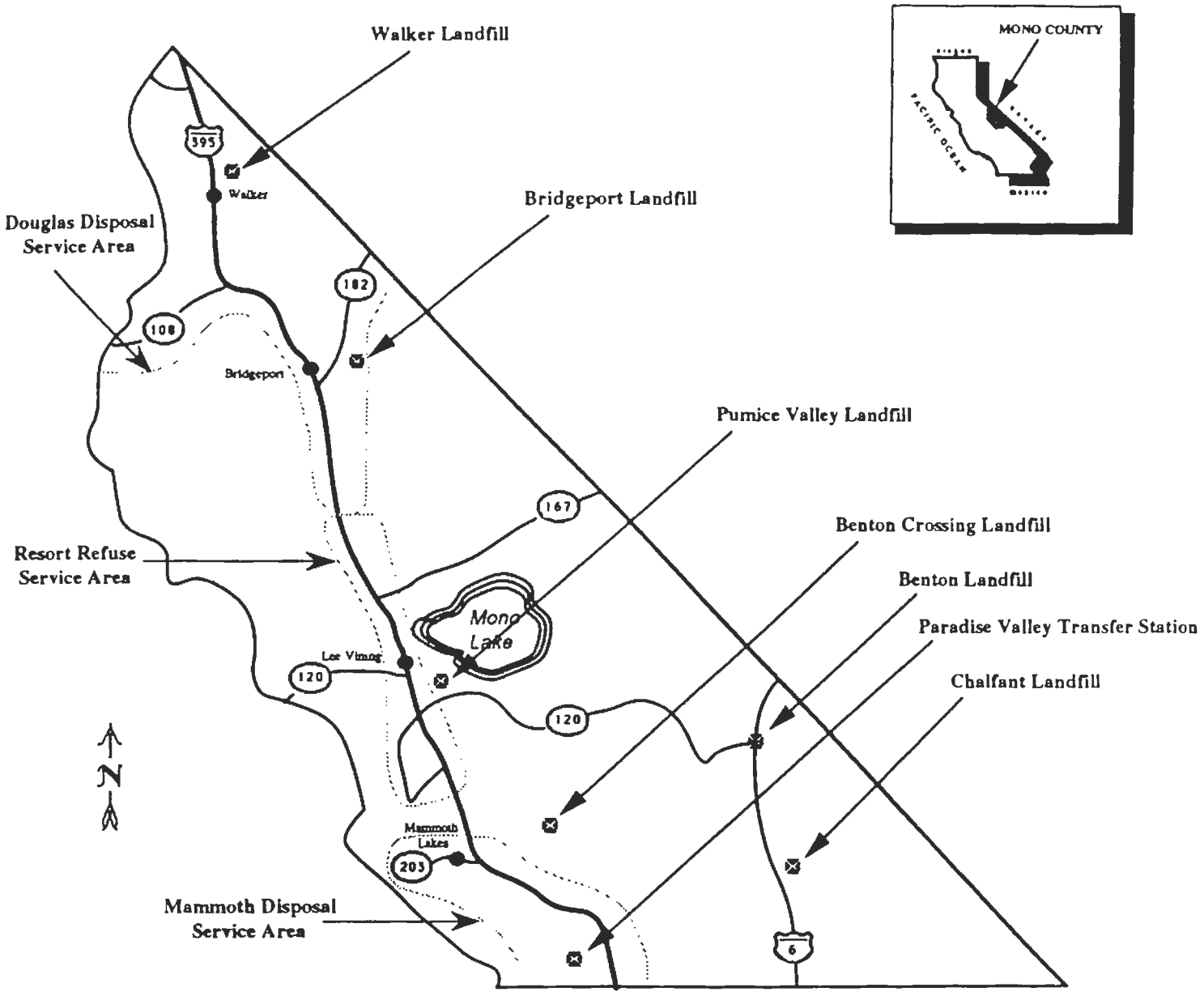
Program	Start-up Costs	Annual Costs	Full-time Staff Equivalent
New Source Reduction	$0	$2,500	0.1
Bins at Recreation Centers	$3,300	$11,000	0.1
Bins at Walker & Bridgeport	$7,000	$5,250	0.1
Corrugated Collection	$5,000	$8,250	0.1
Processing Facility	$50,000	*	0
Benton Buy-back Center	$1,500	$500	0
Coordination With USMC Base	$0	$0	0.1
Total	**$66,800**	**$27,500**	**0.5**

* Annual operating cost included in program costs

Figure 1

Map of Mono County Landfill Sites

MONO COUNTY


Walker Landfill
MONO COUNTY
PACIFIC OCEAN
395
Walker
Douglas Disposal
Service Area
Bridgeport Landfill
182
108
Bridgeport
Pumice Valley Landfill
167
Benton Crossing Landfill
Resort Refuse
Service Area
Benton Landfill
Paradise Valley Transfer Station
Mono
Lake
Lee Vining
120
Chalfant Landfill
120
N
Mammoth
Lakes
203
Mammoth Disposal
Service Area
6

APPENDIX A

Mono County Waste Characterization Study

Fall Season

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table A-1

Description of Sampling Statistics - Fall Season Sort

SOURCES:	No. of Samples	Maximum Sample (lbs.)	Minimum Sample (lbs.)	Mean Sample (lbs.)	Standard Deviation (lbs.)
Commercial Unincorporated	3	231.00	195.50	207.50	23.34
Residential Unincorporated	5	255.00	217.00	229.90	13.37
Industrial	1	266.00	266.00	266.00	0.00
TOTAL SAMPLE STATS:	9	-	-	234.47	-

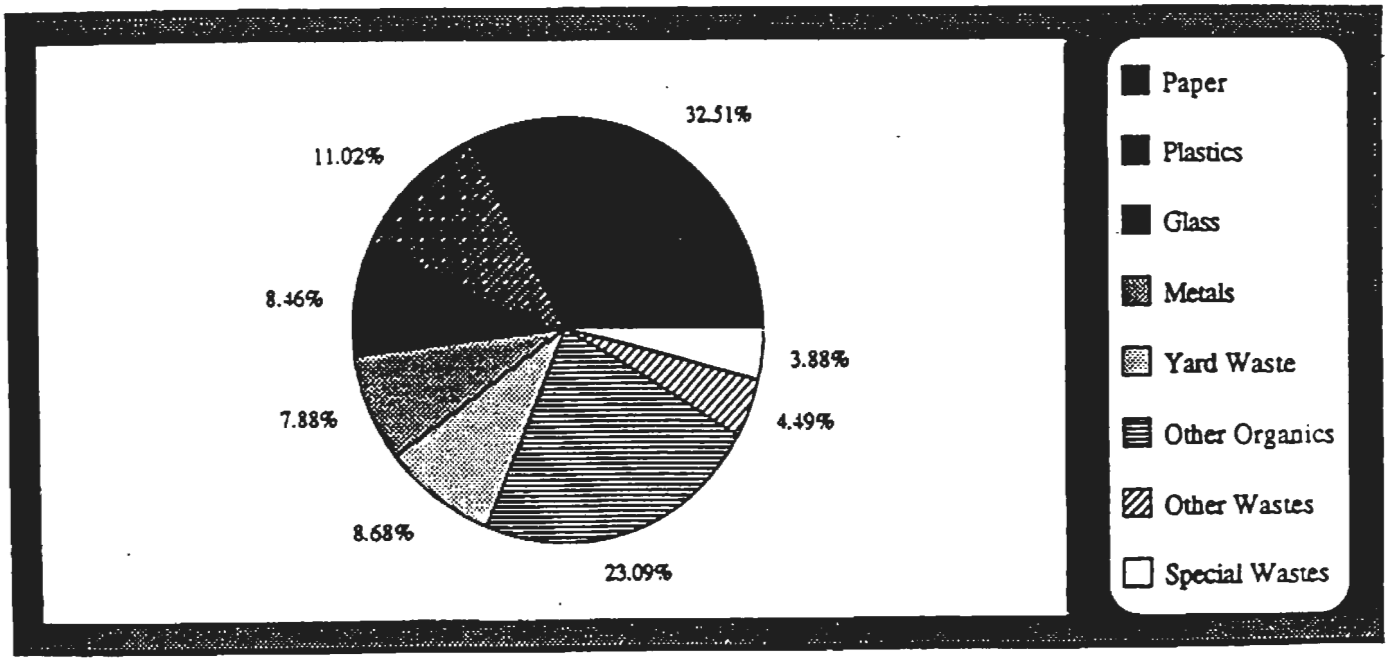
MONO COUNTY WASTE CHARACTERIZATION STUDY

Table A-2

Weekly Summary of Waste Quantities - Fall Season Sort

(Units in Pounds)

Type	Sample #	Location	Paper	Plastics	Glass	Metals	Yard Waste	Other Organics	Other Wastes	Special Wastes	Totals by Sample
Comm.	1	June Lks./Lee V	80.50	10.50	17.00	19.00	[illegible].00	41.50	18.00	3.00	216.50
Comm.	2	June Lks./Lee V	112.00	16.00	19.00	17.00	.00	58.00	6	0.00	230.50
Resid.	1	June Lks./Lee V	63.00	20.00	31.50	12.50	5.00	55.50	24	9.00	221.00
Indust.	1	June Lks./Lee V	49.00	21.00	20.00	16.00	4.00	79.00	29.00	48.00	266.00
Resid.	1	Bridgeport	63.00	30.00	21.00	17.00	0.00	86.00	3.00	8.00	228.00
Resid.	2	Bridgeport	117.00	41.50	19.00	19.00	0.00	45.50	2.00	11.00	255.00
Resid.	1	Walker	73.00	49.50	23.00	2[illegible]0	16.00	42.00	5.50	0.00	229.00
Resid.	2	Walker	74.00	33.50	21.00	2[illegible]	22.00	41.00	3.00	0.00	216.50
Comm.	1	Walker	31.00	2.50	1.00	18.00	101.00	22.00	0.00	0.00	175.50
Totals by Category (lbs.):			**662.50**	**224.50**	**172.50**	**160.50**	**177.00**	**470.50**	**91.50**	**79.00**	**2038.00**
Percentage by Category:			**32.51%**	**11.02%**	**8.46%**	**7.88%**	**8.68%**	**23.09%**	**4.49%**	**3.88%**	**100.00%**



MONO COUNTY WASTE CHARACTERIZATION STUDY

Table A-3

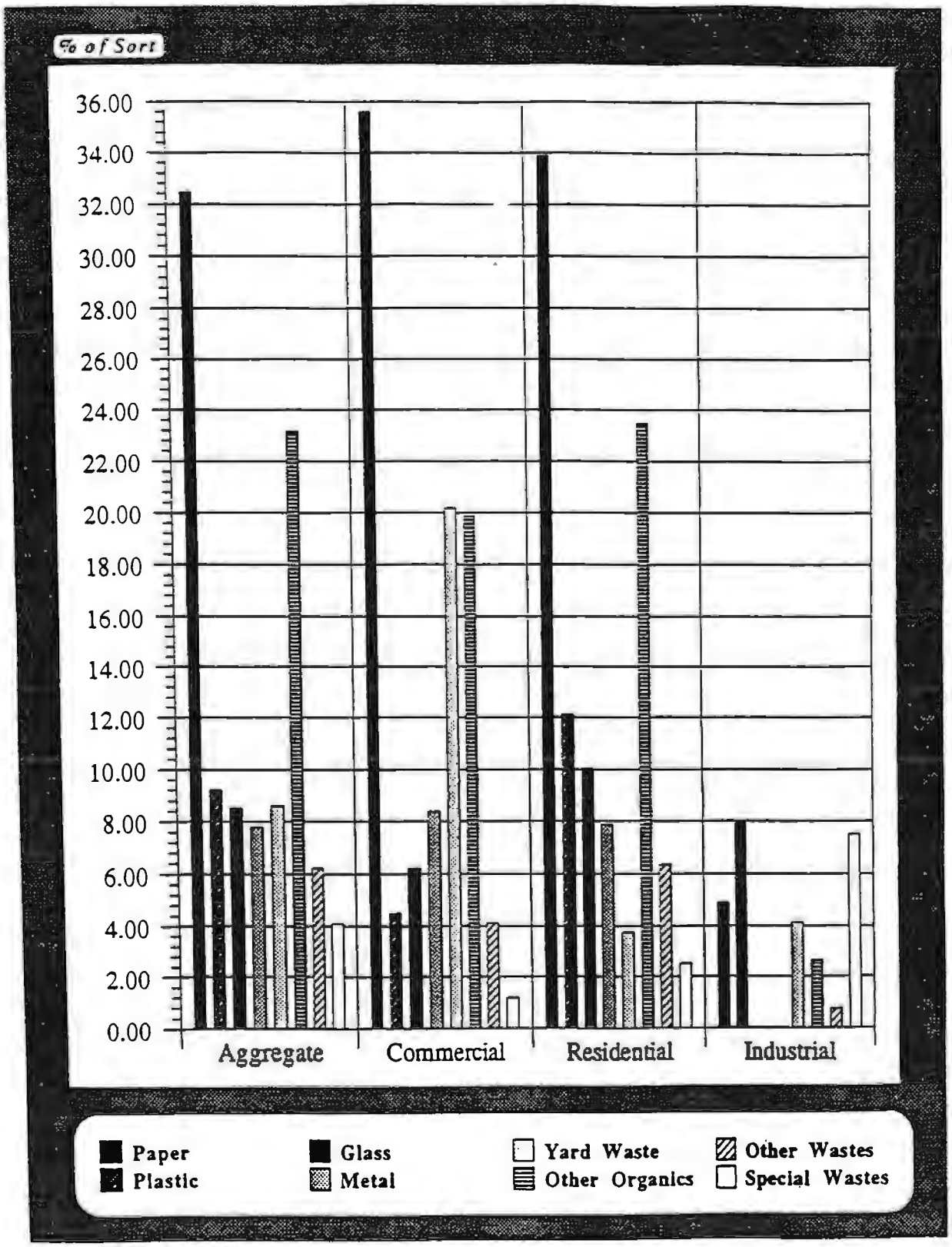
Solid Waste Stream Composition by % (wt. basis) - Fall Season Sort

		Aggregate Total Wt. %	Commercial Total Wt. %	Residential Total Wt. %	Industrial Total Wt. %
PAPER	Corrugated	6.38	7.21	5.56	7.89
	Mixed	14.33	17.46	13.91	8.65
	Newspaper	8.80	8.69	10.43	1.88
	High Grade	0.02	0.08	0.00	0.00
	Other	2.91	2.17	4.00	0.00
	Total:	**32.44**	**35.61**	**33.90**	**18.42**
PLASTIC	HDPE	0.97	0.62	1.22	0.75
	PET	0.32	0.31	0.30	0.38
	Film Plastics	4.27	0.85	6.74	1.88
	Other	3.64	2.72	3.87	4.89
	Total:	**9.20**	**4.50**	**12.13**	**7.90**
GLASS	Refillable	0.00	0.00	0.00	0.00
	Redemption	3.49	2.95	3.65	4.14
	Other Recycled	4.80	3.18	6.21	2.63
	Non-Recyclable	0.22	0.08	0.17	0.75
	Total:	**8.51**	**6.21**	**10.03**	**7.52**
METAL	Aluminum Cans	2.67	2.79	3.04	0.75
	Bi-Metal	0.32	0.54	0.17	0.38
	Ferrous/Tin	4.34	4.03	4.56	4.14
	Non-Ferrous	0.46	1.01	0.09	0.75
	White Goods	0.00	0.00	0.00	0.00
	Total:	**7.79**	**8.37**	**7.86**	**6.02**
YARD WASTE	**Total:**	**8.59**	**20.17**	**3.74**	**1.50**
OTHER ORGANICS	Food Waste	11.96	14.74	12.56	2.63
	Tires/Rubber	3.42	0.16	4.48	6.77
	Wood Wastes	4.39	3.96	1.91	16.17
	Ag. Crop Resid.	0.00	0.00	0.00	0.00
	Manure	0.15	0.00	0.00	1.13
	Textile/Leather	3.23	1.01	4.52	3.01
	Total:	**23.15**	**19.87**	**23.47**	**29.71**
OTHER WASTES	Inert Solids	2.30	1.63	1.91	5.64
	HHW	1.29	0.78	1.00	3.76
	Infectious Wastes (diapers, napkins)	2.64	1.71	3.43	1.50
	Total:	**6.23**	**4.12**	**6.34**	**10.90**
SPECIAL WASTES	Ash	0.61	0.08	0.78	1.13
	Sewage Sludge	0.00	0.00	0.00	0.00
	Indust. Sludge	0.00	0.00	0.00	0.00
	Asbestos	0.00	0.00	0.00	0.00
	Auto Shred Parts	0.29	0.00	0.00	2.26
	Auto Bodies	0.00	0.00	0.00	0.00
	Other Special	3.20	1.09	1.74	14.66
	Total:	**4.10**	**1.17**	**2.52**	**18.05**

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table A-4

Solid Waste Stream Composition by % - Fall Season Sort



MONO COUNTY WASTE CHARACTERIZATION STUDY

Table A-5

Percent of Solid Waste Stream by Waste Category - Fall Season Sort

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	128.50	19.40%	6.31%
	Mixed	295.00	44.53%	14.47%
	Newspaper	179.00	27.02%	8.78%
	High Grade	0.50	0.08%	0.02%
	Other	59.50	8.98%	2.92%
	Total:	**662.50**		**32.50%**
PLASTIC	HDPE	20.00	8.91%	0.98%
	PET	6.50	2.90%	0.32%
	Film Plastics	88.00	39.20%	4.32%
	Other	110.00	49.00%	5.40%
	Total:	**224.50**		**11.02%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	72.00	41.74%	3.53%
	Other Recycled	96.00	55.65%	4.71%
	Non-Recyclable	4.50	2.61%	0.22%
	Total:	**172.50**		**8.46%**
METAL	Aluminum Cans	55.00	34.27%	2.70%
	Bi-Metal	6.50	4.05%	0.32%
	Ferrous/Tin	89.50	55.76%	4.39%
	Non-Ferrous	9.50	5.92%	0.47%
	White Goods	0.00	0.00%	0.00%
	Total:	**160.50**		**7.88%**
YARD WASTE	**Total:**	**177.00**		**8.68%**
OTHER ORGANICS	Food Waste	240.00	51.01%	11.78%
	Tires/Rubber	70.50	14.98%	3.46%
	Wood Wastes	90.50	19.23%	4.44%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	3.00	0.64%	0.15%
	Textile/Leather	66.50	14.13%	3.26%
	Total:	**470.50**		**23.09%**
OTHER WASTES	Inert Solids	21.00	22.95%	1.03%
	HHW	26.00	28.42%	1.28%
	Infectious Wastes (diapers, napkins)	44.50	48.63%	2.18%
	Total:	**91.50**		**4.49%**
SPECIAL WASTES	Ash	7.00	8.86%	0.34%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	6.00	7.59%	0.29%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	66.00	83.54%	3.24%
	Total:	**79.00**		**3.87%**
TOTAL SAMPLE:		**2038.00**		**100.00%**

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table A-6

Commercial Totals - Fall Season Sort

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	46.50	20.26%	6.90%
	Mixed	112.50	49.02%	16.70%
	Newspaper	56.00	24.40%	8.31%
	High Grade	0.50	0.22%	0.07%
	Other	14.00	6.10%	2.08%
	Total:	**229.50**		**34.06%**
PLASTIC	HDPE	4.00	6.25%	0.59%
	PET	2.00	3.13%	0.30%
	Film Plastics	5.50	8.59%	0.82%
	Other	52.50	82.03%	7.80%
	Total:	**64.00**		**9.51%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	19.00	47.50%	2.82%
	Other Recycled	20.50	51.25%	3.04%
	Non-Recyclable	0.50	1.25%	0.07%
	Total:	**40.00**		**5.93%**
METAL	Aluminum Cans	18.00	33.33%	2.67%
	Bi-Metal	3.50	6.48%	0.52%
	Ferrous/Tin	26.00	48.15%	3.86%
	Non-Ferrous	6.50	12.04%	0.97%
	White Goods	0.00	0.00%	0.00%
	Total:	**54.00**		**8.02%**
YARD WASTE	**Total:**	**130.00**		**19.30%**
OTHER ORGANICS	Food Waste	95.00	74.22%	14.11%
	Tires/Rubber	1.00	0.78%	0.15%
	Wood Wastes	25.50	19.92%	3.79%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	0.00	0.00%	0.00%
	Textile/Leather	6.50	5.08%	0.97%
	Total:	**128.00**		**19.02%**
OTHER WASTES	Inert Solids	6.00	27.27%	0.89%
	HHW	5.00	22.73%	0.74%
	Infectious Wastes (diapers, napkins)	11.00	50.00%	1.63%
	Total:	**22.00**		**3.26%**
SPECIAL WASTES	Ash	0.00	0.00%	0.00%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	0.00	0.00%	0.00%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	6.00	100.00%	0.89%
	Total:	**6.00**		**0.89%**
TOTAL SAMPLE:		**673.50**		**100.00%**

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table A-7

Residential Totals - Fall Season Sort

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	61.00	15.89%	5.55%
	Mixed	160.00	41.67%	14.57%
	Newspaper	117.50	30.60%	10.70%
	High Grade	0.00	0.00%	0.00%
	Other	45.50	11.85%	4.14%
	Total:	**384.00**		**34.96%**
PLASTIC	HDPE	14.00	10.04%	1.27%
	PET	3.50	2.51%	0.32%
	Film Plastics	77.50	55.56%	7.06%
	Other	44.50	31.90%	4.05%
	Total:	**139.50**		**12.70%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	42.00	37.33%	3.82%
	Other Recycled	68.50	60.89%	6.24%
	Non-Recyclable	2.00	1.78%	0.18%
	Total:	**112.50**		**10.24%**
METAL	Aluminum Cans	35.00	38.67%	3.19%
	Bi-Metal	2.00	2.21%	0.18%
	Ferrous/Tin	52.50	58.01%	4.78%
	Non-Ferrous	1.00	1.10%	0.09%
	White Goods	0.00	0.00%	0.00%
	Total:	**90.50**		**8.24%**
YARD WASTE	**Total:**	**43.00**		**3.91%**
OTHER ORGANICS	Food Waste	138.00	52.37%	12.56%
	Tires/Rubber	51.50	19.54%	4.69%
	Wood Wastes	22.00	8.35%	2.00%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	0.00	0.00%	0.00%
	Textile/Leather	52.00	19.73%	4.73%
	Total:	**263.50**		**23.98%**
OTHER WASTES	Inert Solids	0.00	0.00%	0.00%
	HHW	11.50	28.40%	1.05%
	Infectious Wastes (diapers, napkins)	29.00	71.60%	2.64%
	Total:	**40.50**		**3.69%**
SPECIAL WASTES	Ash	5.00	20.00%	0.46%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	0.00	0.00%	0.00%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	20.00	80.00%	1.82%
	Total:	**25.00**		**2.28%**
TOTAL SAMPLE:		**1098.50**		**100.00%**

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table A-8

Industrial Totals - Fall Season Sort

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	21.00	42.86%	7.89%
	Mixed	23.00	46.94%	8.65%
	Newspaper	5.00	10.20%	1.88%
	High Grade	0.00	0.00%	0.00%
	Other	0.00	0.00%	0.00%
	Total:	**49.00**		**18.42%**
PLASTIC	HDPE	2.00	9.52%	0.75%
	PET	1.00	4.76%	0.38%
	Film Plastics	5.00	23.81%	1.88%
	Other	13.00	61.90%	4.89%
	Total:	**21.00**		**7.89%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	11.00	55.00%	4.14%
	Other Recycled	7.00	35.00%	2.63%
	Non-Recyclable	2.00	10.00%	0.75%
	Total:	**20.00**		**7.52%**
METAL	Aluminum Cans	2.00	12.50%	0.75%
	Bi-Metal	1.00	6.25%	0.38%
	Ferrous/Tin	11.00	68.75%	4.14%
	Non-Ferrous	2.00	12.50%	0.75%
	White Goods	0.00	0.00%	0.00%
	Total:	**16.00**		**6.02%**
YARD WASTE	**Total:**	**4.00**		**1.50%**
OTHER ORGANICS	Food Waste	7.00	8.86%	2.63%
	Tires/Rubber	18.00	22.78%	6.77%
	Wood Wastes	43.00	54.43%	16.17%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	3.00	3.80%	1.13%
	Textile/Leather	8.00	10.13%	3.01%
	Total:	**79.00**		**29.70%**
OTHER WASTES	Inert Solids	15.00	51.72%	5.64%
	HHW	10.00	34.48%	3.76%
	Infectious Wastes (diapers, napkins)	4.00	13.79%	1.50%
	Total:	**29.00**		**10.90%**
SPECIAL WASTES	Ash	3.00	6.25%	1.13%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	6.00	12.50%	2.26%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	39.00	81.25%	14.66%
	Total:	**48.00**		**18.05%**
TOTAL SAMPLE:		**266.00**		**100.00%**

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table A-9

Statistical Parameters for Aggregate Fall Season Sampling

		Estimated Mean	Standard Deviation	Relative Precision	Range for Population Mean	
					Low	High
PAPER	Corrugated	8.42%	5.60%	2.45%	8.22%	8.63%
	Mixed	12.03%	6.87%	3.01%	11.67%	12.39%
	Newspaper	7.47%	5.33%	2.33%	7.30%	7.65%
	High Grade	0.48%	1.50%	0.66%	0.48%	0.48%
	Other	2.87%	1.49%	0.65%	2.86%	2.89%
PLASTIC	HDPE	0.68%	0.64%	0.28%	0.68%	0.68%
	PET	0.29%	0.24%	0.11%	0.29%	0.29%
	Film Plastics	4.36%	2.83%	1.24%	4.31%	4.41%
	Other	4.84%	3.11%	1.36%	4.77%	4.90%
GLASS	Refillable	0.00%	0.00%	0.00%	0.00%	0.00%
	Redemption	2.95%	2.05%	0.90%	2.92%	2.98%
	Other Recycled	4.98%	2.73%	1.20%	4.92%	5.04%
	Non-Recyclable	0.19%	0.37%	0.16%	0.19%	0.19%
METAL	Aluminum Cans	1.85%	1.52%	0.66%	1.84%	1.86%
	Bi-Metal	0.18%	0.34%	0.15%	0.18%	0.18%
	Ferrous/Tin	3.28%	1.73%	0.76%	3.26%	3.31%
	Non-Ferrous	0.65%	1.50%	0.66%	0.64%	0.65%
	White Goods	0.00%	0.00%	0.00%	0.00%	0.00%
YARD WASTE		11.63%	18.96%	8.31%	10.67%	12.60%
OTHER ORGANICS	Food Waste	12.59%	6.99%	3.06%	12.21%	12.98%
	Tires/Rubber	1.86%	5.50%	2.41%	1.82%	1.91%
	Wood Wastes	5.75%	6.63%	2.91%	5.58%	5.92%
	Ag. Crop Resid.	0.00%	0.00%	0.00%	0.00%	0.00%
	Manure	0.55%	1.24%	0.54%	0.55%	0.56%
	Textile/Leather	3.35%	2.70%	1.18%	3.31%	3.39%
OTHER WASTES	Inert Solids	1.65%	2.45%	1.07%	1.64%	1.67%
	HHW	1.98%	1.88%	0.83%	1.97%	2.00%
SPECIAL WASTES	Ash	0.65%	0.89%	0.39%	0.65%	0.65%
	Sewage Sludge	0.00%	0.00%	0.00%	0.00%	0.00%
	Indust. Sludge	0.00%	0.00%	0.00%	0.00%	0.00%
	Asbestos	0.00%	0.00%	0.00%	0.00%	0.00%
	Auto Shred Parts	0.14%	0.56%	0.25%	0.14%	0.14%
	Auto Bodies	1.19%	4.74%	2.08%	1.16%	1.21%
	Other Special	3.12%	4.81%	2.11%	3.06%	3.19%

APPENDIX B

Mono County Waste Characterization Study

Winter Season

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table B-1

Description of Sampling Statistics - Winter Season Sort

SOURCES:	No. of Samples	Maximum Sample (lbs.)	Minimum Sample (lbs.)	Mean Sample (lbs.)	Standard Deviation (lbs.)
Commercial Incorporated	8	374.00	201.00	265.19	51.63
Residential Incorporated	4	239.00	206.50	221.38	13.21
TOTAL SAMPLE STATS:	12	-	-	243.28	-

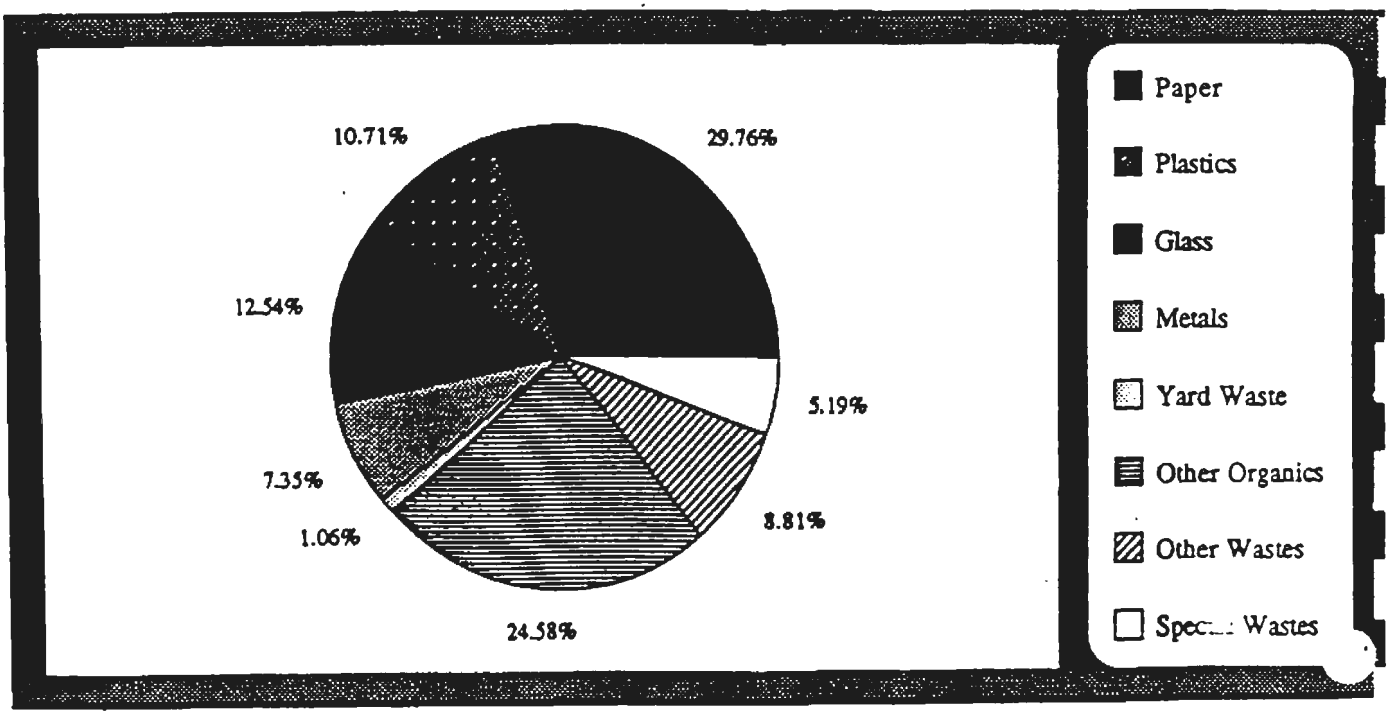
MONO COUNTY WASTE CHARACTERIZATION STUDY

Table B-2

Weekly Summary of Waste Quantities - Winter Season Sort

(Units in Pounds)

Type	Sample #	Location	Paper	Plastics	Glass	Metals	Yard Waste	Other Organics	Other Wastes	Special Wastes	Totals by Sample
Comm.	1	Mono County	118.00	25.00	30.00	20.00	3.00	105.00	21.00	52.00	374.00
Comm.	2	Mono County	67.00	26.00	35.00	12.50	1.00	75.00	40.00	1.00	25[illegible]
Comm.	3	Mono County	84.00	23.00	56.00	21.00	0.00	30.00	20.00	0.00	2[illegible]
Comm.	4	Mono County	80.00	29.00	35.00	17.00	8.00	98.00	15.00	6.00	288.00
Comm.	5	Mono County	100.00	37.00	27.00	26.00	7.00	62.00	25.00	15.00	299.00
Comm.	6	Mono County	67.00	36.00	17.00	20.00	0.00	80.00	30.00	3.00	253.00
Comm.	7	Mono County	57.00	21.00	27.00	22.00	5.00	52.00	17.00	0.00	201.00
Comm.	8	Mono County	46.00	22.00	17.00	32.00	0.00	59.00	15.00	24.00	215.00
Resid.	1	Mono County	56.00	30.00	32.00	14.50	4.00	53.00	5.00	12.00	206.50
Resid.	2	Mono County	55.00	25.00	33.00	15.00	4.00	20.00	48.00	29.00	229.00
Resid.	3	Mono County	69.00	27.00	35.00	8.00	0.00	69.00	17.00	14.00	239.00
Resid.	4	Mono County	96.00	21.00	33.00	13.00	0.00	36.00	12.00	0.00	211.00
Totals by Category (lbs.):			**895.00**	**322.00**	**377.00**	**221.00**	**32.00**	**739.00**	**265.00**	**156.00**	**3007.00**
:ntage by Category:			**29.76%**	**10.71%**	**12.54%**	**7.35%**	**1.06%**	**24.58%**	**8.81%**	**5.19%**	**100.00%**



MONO COUNTY WASTE CHARACTERIZATION STUDY

Table B-3

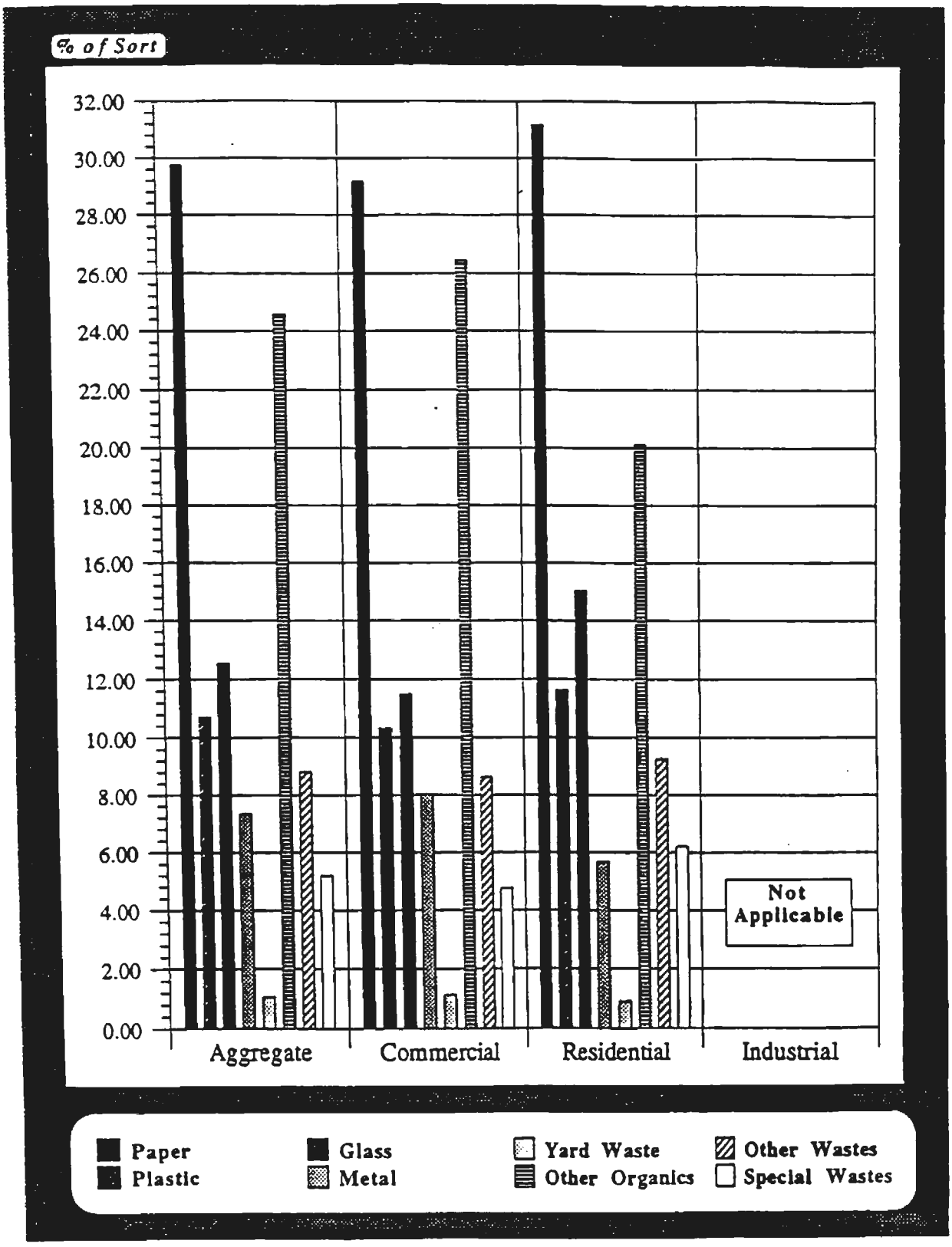
Solid Waste Stream Composition by % (wt. basis) - Winter Season Sort

		Aggregate Total Wt. %	Commercial Total Wt. %	Residential Total Wt. %	Industrial Total Wt. %
PAPER	Corrugated	11.21	9.57	15.13	0.00
	Mixed	13.93	14.99	11.41	0.00
	Newspaper	4.12	3.91	4.63	0.00
	High Grade	0.00	0.00	0.00	0.00
	Other	0.50	0.71	0.00	0.00
	Total:	**29.76**	**29.18**	**31.17**	**0.00**
PLASTIC	HDPE	1.96	1.46	3.16	0.00
	PET	0.50	0.28	1.02	0.00
	Film Plastics	3.79	4.34	2.48	0.00
	Other	4.46	4.24	4.97	0.00
	Total:	**10.71**	**10.32**	**11.63**	**0.00**
GLASS	Refillable	0.00	0.00	0.00	0.00
	Redemption	4.86	5.09	4.29	0.00
	Other Recycled	7.58	6.27	10.73	0.00
	Non-Recyclable	0.10	0.14	0.00	0.00
	Total:	**12.54**	**11.50**	**15.02**	**0.00**
METAL	Aluminum Cans	1.96	2.33	1.07	0.00
	Bi-Metal	0.60	0.61	0.56	0.00
	Ferrous/Tin	3.62	3.68	3.50	0.00
	Non-Ferrous	1.16	1.41	0.56	0.00
	White Goods	0.00	0.00	0.00	0.00
	Total:	**7.34**	**8.03**	**5.69**	**0.00**
YARD WASTE	**Total:**	**1.06**	**1.13**	**0.90**	**0.00**
OTHER ORGANICS	Food Waste	15.10	16.97	10.62	0.00
	Tires/Rubber	0.96	0.66	1.69	0.00
	Wood Wastes	4.62	5.42	2.71	0.00
	Ag. Crop Resid.	0.00	0.00	0.00	0.00
	Manure	0.40	0.00	1.36	0.00
	Textile/Leather	3.49	3.39	3.73	0.00
	Total:	**24.57**	**26.44**	**20.11**	**0.00**
OTHER WASTES	Inert Solids	1.26	1.79	0.00	0.00
	HHW	3.26	2.12	5.99	0.00
	Infectious Wastes	4.29	4.71	3.27	0.00
	(diapers, napkins)	0.00			
	Total:	**8.81**	**8.62**	**9.26**	**0.00**
SPECIAL WASTES	Ash	1.03	1.46	0.00	0.00
	Sewage Sludge	0.00	0.00	0.00	0.00
	Indust. Sludge	0.00	0.00	0.00	0.00
	Asbestos	0.00	0.00	0.00	0.00
	Auto Shred Parts	0.83	1.18	0.00	0.00
	Auto Bodies	0.00	0.00	0.00	0.00
	Other Special	3.33	2.12	6.21	0.00
	Total:	**5.19**	**4.76**	**6.21**	**0.00**

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table B-4

Solid Waste Stream Composition by % - Winter Season Sort



MONO COUNTY WASTE CHARACTERIZATION STUDY

Table B-5

Percent of Solid Waste Stream by Waste Category - Winter Season Sort

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	337.00	37.65%	11.21%
	Mixed	419.00	46.82%	13.93%
	Newspaper	124.00	13.85%	4.12%
	High Grade	0.00	0.00%	0.00%
	Other	15.00	1.68%	0.50%
	Total:	**895.00**		**29.76%**
PLASTIC	HDPE	59.00	18.32%	1.96%
	PET	15.00	4.66%	0.50%
	Film Plastics	114.00	35.40%	3.79%
	Other	134.00	41.61%	4.46%
	Total:	**322.00**		**10.71%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	146.00	38.73%	4.86%
	Other Recycled	228.00	60.48%	7.58%
	Non-Recyclable	3.00	0.80%	0.10%
	Total:	**377.00**		**12.54%**
METAL	Aluminum Cans	59.00	26.70%	1.96%
	Bi-Metal	18.00	8.14%	0.60%
	Ferrous/Tin	109.00	49.32%	3.62%
	Non-Ferrous	35.00	15.84%	1.16%
	White Goods	0.00	0.00%	0.00%
	Total:	**221.00**		**7.35%**
YARD WASTE	**Total:**	**32.00**		**1.06%**
OTHER ORGANICS	Food Waste	454.00	50.73%	15.10%
	Tires/Rubber	29.00	3.24%	0.96%
	Wood Wastes	139.00	15.53%	4.62%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	12.00	1.34%	0.40%
	Textile/Leather	105.00	11.73%	3.49%
	Total:	**739.00**		**24.58%**
OTHER WASTES	Inert Solids	38.00	14.34%	1.26%
	HHW	98.00	36.98%	3.26%
	Infectious Wastes (diapers, napkins)	129.00	48.68%	4.29%
	Total:	**265.00**		**8.81%**
SPECIAL WASTES	Ash	31.00	19.87%	1.03%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	25.00	16.03%	0.83%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	100.00	64.10%	3.33%
	Total:	**156.00**		**5.19%**
TOTAL SAMPLE:		**3007.00**		**100.00%**

MONO COUNTY WASTE CHARACTERIZATION STUDY
Table B-6
Commercial Totals - Winter Season Sort

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	203.00	32.79%	9.57%
	Mixed	318.00	51.37%	14.99%
	Newspaper	83.00	13.41%	3.91%
	High Grade	0.00	0.00%	0.00%
	Other	15.00	2.42%	0.71%
	Total:	**619.00**		**29.18%**
PLASTIC	HDPE	31.00	14.16%	1.46%
	PET	6.00	2.74%	0.28%
	Film Plastics	92.00	42.01%	4.34%
	Other	90.00	41.10%	4.24%
	Total:	**219.00**		**10.32%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	108.00	44.26%	5.09%
	Other Recycled	133.00	54.51%	6.27%
	Non-Recyclable	3.00	1.23%	0.14%
	Total:	**244.00**		**11.50%**
METAL	Aluminum Cans	49.50	29.03%	2.33%
	Bi-Metal	13.00	7.62%	0.61%
	Ferrous/Tin	78.00	45.75%	3.68%
	Non-Ferrous	30.00	17.60%	1.41%
	White Goods	0.00	0.00%	0.00%
	Total:	**170.50**		**8.03%**
YARD WASTE	**Total:**	**24.00**		**1.13%**
OTHER ORGANICS	Food Waste	360.00	64.17%	16.97%
	Tires/Rubber	14.00	2.50%	0.66%
	Wood Wastes	115.00	20.50%	5.42%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	0.00	0.00%	0.00%
	Textile/Leather	72.00	12.83%	3.39%
	Total:	**561.00**		**26.44%**
OTHER WASTES	Inert Solids	38.00	20.77%	1.79%
	HHW	45.00	24.59%	2.12%
	Infectious Wastes (diapers, napkins)	100.00	54.64%	4.71%
	Total:	**183.00**		**8.62%**
SPECIAL WASTES	Ash	31.00	30.69%	1.46%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	25.00	24.75%	1.18%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	45.00	44.55%	2.12%
	Total:	**101.00**		**4.76%**
TOTAL SAMPLE:		**2121.50**		**100.00%**

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table B-7

Residential Totals - Winter Season Sort

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	134.00	48.55%	15.13%
	Mixed	101.00	36.59%	11.41%
	Newspaper	41.00	14.86%	4.63%
	High Grade	0.00	0.00%	0.00%
	Other	0.00	0.00%	0.00%
	Total:	**276.00**		**31.17%**
PLASTIC	HDPE	28.00	27.18%	3.16%
	PET	9.00	8.74%	1.02%
	Film Plastics	22.00	21.36%	2.48%
	Other	44.00	42.72%	4.97%
	Total:	**103.00**		**11.63%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	38.00	28.57%	4.29%
	Other Recycled	95.00	71.43%	10.73%
	Non-Recyclable	0.00	0.00%	0.00%
	Total:	**133.00**		**15.02%**
METAL	Aluminum Cans	9.50	18.81%	1.07%
	Bi-Metal	5.00	9.90%	0.56%
	Ferrous/Tin	31.00	61.39%	3.50%
	Non-Ferrous	5.00	9.90%	0.56%
	White Goods	0.00	0.00%	0.00%
	Total:	**50.50**		**5.69%**
YARD WASTE	**Total:**	**8.00**		**0.90%**
OTHER ORGANICS	Food Waste	94.00	52.81%	10.62%
	Tires/Rubber	15.00	8.43%	1.69%
	Wood Wastes	24.00	13.48%	2.71%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	12.00	6.74%	1.36%
	Textile/Leather	33.00	18.54%	3.73%
	Total:	**178.00**		**20.11%**
OTHER WASTES	Inert Solids	0.00	0.00%	0.00%
	HHW	53.00	64.63%	5.99%
	Infectious Wastes (diapers, napkins)	29.00	35.37%	3.27%
	Total:	**82.00**		**9.26%**
SPECIAL WASTES	Ash	0.00	0.00%	0.00%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	0.00	0.00%	0.00%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	55.00	100.00%	6.21%
	Total:	**55.00**		**6.21%**
TOTAL SAMPLE:		**885.50**		**100.00%**

APPENDIX C

Mono County Waste Characterization Study

Combined Fall/Winter Season

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table C-1

Description of Sampling Statistics - Fall/Winter Season Sorts

SOURCES:	No. of Samples	Maximum Sample (lbs.)	Minimum Sample (lbs.)	Mean Sample (lbs.)	Standard Deviation (lbs.)
Commercial Unincorporated	11	374.00	195.50	249.45	52.41
Residential Unincorporated	9	239.00	206.50	226.11	13.95
Industrial Unincorporated	1	266.00	266.00	266.00	0.00
TOTAL SAMPLE STATS:	21	-	-	247.19	-

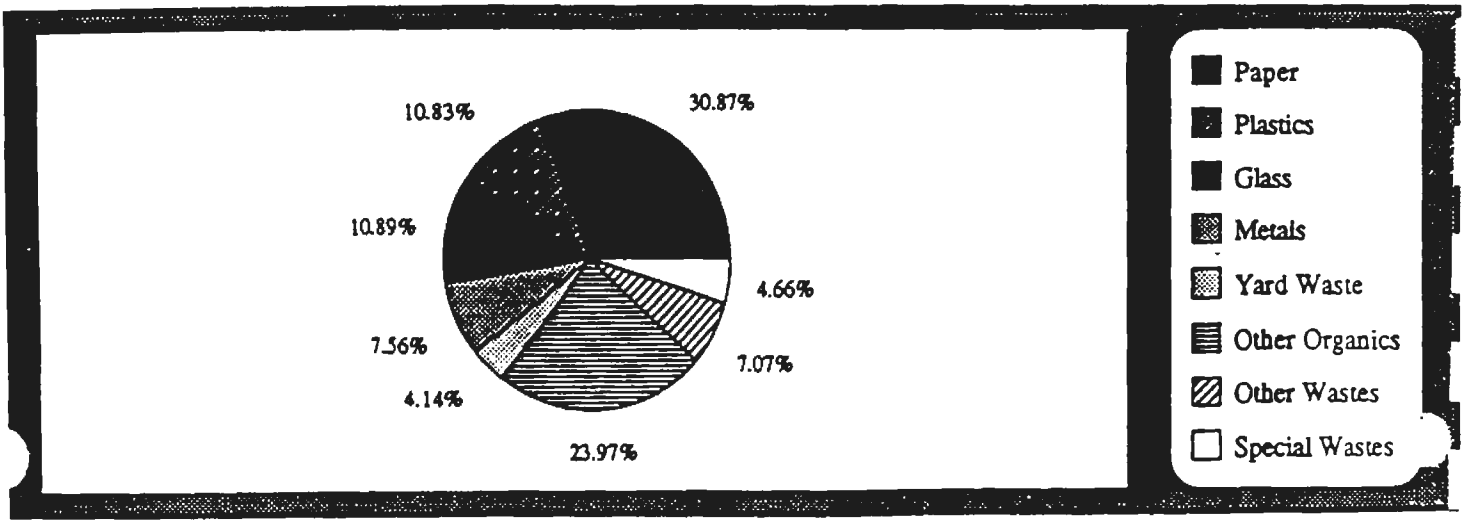
MONO COUNTY WASTE CHARACTERIZATION STUDY

Table C-2

Weekly Summary of Waste Quantities - Fall/Winter Season Sorts

(Units in Pounds)

Type	Sample #	Location	Paper	Plastics	Glass	Metals	Yard Waste	Other Organics	Other Wastes	Special Wastes	Totals by Sample
Comm.	1	June Lks./Lee V	80.50	10.50	17.00	19.00	27.00	41.50	18.00	3.00	216.50
Comm.	2	June Lks./Lee V	112.00	16.00	19.00	17.00	2.00	58.00	6.50	0.00	230.50
Resid.	1	June Lks./Lee V	63.00	20.00	31.50	12.50	5.00	55.50	24.50	9.00	221.00
Indust.	1	June Lks./Lee V	49.00	21.00	20.00	16.00	4.00	79.00	29.00	48.00	266.00
Resid.	1	Bridgeport	63.00	30.00	21.00	17.00	0.00	86.00	3.00	8.00	228.00
Resid.	2	Bridgeport	117.00	41.50	19.00	19.00	0.00	45.50	2.00	11.00	255.00
Resid.	1	Walker	73.00	49.50	23.00	20.00	16.00	42.00	5.50	0.00	229.00
Resid.	2	Walker	74.00	33.50	21.00	22.00	22.00	41.00	3.00	0.00	216.50
Comm.	1	Walker	31.00	2.50	1.00	18.00	101.00	22.00	0.00	0.00	175.50
Comm.	1	Mono County	118.00	25.00	30.00	20.00	3.00	105.00	21.00	52.00	374.00
Comm.	2	Mono County	67.00	26.00	35.00	12.50	1.00	75.00	40.00	1.00	257.50
Comm.	3	Mono County	84.00	23.00	56.00	21.00	0.00	30.00	20.00	0.00	234.00
Comm.	4	Mono County	80.00	29.00	35.00	17.00	8.00	98.00	15.00	6.00	288.00
Comm.	5	Mono County	100.00	37.00	27.00	26.00	7.00	62.00	25.00	15.00	299.00
Comm.	6	Mono County	67.00	36.00	17.00	20.00	0.00	80.00	30.00	3.00	253.00
n.	7	Mono County	57.00	21.00	27.00	22.00	5.00	52.00	17.00	0.00	20
Comm.	8	Mono County	46.00	22.00	17.00	32.00	0.00	59.00	15.00	24.00	215.00
Resid.	1	Mono County	56.00	30.00	32.00	14.50	4.00	53.00	5.00	12.00	206.50
Resid.	2	Mono County	55.00	25.00	33.00	15.00	4.00	20.00	48.00	29.00	229.00
Resid.	3	Mono County	69.00	27.00	35.00	8.00	0.00	69.00	17.00	14.00	239.00
Resid.	4	Mono County	96.00	21.00	33.00	13.00	0.00	36.00	12.00	0.00	211.00
Totals by Category (lbs.):			**1,557.50**	**546.50**	**549.50**	**381.50**	**209.00**	**1,209.50**	**356.50**	**235.00**	**5,045.00**
Percentage by Category:			**30.87%**	**10.83%**	**10.89%**	**7.56%**	**4.14%**	**23.97%**	**7.07%**	**4.66%**	**100.00%**



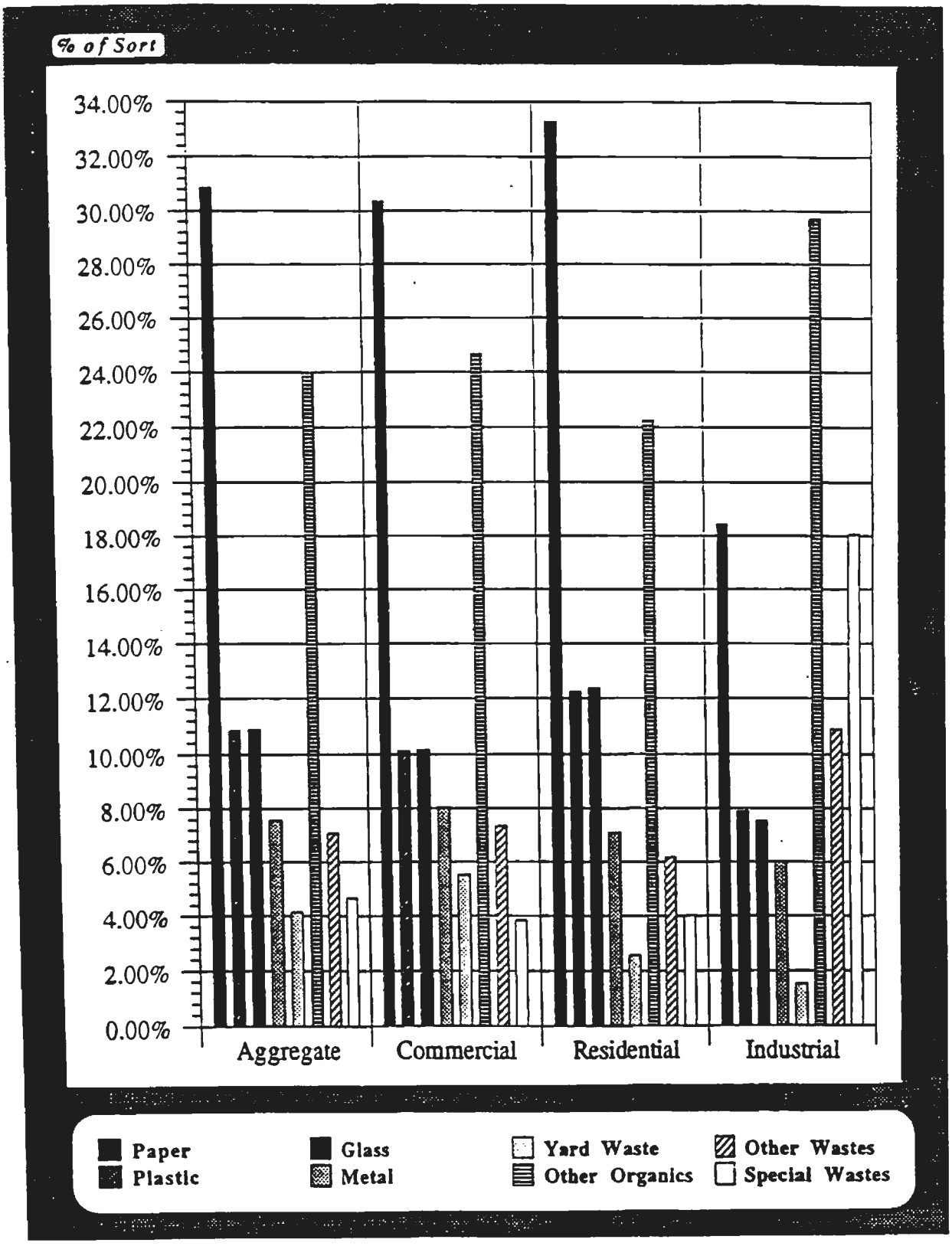
MONO COUNTY WASTE CHARACTERIZATION STUDY

Table C-3

Solid Waste Stream Composition by % (wt. basis) - Fall/Winter Season

		Aggregate Total Wt. %	Commercial Total Wt. %	Residential Total Wt. %	Industrial Total Wt. %
PAPER	Corrugated	9.23%	8.93%	9.83%	7.89%
	Mixed	14.15%	15.39%	13.16%	8.65%
	Newspaper	6.01%	4.97%	7.99%	1.88%
	High Grade	0.01%	0.02%	0.00%	0.00%
	Other	1.48%	1.04%	2.29%	0.00%
	Total:	**30.87%**	**30.35%**	**33.27%**	**18.42%**
PLASTIC	HDPE	1.57%	1.25%	2.12%	0.75%
	PET	0.43%	0.29%	0.63%	0.38%
	Film Plastics	4.00%	3.49%	5.02%	1.88%
	Other	4.84%	5.10%	4.46%	4.89%
	Total:	**10.83%**	**10.13%**	**12.23%**	**7.89%**
GLASS	Refillable	0.00%	0.00%	0.00%	0.00%
	Redemption	4.32%	4.54%	4.03%	4.14%
	Other Recycled	6.42%	5.49%	8.24%	2.63%
	Non-Recyclable	0.15%	0.13%	0.10%	0.75%
	Total:	**10.89%**	**10.16%**	**12.37%**	**7.52%**
METAL	Aluminum Cans	2.26%	2.42%	2.24%	0.75%
	Bi-Metal	0.49%	0.59%	0.35%	0.38%
	Ferrous/Tin	3.93%	3.72%	4.21%	4.14%
	Non-Ferrous	0.88%	1.31%	0.30%	0.75%
	White Goods	0.00%	0.00%	0.00%	0.00%
	Total:	**7.56%**	**8.04%**	**7.10%**	**6.02%**
YARD WASTE	**Total:**	**4.14%**	**5.51%**	**2.57%**	**1.50%**
OTHER ORGANICS	Food Waste	13.76%	16.28%	11.69%	2.63%
	Tires/Rubber	1.97%	0.54%	3.35%	6.77%
	Wood Wastes	4.55%	5.03%	2.32%	16.17%
	Ag. Crop Resid.	0.00%	0.00%	0.00%	0.00%
	Manure	0.30%	0.00%	0.60%	1.13%
	Textile/Leather	3.40%	2.81%	4.28%	3.01%
	Total:	**23.97%**	**24.66%**	**22.24%**	**29.70%**
OTHER WASTES	Inert Solids	1.17%	1.57%	0.00%	5.64%
	HHW	2.46%	1.79%	3.25%	3.76%
	Infectious Wastes (diapers, napkins)	3.44%	3.97%	2.92%	1.50%
	Total:	**7.07%**	**7.33%**	**6.17%**	**10.90%**
SPECIAL WASTES	Ash	0.75%	1.11%	0.25%	1.13%
	Sewage Sludge	0.00%	0.00%	0.00%	0.00%
	Indust. Sludge	0.00%	0.00%	0.00%	0.00%
	Asbestos	0.00%	0.00%	0.00%	0.00%
	Auto Shred Parts	0.61%	0.89%	0.00%	2.26%
	Auto Bodies	0.00%	0.00%	0.00%	0.00%
	Other Special	3.29%	1.83%	3.78%	14.66%
	Total:	**4.66%**	**3.83%**	**4.03%**	**18.05%**

MONO COUNTY WASTE CHARACTERIZATION STUDY
Table C-4
Solid Waste Stream Composition by % - Fall/Winter Season Sorts



MONO COUNTY WASTE CHARACTERIZATION STUDY

Table C-5

Percent of Solid Waste Stream by Waste Category - Fall/Winter Season Sorts

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	465.50	29.89%	9.23%
	Mixed	714.00	45.84%	14.15%
	Newspaper	303.00	19.45%	6.01%
	High Grade	0.50	0.03%	0.01%
	Other	74.50	4.78%	1.48%
	Total:	**1557.50**		**30.87%**
PLASTIC	HDPE	79.00	14.46%	1.57%
	PET	21.50	3.93%	0.43%
	Film Plastics	202.00	36.96%	4.00%
	Other	244.00	44.65%	4.84%
	Total:	**546.50**		**10.83%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	218.00	39.67%	4.32%
	Other Recycled	324.00	58.96%	6.42%
	Non-Recyclable	7.50	1.36%	0.15%
	Total:	**549.50**		**10.89%**
METAL	Aluminum Cans	114.00	29.88%	2.26%
	Bi-Metal	24.50	6.42%	0.49%
	Ferrous/Tin	198.50	52.03%	3.93%
	Non-Ferrous	44.50	11.66%	0.88%
	White Goods	0.00	0.00%	0.00%
	Total:	**381.50**		**7.56%**
YARD WASTE	**Total:**	**209.00**		**4.14%**
OTHER ORGANICS	Food Waste	694.00	44.56%	13.76%
	Tires/Rubber	99.50	6.39%	1.97%
	Wood Wastes	229.50	14.74%	4.55%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	15.00	0.96%	0.30%
	Textile/Leather	171.50	11.01%	3.40%
	Total:	**1209.50**		**23.97%**
OTHER WASTES	Inert Solids	59.00	16.55%	1.17%
	HHW	124.00	34.78%	2.46%
	Infectious Wastes (diapers, napkins)	173.50	48.67%	3.44%
	Total:	**356.50**		**7.07%**
SPECIAL WASTES	Ash	38.00	16.17%	0.75%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	31.00	13.19%	0.61%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	166.00	70.64%	3.29%
	Total:	**235.00**		**4.66%**
TOTAL SAMPLE:		**5045.00**		**100.00%**

Table C-6

Commercial Totals - Fall/Winter Season Sorts

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	249.50	29.42%	8.93%
	Mixed	430.00	50.71%	15.39%
	Newspaper	139.00	16.39%	4.97%
	High Grade	0.50	0.06%	0.02%
	Other	29.00	3.42%	1.04%
	Total:	**848.00**		**30.35%**
PLASTIC	HDPE	35.00	12.37%	1.25%
	PET	8.00	2.83%	0.29%
	Film Plastics	97.50	34.45%	3.49%
	Other	142.50	50.35%	5.10%
	Total:	**283.00**		**10.13%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	127.00	44.72%	4.54%
	Other Recycled	153.50	54.05%	5.49%
	Non-Recyclable	3.50	1.23%	0.13%
	Total:	**284.00**		**10.16%**
METAL	Aluminum Cans	67.50	30.07%	2.42%
	Bi-Metal	16.50	7.35%	0.59%
	Ferrous/Tin	104.00	46.33%	3.72%
	Non-Ferrous	36.50	16.26%	1.31%
	White Goods	0.00	0.00%	0.00%
	Total:	**224.50**		**8.04%**
YARD WASTE	**Total:**	**154.00**		**5.51%**
OTHER ORGANICS	Food Waste	455.00	66.04%	16.28%
	Tires/Rubber	15.00	2.18%	0.54%
	Wood Wastes	140.50	20.39%	5.03%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	0.00	0.00%	0.00%
	Textile/Leather	78.50	11.39%	2.81%
	Total:	**689.00**		**24.66%**
OTHER WASTES	Inert Solids	44.00	21.46%	1.57%
	HHW	50.00	24.39%	1.79%
	Infectious Wastes (diapers, napkins)	111.00	54.15%	3.97%
	Total:	**205.00**		**7.33%**
SPECIAL WASTES	Ash	31.00	28.97%	1.11%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	25.00	23.36%	0.89%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	51.00	47.66%	1.83%
	Total:	**107.00**		**3.83%**
TOTAL SAMPLE:		**2794.50**		**100.00%**

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table C-7

Residential Totals - Fall/Winter Season Sorts

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	195.00	29.55%	9.83%
	Mixed	261.00	39.55%	13.16%
	Newspaper	158.50	24.02%	7.99%
	High Grade	0.00	0.00%	0.00%
	Other	45.50	6.89%	2.29%
	Total:	**660.00**		**33.27%**
PLASTIC	HDPE	42.00	17.32%	2.12%
	PET	12.50	5.15%	0.63%
	Film Plastics	99.50	41.03%	5.02%
	Other	88.50	36.49%	4.46%
	Total:	**242.50**		**12.23%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	80.00	32.59%	4.03%
	Other Recycled	163.50	66.60%	8.24%
	Non-Recyclable	2.00	0.81%	0.10%
	Total:	**245.50**		**12.37%**
METAL	Aluminum Cans	44.50	31.56%	2.24%
	Bi-Metal	7.00	4.96%	0.35%
	Ferrous/Tin	83.50	59.22%	4.21%
	Non-Ferrous	6.00	4.26%	0.30%
	White Goods	0.00	0.00%	0.00%
	Total:	**141.00**		**7.10%**
YARD WASTE	**Total:**	**51.00**		**2.57%**
OTHER ORGANICS	Food Waste	232.00	52.55%	11.69%
	Tires/Rubber	66.50	15.06%	3.35%
	Wood Wastes	46.00	10.42%	2.32%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	12.00	2.72%	0.60%
	Textile/Leather	85.00	19.25%	4.28%
	Total:	**441.50**		**22.24%**
OTHER WASTES	Inert Solids	0.00	0.00%	0.00%
	HHW	64.50	52.65%	3.25%
	Infectious Wastes (diapers, napkins)	58.00	47.35%	2.92%
	Total:	**122.50**		**6.17%**
SPECIAL WASTES	Ash	5.00	6.25%	0.25%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	0.00	0.00%	0.00%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	75.00	93.75%	3.78%
	Total:	**80.00**		**4.03%**
TOTAL SAMPLE:		**1984.00**		**100.00%**

MONO COUNTY WASTE CHARACTERIZATION STUDY

Table C-8

Industrial Totals - Fall/Winter Season Sorts

		Weight (lbs)	Percent of Category	Percent of Total
PAPER	Corrugated	21.00	42.86%	7.89%
	Mixed	23.00	46.94%	8.65%
	Newspaper	5.00	10.20%	1.88%
	High Grade	0.00	0.00%	0.00%
	Other	0.00	0.00%	0.00%
	Total:	**49.00**		**18.42%**
PLASTIC	HDPE	2.00	9.52%	0.75%
	PET	1.00	4.76%	0.38%
	Film Plastics	5.00	23.81%	1.88%
	Other	13.00	61.90%	4.89%
	Total:	**21.00**		**7.89%**
GLASS	Refillable	0.00	0.00%	0.00%
	Redemption	11.00	55.00%	4.14%
	Other Recycled	7.00	35.00%	2.63%
	Non-Recyclable	2.00	10.00%	0.75%
	Total:	**20.00**		**7.52%**
METAL	Aluminum Cans	2.00	12.50%	0.75%
	Bi-Metal	1.00	6.25%	0.38%
	Ferrous/Tin	11.00	68.75%	4.14%
	Non-Ferrous	2.00	12.50%	0.75%
	White Goods	0.00	0.00%	0.00%
	Total:	**16.00**		**6.02%**
YARD WASTE	**Total:**	**4.00**		**1.50%**
OTHER ORGANICS	Food Waste	7.00	8.86%	2.63%
	Tires/Rubber	18.00	22.78%	6.77%
	Wood Wastes	43.00	54.43%	16.17%
	Ag. Crop Resid.	0.00	0.00%	0.00%
	Manure	3.00	3.80%	1.13%
	Textile/Leather	8.00	10.13%	3.01%
	Total:	**79.00**		**29.70%**
OTHER WASTES	Inert Solids	15.00	51.72%	5.64%
	HHW	10.00	34.48%	3.76%
	Infectious Wastes (diapers, napkins)	4.00	13.79%	1.50%
	Total:	**29.00**		**10.90%**
SPECIAL WASTES	Ash	3.00	6.25%	1.13%
	Sewage Sludge	0.00	0.00%	0.00%
	Indust. Sludge	0.00	0.00%	0.00%
	Asbestos	0.00	0.00%	0.00%
	Auto Shred Parts	6.00	12.50%	2.26%
	Auto Bodies	0.00	0.00%	0.00%
	Other Special	39.00	81.25%	14.66%
	Total:	**48.00**		**18.05%**
TOTAL SAMPLE:		**266.00**		**100.00%**

APPENDIX D

Waste Composition by Seasonal Variation

WASTE COMPOSITION BY SEASONAL VARIATIONS (% basis)
Table D-1

	FALL (Oct-Dec)	WINTER (Jan-Mar)	SPRING (Apr-Jun)	SUMMER (Jul-Sep)
PAPER TOTAL	**30.57%**	**36.08%**	**34.17%**	**34.22%**
Corrugated	11.47%	11.71%	9.78%	11.08%
Mixed	9.42%	18.41%	15.78%	10.47%
Newspaper	5.85%	5.38%	7.38%	9.68%
High Grade	1.00%	0.58%	0.36%	0.27%
Other	2.83%	0.00%	0.87%	2.72%
PLASTIC TOTAL	**8.45%**	**10.90%**	**9.83%**	**10.67%**
HDPE	0.36%	0.70%	1.58%	2.05%
PET	0.22%	0.66%	0.89%	1.22%
Film Plastics	4.60%	5.55%	4.21%	3.84%
Other Plastics	3.27%	3.99%	3.15%	3.56%
GLASS TOTAL	**7.79%**	**9.65%**	**11.92%**	**13.39%**
Refillable	0.00%	0.00%	0.00%	0.00%
Redemption	2.33%	4.97%	5.26%	5.53%
Other Recycled	5.29%	4.15%	6.28%	7.65%
Non-Recyclable	0.17%	0.53%	0.38%	0.21%
METAL TOTAL	**3.66%**	**5.71%**	**9.48%**	**8.96%**
Aluminum Cans	0.89%	1.48%	2.47%	2.05%
Bi-metal	0.00%	1.11%	2.39%	1.52%
Ferrous/Tin	1.83%	1.97%	3.66%	5.13%
Non-ferrous	0.94%	1.15%	0.96%	0.26%
White Goods	0.00%	0.00%	0.00%	0.00%
YARD WASTE TOTAL	**12.83%**	**2.14%**	**10.28%**	**11.53%**
OTHER ORGANICS	**26.06%**	**23.54%**	**24.77%**	**21.55%**
Food Waste	14.14%	12.49%	12.89%	11.50%
Tires/Rubber	0.00%	0.74%	1.67%	1.20%
Wood Wastes	7.32%	8.30%	7.24%	6.20%
Ag. Crop Resid.	0.00%	0.00%	0.00%	0.00%
Manure	1.11%	0.08%	0.60%	0.70%
Textile/Leather	3.49%	1.93%	2.37%	1.95%
OTHER WASTES	**4.27%**	**6.66%**	**5.04%**	**5.56%**
Inert Solids	0.94%	2.20%	2.15%	0.90%
HWW	2.11%	1.56%	1.96%	1.05%
Infectious	1.22%	2.88%	0.93%	3.61%
SPECIAL WASTES	**6.38%**	**5.30%**	**6.39%**	**4.17%**
Ash	0.78%	0.82%	0.36%	0.60%
Sewage Sludge	0.00%	0.00%	0.00%	0.00%
Ind. Sludge	0.00%	0.00%	0.00%	0.00%
Asbestos	0.00%	0.00%	0.00%	0.00%
Auto Shred Parts	2.44%	0.04%	2.57%	1.94%
Auto Bodies	0.00%	0.00%	0.00%	0.00%
Other Special	3.16%	4.44%	3.46%	1.63%

APPENDIX E

Twelve-Month Sampling Period

MONO COUNTY WASTE TYPES BY MONTH (Tons basis)

Table E-1

		WINTER			SPRING			SUMMER			FALL		
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
PAPER	Corrugated	104.34	90.43	83.47	63.32	68.60	79.15	116.70	115.61	111.55	61.75	60.84	59.03
	Mixed	129.66	112.37	103.73	98.33	106.53	122.91	125.59	124.42	120.05	138.69	136.66	132.58
	Newspaper	38.35	33.24	30.68	46.56	50.44	58.20	100.03	99.10	95.61	85.17	83.92	81.41
	High Grade	0.00	0.00	0.00	0.74	0.81	0.93	0.56	0.55	0.53	0.19	0.19	0.19
	Other	4.65	4.03	3.72	5.59	6.05	6.98	6.67	6.61	6.37	28.16	27.75	26.92
	Total:	**277.00**	**240.07**	**221.60**	**222.00**	**240.50**	**277.47**	**349.54**	**346.29**	**334.12**	**313.97**	**309.36**	**300.12**
PLASTIC	HDPE	18.24	15.81	14.59	9.31	10.09	11.64	16.67	16.52	15.94	9.39	9.25	8.97
	PET	4.65	4.03	3.72	3.72	4.04	4.66	7.78	7.71	7.44	3.10	3.05	2.96
	Film Plastics	35.28	30.57	28.22	29.05	31.47	36.31	23.90	23.67	22.84	41.33	40.72	39.50
	Other Plastics	41.51	35.98	33.21	26.07	28.25	32.59	34.45	34.13	32.93	35.23	34.71	33.68
	Total:	**99.69**	**86.40**	**79.75**	**68.16**	**73.84**	**85.20**	**82.80**	**82.03**	**79.15**	**89.04**	**87.73**	**85.11**
GLASS	Refillable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Redemption	45.24	39.20	36.19	30.54	33.09	38.18	54.46	53.95	52.06	33.78	33.28	32.29
	Other Recycled	70.55	61.15	56.44	52.89	57.30	66.11	91.69	90.84	87.65	46.46	45.77	44.41
	Non-Recyclable	0.93	0.81	0.74	1.86	2.02	2.33	1.11	1.10	1.06	2.13	2.10	2.04
	Total:	**116.72**	**101.16**	**93.38**	**85.30**	**92.41**	**106.61**	**147.26**	**145.89**	**140.76**	**82.36**	**81.15**	**78.73**
METAL	Aluminum Cans	18.24	15.81	14.59	11.17	12.11	13.97	22.78	22.57	21.78	25.84	25.46	24.70
	Bi-metal	5.58	4.84	4.47	3.72	4.04	4.66	8.34	8.26	7.97	3.10	3.05	2.96
	Ferrous/Tin	33.69	29.20	26.96	23.84	25.83	29.80	49.46	49.00	47.28	42.01	41.39	40.15
	Non-ferrous	10.80	9.36	8.64	3.72	4.04	4.66	0.56	0.55	0.53	4.45	4.39	4.26
	White Goods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	**68.32**	**59.21**	**54.66**	**42.46**	**46.00**	**53.07**	**81.13**	**80.38**	**77.55**	**75.40**	**74.29**	**72.07**
YARD WASTE	**Total:**	**9.87**	**8.55**	**7.89**	**81.95**	**88.77**	**102.42**	**125.59**	**124.42**	**120.05**	**83.14**	**81.92**	**79.47**
OTHER ORGANICS	Food Waste	140.55	121.81	112.44	91.26	98.86	114.06	127.81	126.63	122.17	115.76	114.05	110.65
	Tires/Rubber	8.94	7.74	7.15	17.88	19.37	22.35	13.34	13.21	12.75	33.10	32.61	31.64
	Wood Wastes	43.00	37.27	34.40	45.44	49.23	56.80	68.91	68.27	65.87	42.49	41.86	40.61
	Ag. Crop Resid.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Manure	3.72	3.23	2.98	4.47	4.84	5.59	7.78	7.71	7.44	1.45	1.43	1.39
	Textile/Leather	32.48	28.15	25.99	20.11	21.79	25.14	14.45	14.31	13.81	31.26	30.80	29.88
	Total:	**228.69**	**198.20**	**182.96**	**179.16**	**194.09**	**223.93**	**232.28**	**230.13**	**222.04**	**224.06**	**220.77**	**214.17**
OTHER WASTES	Inert Solids	11.73	10.16	9.38	16.39	17.75	20.48	10.00	9.91	9.56	22.26	21.93	21.28
	HWW	30.34	26.30	24.27	11.17	12.11	13.97	11.67	11.56	11.15	12.49	12.30	11.93
	Infectious	39.93	34.61	31.94	14.15	15.33	17.69	44.46	44.04	42.49	25.55	25.18	24.42
	Total:	**82.00**	**71.07**	**65.60**	**41.72**	**45.19**	**52.14**	**66.13**	**65.51**	**63.21**	**60.30**	**59.41**	**57.64**
SPECIAL WASTES	Ash	9.59	8.31	7.67	2.98	3.23	3.72	6.67	6.61	6.37	5.90	5.82	5.64
	Sewage Sludge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ind. Sludge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Asbestos	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Auto Shred Part	7.73	6.70	6.18	1.12	1.21	1.40	12.23	12.11	11.69	2.81	2.77	2.68
	Auto Bodies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other Special	30.99	26.86	24.80	20.11	21.79	25.14	7.78	7.71	7.44	30.97	30.52	29.61
	Total:	**48.31**	**41.87**	**38.65**	**24.21**	**26.23**	**30.26**	**26.67**	**26.43**	**25.50**	**39.68**	**39.10**	**37.93**

APPENDIX F

Waste Disposal by Generator Category

RESIDENTIAL GENERATOR

Table F-1

		Wt. (Tons)	%	Vol. (Cu.Yds.)
PER	Corrugated	317.99	8.83%	847.97
	Mixed	723.85	20.10%	1,930.27
	Newspaper	181.14	5.03%	483.05
	High Grade	7.20	0.20%	19.21
	Other	51.50	1.43%	137.33
	Total	**1,281.68**	**35.59%**	**3,417.83**
PLASTIC	HDPE	38.53	1.07%	102.76
	PET	14.77	0.41%	39.37
	Film Plastics	231.56	6.43%	617.49
	Other Plastics	144.41	4.01%	385.09
	Total	**429.27**	**11.92%**	**1,144.72**
GLASS	Refillable	0.00	0.00%	0.00
	Redemption	108.40	3.01%	289.06
	Other Recycled	201.31	5.59%	536.83
	Non-Recyclable	7.20	0.20%	19.21
	Total	**316.91**	**8.80%**	**845.09**
METAL	Aluminum Cans	40.33	1.12%	107.56
	Bi-metal	25.57	0.71%	68.18
	Ferrous/Tin	92.91	2.58%	247.77
	Non-ferrous	73.47	2.04%	195.91
	White Goods	0.00	0.00%	0.00
	Total	**232.28**	**6.45%**	**619.42**
YARD WASTE	Total	**246.33**	**6.84%**	**656.87**
OTHER ORGANICS	Food Waste	472.12	13.11%	1,259.00
	Tires/Rubber	25.57	0.71%	68.18
	Wood Wastes	130.37	3.62%	347.64
	Ag. Crop Resid.	0.00	0.00%	0.00
	Manure	25.57	0.71%	68.18
	Textile/Leather	126.76	3.52%	338.04
	Total	**780.39**	**21.67%**	**2,081.04**
OTHER WASTES	Inert Solids	3.60	0.10%	9.60
	HHW	46.10	1.28%	122.92
	Infectious Wastes (Diapers,Medical)	148.73	4.13%	396.62
	Total	**198.43**	**5.51%**	**529.14**
SPECIAL WASTES	Ash	47.90	1.33%	127.72
	Sewage Sludge	0.00	0.00%	0.00
	Ind. Sludge	0.00	0.00%	0.00
	Asbestos	0.00	0.00%	0.00
	Auto Shred Parts	0.00	0.00%	0.00
	Auto Bodies	0.00	0.00%	0.00
	Other Special	68.06	1.89%	181.50
	Total	**115.96**	**3.22%**	**309.23**
TOTAL SAMPLE WT.		**3,601.25**		**9,603.33**

COMMERCIAL GENERATOR

Table F-2

		Wt. (Tons)	%	Vol. (Cu.Yds.)
PAPER	Corrugated	1,061.68	15.33%	2,831.14
	Mixed	759.03	10.96%	2,024.09
	Newspaper	474.40	6.85%	1,265.05
	High Grade	96.26	1.39%	256.70
	Other	78.95	1.14%	210.53
	Total	**2,470.32**	**35.67%**	**6,587.52**
PLASTIC	HDPE	8.31	0.12%	22.16
	PET	41.55	0.60%	110.81
	Film Plastics	315.80	4.56%	842.14
	Other Plastics	342.12	4.94%	912.32
	Total	**707.78**	**10.22%**	**1,887.42**
GLASS	Refillable	0.00	0.00%	0.00
	Redemption	357.35	5.16%	952.95
	Other Recycled	299.18	4.32%	797.82
	Non-Recyclable	38.09	0.55%	101.57
	Total	**694.63**	**10.03%**	**1,852.34**
METAL	Aluminum Cans	103.19	1.49%	275.17
	Bi-metal	41.55	0.60%	110.81
	Ferrous/Tin	104.57	1.51%	278.87
	Non-ferrous	6.93	0.10%	18.47
	White Goods	0.00	0.00%	0.00
	Total	**256.24**	**3.70%**	**683.31**
YARD WASTE	**Total**	**513.87**	**7.42%**	**1,370.32**
OTHER ORGANICS	Food Waste	1,037.44	14.98%	2,766.50
	Tires/Rubber	13.85	0.20%	36.94
	Wood Wastes	508.33	7.34%	1,355.55
	Ag. Crop Resid.	0.00	0.00%	0.00
	Manure	27.70	0.40%	73.87
	Textile/Leather	140.59	2.03%	374.90
	Total	**1,727.91**	**24.95%**	**4,607.75**
OTHER WASTES	Inert Solids	20.78	0.30%	55.40
	HHW	150.98	2.18%	402.60
	Infectious Wastes (Diapers,Medical)	38.09	0.55%	101.57
	Total	**209.84**	**3.03%**	**559.58**
SPECIAL WASTES	Ash	24.24	0.35%	64.64
	Sewage Sludge	0.00	0.00%	0.00
	Ind. Sludge	0.00	0.00%	0.00
	Asbestos	0.00	0.00%	0.00
	Auto Shred Parts	154.44	2.23%	411.84
	Auto Bodies	0.00	0.00%	0.00
	Other Special	168.29	2.43%	448.77
	Total	**346.97**	**5.01%**	**925.24**
TOTAL SAMPLE WT.		**6,925.48**		**18,473.49**

INDUSTRIAL GENERATOR

Table F-3

		Wt. (Tons)	%	Vol. (Cu.Yds.)
ER	Corrugated	43.71	7.89%	116.57
	Mixed	47.92	8.65%	127.80
	Newspaper	10.42	1.88%	27.78
	High Grade	0.00	0.00%	0.00
	Other	0.00	0.00%	0.00
	Total	**102.05**	**18.42%**	**272.14**
PLASTIC	HDPE	4.16	0.75%	11.08
	PET	2.11	0.38%	5.61
	Film Plastics	10.42	1.88%	27.78
	Other Plastics	27.09	4.89%	72.25
	Total	**43.71**	**7.89%**	**116.57**
GLASS	Refillable	0.00	0.00%	0.00
	Redemption	22.94	4.14%	61.17
	Other Recycled	14.57	2.63%	38.86
	Non-Recyclable	4.16	0.75%	11.08
	Total	**41.66**	**7.52%**	**111.10**
METAL	Aluminum Cans	4.16	0.75%	11.08
	Bi-metal	2.11	0.38%	5.61
	Ferrous/Tin	22.94	4.14%	61.17
	Non-ferrous	4.16	0.75%	11.08
	White Goods	0.00	0.00%	0.00
	Total	**33.35**	**6.02%**	**88.94**
YARD WASTE	**Total**	**8.31**	**1.50%**	**22.16**
OTHER ORGANICS	Food Waste	14.57	2.63%	38.86
	Tires/Rubber	37.51	6.77%	100.02
	Wood Wastes	89.59	16.17%	238.90
	Ag. Crop Resid.	0.00	0.00%	0.00
	Manure	6.26	1.13%	16.70
	Textile/Leather	16.68	3.01%	44.47
	Total	**164.55**	**29.70%**	**438.80**
OTHER WASTES	Inert Solids	31.25	5.64%	83.33
	HHW	20.83	3.76%	55.55
	Infectious Wastes (Diapers,Medical)	8.31	1.50%	22.16
	Total	**60.39**	**10.90%**	**161.04**
SPECIAL WASTES	Ash	6.26	1.13%	16.70
	Sewage Sludge	0.00	0.00%	0.00
	Ind. Sludge	0.00	0.00%	0.00
	Asbestos	0.00	0.00%	0.00
	Auto Shred Parts	12.52	2.26%	33.39
	Auto Bodies	0.00	0.00%	0.00
	Other Special	81.22	14.66%	216.59
	Total	**100.00**	**18.05%**	**266.68**
TOTAL SAMPLE WT.		**554.04**		**1,477.44**

APPENDIX G

Solid Waste Diversion Report

Mono County Unincorporated Area

DIVERSION REPORT

Existing Diversion by Program - Tons/Year

Program	Total	Residential	Commercial
Recycling			
AB2020 Centers	66.0	52.8	13.2
Government Agencies	104.9	0	104.9
Riding Stables	280.0	0	280.0
Rendering Companies	20.5	0	20.5
Restaurants & Stores	24.2	0	24.2
Tire Retailers	0.1	0	0.1
Scrap Metal Dealers	75.0	60.0	15.0
Subtotal	570.7	112.8	457.8
Source Reduction			
Shoe Repair Shops	0.1	0.1	0
Used Clothing Stores	0.1	0.1	0
Subtotal	0.2	0.2	0
Total	**570.8**	**113.0**	**457.8**

Existing Diversion by Material Type - Tons/Year

Material	Total	Residential	Commercial
CRV Glass	64.0	27.0	37.0
Aluminum	35.7	25.6	10.1
PET	1.3	0.2	1.1
Ferrous Metal	91.8	60.0	31.8
Food Waste	20.5	0	20.5
Tires	0.1	0	0.1
Manure	280.0	0	280.0
Inert Material	75.0	0	75.0
Textiles & Leather	0.2	0.2	0
Ledger Paper	2 2	0	2.2
Total	**570.8**	**113.0**	**457.8**

APPENDIX H

Fifteen-Year Projections (1991-2005)

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

Existing Conditions

WASTE TYPE	1991				1992			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,060	0	1,060	0.0%	1,066	0	1,066	0.0%
Mixed Paper	1,596	0	1,596	0.0%	1,605	0	1,605	0.0%
Newspaper	645	0	645	0.0%	649	0	649	0.0%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	168	0	168	0.0%	169	0	169	0.0%
Subtotal	3,470	2	3,472	0.1%	3,490	2	3,492	0.1%
Plastic								
HDPE	167	0	167	0.0%	168	0	168	0.0%
PET	46	1	47	2.8%	46	1	48	2.8%
Film plastics	447	0	447	0.0%	450	0	450	0.0%
Other plastics	548	0	548	0.0%	551	0	551	0.0%
Subtotal	1,208	1	1,210	0.1%	1,215	1	1,217	0.1%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	484	64	549	11.7%	487	65	552	11.7%
Other recyclable glass	697	0	697	0.0%	701	0	701	0.0%
Other non-recyclable glass	88	0	88	0.0%	89	0	89	0.0%
Subtotal	1,269	64	1,333	4.8%	1,276	65	1,341	4.8%
Metals								
Aluminum cans	253	36	289	12.4%	254	36	290	12.4%
Bi-Metal	57	0	57	0.0%	57	0	57	0.0%
Ferrous metals	468	92	561	16.5%	471	93	564	16.5%
Non-ferrous metals	130	0	130	0.0%	131	0	131	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	908	128	1,037	12.4%	914	129	1,043	12.4%
Yard Waste	618	0	618	0.0%	622	0	622	0.0%
Organics								
Food waste	1,574	21	1,594	1.3%	1,583	21	1,604	1.3%
Tires & Rubber	197	0	197	0.1%	198	0	198	0.1%
Wood	1,742	0	1,742	0.0%	1,752	0	1,752	0.0%
Textiles and leather	373	0	373	0.1%	375	0	375	0.1%
Diapers	258	0	258	0.0%	259	0	259	0.0%
Manure	28	282	310	90.9%	28	283	311	90.9%
Misc. Organics	133	0	133	0.0%	134	0	134	0.0%
Subtotal	4,305	303	4,607	6.6%	4,329	304	4,634	6.6%
Other Wastes								
Inert solids	1,175	75	1,251	6.0%	1,182	76	1,258	6.0%
HHW	264	0	264	0.0%	266	0	266	0.0%
Subtotal	1,440	75	1,515	5.0%	1,448	76	1,524	5.0%
Special Wastes								
Ash	93	0	93	0.0%	93	0	93	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	75	0	75	0.0%	75	0	75	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	346	0	346	0.0%	348	0	348	0.0%
Subtotal	513	0	513	0.0%	516	0	516	0.0%
Total Waste	13,731	574	14,305	4.0%	13,811	577	14,388	4.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

Existing Conditions

WASTE TYPE	1993				1994			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,072	0	1,072	0.0%	1,078	0	1,078	0.0%
Mixed Paper	1,614	0	1,614	0.0%	1,624	0	1,624	0.0%
Newspaper	653	0	653	0.0%	656	0	656	0.0%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	170	0	170	0.0%	171	0	171	0.0%
Subtotal	3,510	2	3,513	0.1%	3,531	2	3,533	0.1%
Plastic								
HDPE	169	0	169	0.0%	170	0	170	0.0%
PET	47	1	48	2.8%	47	1	48	2.8%
Film plastics	452	0	452	0.0%	455	0	455	0.0%
Other plastics	555	0	555	0.0%	558	0	558	0.0%
Subtotal	1,222	1	1,224	0.1%	1,230	1	1,231	0.1%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	490	65	555	11.7%	493	65	558	11.7%
Other recyclable glass	705	0	705	0.0%	709	0	709	0.0%
Other non-recyclable glass	89	0	89	0.0%	90	0	90	0.0%
Subtotal	1,284	65	1,349	4.8%	1,291	65	1,357	4.8%
Metals								
Aluminum cans	256	36	292	12.4%	257	36	294	12.4%
Bi-Metal	58	0	58	0.0%	58	0	58	0.0%
Ferrous metals	474	93	567	16.5%	476	94	570	16.5%
Non-ferrous metals	132	0	132	0.0%	133	0	133	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	919	130	1,049	12.4%	924	130	1,055	12.4%
Yard Waste	626	0	626	0.0%	629	0	629	0.0%
Organics								
Food waste	1,592	21	1,613	1.3%	1,601	21	1,622	1.3%
Tires & Rubber	199	0	199	0.1%	200	0	200	0.1%
Wood	1,762	0	1,762	0.0%	1,773	0	1,773	0.0%
Textiles and leather	377	0	377	0.1%	379	0	379	0.1%
Diapers	261	0	261	0.0%	262	0	262	0.0%
Manure	28	285	313	90.9%	29	287	315	90.9%
Misc. Organics	135	0	135	0.0%	136	0	136	0.0%
Subtotal	4,355	306	4,661	6.6%	4,380	308	4,688	6.6%
Other Wastes								
Inert solids	1,189	76	1,265	6.0%	1,196	77	1,272	6.0%
HHW	268	0	268	0.0%	269	0	269	0.0%
Subtotal	1,456	76	1,533	5.0%	1,465	77	1,541	5.0%
Special Wastes								
Ash	94	0	94	0.0%	94	0	94	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	75	0	75	0.0%	76	0	76	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	350	0	350	0.0%	352	0	352	0.0%
Subtotal	519	0	519	0.0%	522	0	522	0.0%
Total Waste	13,891	581	14,472	4.0%	13,972	584	14,556	4.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

Existing Conditions

WASTE TYPE	1995				1996			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,085	0	1,085	0.0%	1,091	0	1,091	0.0%
Mixed Paper	1,633	0	1,633	0.0%	1,643	0	1,643	0.0%
Newspaper	660	0	660	0.0%	664	0	664	0.0%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	172	0	172	0.0%	173	0	173	0.0%
Subtotal	3,551	2	3,554	0.1%	3,572	2	3,574	0.1%
Plastic								
HDPE	171	0	171	0.0%	172	0	172	0.0%
PET	47	1	49	2.8%	48	1	49	2.8%
Film plastics	457	0	457	0.0%	460	0	460	0.0%
Other plastics	561	0	561	0.0%	564	0	564	0.0%
Subtotal	1,237	1	1,238	0.1%	1,244	1	1,245	0.1%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	496	66	561	11.7%	498	66	565	11.7%
Other recyclable glass	713	0	713	0.0%	717	0	717	0.0%
Other non-recyclable glass	90	0	90	0.0%	91	0	91	0.0%
Subtotal	1,299	66	1,364	4.8%	1,306	66	1,372	4.8%
Metals								
Aluminum cans	259	37	295	12.4%	260	37	297	12.4%
Bi-Metal	58	0	58	0.0%	59	0	59	0.0%
Ferrous metals	479	94	574	16.5%	482	95	577	16.5%
Non-ferrous metals	134	0	134	0.0%	134	0	134	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	930	131	1,061	12.4%	935	132	1,067	12.4%
Yard Waste	633	0	633	0.0%	637	0	637	0.0%
Organics								
Food waste	1,611	21	1,632	1.3%	1,620	21	1,641	1.3%
Tires & Rubber	201	0	201	0.1%	202	0	203	0.1%
Wood	1,783	0	1,783	0.0%	1,793	0	1,793	0.0%
Textiles and leather	381	0	382	0.1%	384	0	384	0.1%
Diapers	264	0	264	0.0%	265	0	265	0.0%
Manure	29	288	317	90.9%	29	290	319	90.9%
Misc. Organics	137	0	137	0.0%	137	0	137	0.0%
Subtotal	4,405	310	4,715	6.6%	4,431	311	4,742	6.6%
Other Wastes								
Inert solids	1,203	77	1,280	6.0%	1,210	78	1,287	6.0%
HHW	271	0	271	0.0%	272	0	272	0.0%
Subtotal	1,473	77	1,550	5.0%	1,482	78	1,559	5.0%
Special Wastes								
Ash	95	0	95	0.0%	95	0	95	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	76	0	76	0.0%	77	0	77	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	354	0	354	0.0%	356	0	356	0.0%
Subtotal	525	0	525	0.0%	528	0	528	0.0%
Total Waste	14,053	588	14,640	4.0%	14,134	591	14,725	4.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

Existing Conditions

WASTE TYPE	1997				1998			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,097	0	1,097	0.0%	1,104	0	1,104	0.0%
Mixed Paper	1,652	0	1,652	0.0%	1,662	0	1,662	0.0%
Newspaper	668	0	668	0.0%	672	0	672	0.0%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	174	0	174	0.0%	175	0	175	0.0%
Subtotal	3,593	2	3,595	0.1%	3,613	2	3,616	0.1%
Plastic								
HDPE	173	0	173	0.0%	174	0	174	0.0%
PET	48	1	49	2.8%	48	1	49	2.8%
Film plastics	463	0	463	0.0%	465	0	465	0.0%
Other plastics	568	0	568	0.0%	571	0	571	0.0%
Subtotal	1,251	1	1,252	0.1%	1,258	1	1,260	0.1%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	501	67	568	11.7%	504	67	571	11.7%
Other recyclable glass	721	0	721	0.0%	725	0	725	0.0%
Other non-recyclable glass	91	0	91	0.0%	92	0	92	0.0%
Subtotal	1,314	67	1,380	4.8%	1,321	67	1,388	4.8%
Metals								
Aluminum cans	262	37	299	12.4%	263	37	301	12.4%
Bi-Metal	59	0	59	0.0%	59	0	59	0.0%
Ferrous metals	485	96	580	16.5%	488	96	584	16.5%
Non-ferrous metals	135	0	135	0.0%	136	0	136	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	941	133	1,073	12.4%	946	133	1,079	12.4%
Yard Waste	640	0	640	0.0%	644	0	644	0.0%
Organics								
Food waste	1,629	21	1,651	1.3%	1,639	21	1,660	1.3%
Tires & Rubber	204	0	204	0.1%	205	0	205	0.1%
Wood	1,804	0	1,804	0.0%	1,814	0	1,814	0.0%
Textiles and leather	386	0	386	0.1%	388	0	388	0.1%
Diapers	267	0	267	0.0%	268	0	268	0.0%
Manure	29	292	321	90.9%	29	293	322	90.9%
Misc. Organics	138	0	138	0.0%	139	0	139	0.0%
Subtotal	4,457	313	4,770	6.6%	4,482	315	4,797	6.6%
Other Wastes								
Inert solids	1,217	78	1,295	6.0%	1,224	79	1,302	6.0%
HHW	274	0	274	0.0%	275	0	275	0.0%
Subtotal	1,490	78	1,568	5.0%	1,499	79	1,578	5.0%
Special Wastes								
Ash	96	0	96	0.0%	96	0	96	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	77	0	77	0.0%	78	0	78	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	358	0	358	0.0%	360	0	360	0.0%
Subtotal	531	0	531	0.0%	534	0	534	0.0%
Total Waste	14,216	594	14,811	4.0%	14,299	598	14,897	4.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

Existing Conditions

WASTE TYPE	1999				2000			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,110	0	1,110	0.0%	1,116	0	1,116	0.0%
Mixed Paper	1,671	0	1,671	0.0%	1,681	0	1,681	0.0%
Newspaper	676	0	676	0.0%	679	0	679	0.0%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	176	0	176	0.0%	177	0	177	0.0%
Subtotal	3,634	2	3,637	0.1%	3,655	2	3,658	0.1%
Plastic								
HDPE	175	0	175	0.0%	176	0	176	0.0%
PET	48	1	50	2.8%	49	1	50	2.8%
Film plastics	468	0	468	0.0%	471	0	471	0.0%
Other plastics	574	0	574	0.0%	578	0	578	0.0%
Subtotal	1,266	1	1,267	0.1%	1,273	1	1,274	0.1%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	507	67	575	11.7%	510	68	578	11.7%
Other recyclable glass	730	0	730	0.0%	734	0	734	0.0%
Other non-recyclable glass	92	0	92	0.0%	93	0	93	0.0%
Subtotal	1,329	67	1,396	4.8%	1,337	68	1,405	4.8%
Metals								
Aluminum cans	265	38	302	12.4%	266	38	304	12.4%
Bi-Metal	60	0	60	0.0%	60	0	60	0.0%
Ferrous metals	490	97	587	16.5%	493	97	590	16.5%
Non-ferrous metals	137	0	137	0.0%	137	0	137	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	#DIV/0!
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	951	134	1,086	12.4%	957	135	1,092	12.4%
Yard Waste	648	0	648	0.0%	651	0	651	0.0%
Organics								
Food waste	1,648	22	1,670	1.3%	1,658	22	1,680	1.3%
Tires & Rubber	206	0	206	0.1%	207	0	207	0.1%
Wood	1,825	0	1,825	0.0%	1,835	0	1,835	0.0%
Textiles and leather	390	0	391	0.1%	393	0	393	0.1%
Diapers	270	0	270	0.0%	271	0	271	0.0%
Manure	29	295	324	90.9%	30	297	326	90.9%
Misc. Organics	140	0	140	0.0%	141	0	141	0.0%
Subtotal	4,508	317	4,825	6.6%	4,535	319	4,853	6.6%
Other Wastes								
Inert solids	1,231	79	1,310	6.0%	1,238	79	1,317	6.0%
HHW	277	0	277	0.0%	279	0	279	0.0%
Subtotal	1,508	79	1,587	5.0%	1,516	79	1,596	5.0%
Special Wastes								
Ash	97	0	97	0.0%	98	0	98	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	78	0	78	0.0%	79	0	79	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	362	0	362	0.0%	365	0	365	0.0%
Subtotal	538	0	538	0.0%	541	0	541	0.0%
Total Waste	14,382	601	14,983	4.0%	14,465	605	15,070	4.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

Existing Conditions

WASTE TYPE	2001				2002			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,123	0	1,123	0.0%	1,129	0	1,129	0.0%
Mixed Paper	1,691	0	1,691	0.0%	1,701	0	1,701	0.0%
Newspaper	683	0	683	0.0%	687	0	687	0.0%
Ledger	1	2	4	62.2%	2	2	4	62.2%
Other Paper	178	0	178	0.0%	179	0	179	0.0%
Subtotal	3,677	2	3,679	0.1%	3,698	2	3,700	0.1%
Plastic								
HDPE	177	0	177	0.0%	178	0	178	0.0%
PET	49	1	50	2.8%	49	1	51	2.8%
Film plastics	474	0	474	0.0%	476	0	476	0.0%
Other plastics	581	0	581	0.0%	584	0	584	0.0%
Subtotal	1,280	1	1,282	0.1%	1,288	1	1,289	0.1%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	513	68	581	11.7%	516	69	585	11.7%
Other recyclable glass	738	0	738	0.0%	742	0	742	0.0%
Other non-recyclable glass	93	0	93	0.0%	94	0	94	0.0%
Subtotal	1,344	68	1,413	4.8%	1,352	69	1,421	4.8%
Metals								
Aluminum cans	268	38	306	12.4%	269	38	308	12.4%
Bi-Metal	60	0	60	0.0%	61	0	61	0.0%
Ferrous metals	496	98	594	16.5%	499	98	597	16.5%
Non-ferrous metals	138	0	138	0.0%	139	0	139	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	963	136	1,098	12.4%	968	137	1,105	12.4%
Yard Waste	655	0	655	0.0%	659	0	659	0.0%
Organics								
Food waste	1,668	22	1,689	1.3%	1,677	22	1,699	1.3%
Tires & Rubber	208	0	208	0.1%	210	0	210	0.1%
Wood	1,846	0	1,846	0.0%	1,857	0	1,857	0.0%
Textiles and leather	395	0	395	0.1%	397	0	397	0.1%
Diapers	273	0	273	0.0%	275	0	275	0.0%
Manure	30	298	328	90.9%	30	300	330	90.9%
Misc. Organics	141	0	141	0.0%	142	0	142	0.0%
Subtotal	4,561	321	4,881	6.6%	4,587	322	4,910	6.6%
Other Wastes								
Inert solids	1,245	80	1,325	6.0%	1,252	80	1,333	6.0%
HHW	280	0	280	0.0%	282	0	282	0.0%
Subtotal	1,525	80	1,605	5.0%	1,534	80	1,614	5.0%
Special Wastes								
Ash	98	0	98	0.0%	99	0	99	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	79	0	79	0.0%	79	0	79	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	367	0	367	0.0%	369	0	369	0.0%
Subtotal	544	0	544	0.0%	547	0	547	0.0%
Total Waste	14,549	608	15,157	4.0%	14,633	612	15,245	4.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

Existing Conditions

WASTE TYPE	2003				2004			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,136	0	1,136	0.0%	1,143	0	1,143	0.0%
Mixed Paper	1,710	0	1,710	0.0%	1,720	0	1,720	0.0%
Newspaper	691	0	691	0.0%	695	0	695	0.0%
Ledger	2	2	4	62.2%	2	2	4	62.2%
Other Paper	180	0	180	0.0%	181	0	181	0.0%
Subtotal	3,719	2	3,722	0.1%	3,741	2	3,743	0.1%
Plastic								
HDPE	179	0	179	0.0%	180	0	180	0.0%
PET	49	1	51	2.8%	50	1	51	2.8%
Film plastics	479	0	479	0.0%	482	0	482	0.0%
Other plastics	588	0	588	0.0%	591	0	591	0.0%
Subtotal	1,295	1	1,297	0.1%	1,303	1	1,304	0.1%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	519	69	588	11.7%	522	69	591	11.7%
Other recyclable glass	747	0	747	0.0%	751	0	751	0.0%
Other non-recyclable glass	94	0	94	0.0%	95	0	95	0.0%
Subtotal	1,360	69	1,429	4.8%	1,368	69	1,437	4.8%
Metals								
Aluminum cans	271	38	309	12.4%	273	39	311	12.4%
Bi-Metal	61	0	61	0.0%	61	0	61	0.0%
Ferrous metals	502	99	601	16.5%	505	100	604	16.5%
Non-ferrous metals	140	0	140	0.0%	141	0	141	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	974	137	1,111	12.4%	979	138	1,118	12.4%
Yard Waste	663	0	663	0.0%	667	0	667	0.0%
Organics								
Food waste	1,687	22	1,709	1.3%	1,697	22	1,719	1.3%
Tires & Rubber	211	0	211	0.1%	212	0	212	0.1%
Wood	1,867	0	1,867	0.0%	1,878	0	1,878	0.0%
Textiles and leather	400	0	400	0.1%	402	0	402	0.1%
Diapers	276	0	276	0.0%	278	0	278	0.0%
Manure	30	302	332	90.9%	30	304	334	90.9%
Misc. Organics	143	0	143	0.0%	144	0	144	0.0%
Subtotal	4,614	324	4,938	6.6%	4,641	326	4,967	6.6%
Other Wastes								
Inert solids	1,260	81	1,340	6.0%	1,267	81	1,348	6.0%
HHW	283	0	283	0.0%	285	0	285	0.0%
Subtotal	1,543	81	1,624	5.0%	1,552	81	1,633	5.0%
Special Wastes								
Ash	99	0	99	0.0%	100	0	100	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	80	0	80	0.0%	80	0	80	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	371	0	371	0.0%	373	0	373	0.0%
Subtotal	550	0	550	0.0%	553	0	553	0.0%
Total Waste	14,718	615	15,334	4.0%	14,804	619	15,422	4.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

Existing Conditions

WASTE TYPE	2005				2006			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,149	0	1,149	0.0%	1,156	0	1,156	0.0%
Mixed Paper	1,730	0	1,730	0.0%	1,740	0	1,740	0.0%
Newspaper	699	0	699	0.0%	703	0	703	0.0%
Ledger	2	3	4	62.2%	2	3	4	62.2%
Other Paper	182	0	182	0.0%	183	0	183	0.0%
Subtotal	3,763	3	3,765	0.1%	3,784	3	3,787	0.1%
Plastic								
HDPE	181	0	181	0.0%	182	0	182	0.0%
PET	50	1	51	2.8%	50	1	52	2.8%
Film plastics	485	0	485	0.0%	487	0	487	0.0%
Other plastics	594	0	594	0.0%	598	0	598	0.0%
Subtotal	1,310	1	1,312	0.1%	1,318	1	1,319	0.1%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	525	70	595	11.7%	528	70	598	11.7%
Other recyclable glass	755	0	755	0.0%	760	0	760	0.0%
Other non-recyclable glass	96	0	96	0.0%	96	0	96	0.0%
Subtotal	1,376	70	1,446	4.8%	1,384	70	1,454	4.8%
Metals								
Aluminum cans	274	39	313	12.4%	276	39	315	12.4%
Bi-Metal	62	0	62	0.0%	62	0	62	0.0%
Ferrous metals	508	100	608	16.5%	511	101	611	16.5%
Non-ferrous metals	141	0	141	0.0%	142	0	142	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	985	139	1,124	12.4%	991	140	1,131	12.4%
Yard Waste	671	0	671	0.0%	674	0	674	0.0%
Organics								
Food waste	1,707	22	1,729	1.3%	1,717	22	1,739	1.3%
Tires & Rubber	213	0	213	0.1%	214	0	215	0.1%
Wood	1,889	0	1,889	0.0%	1,900	0	1,900	0.0%
Textiles and leather	404	0	404	0.1%	407	0	407	0.1%
Diapers	279	0	279	0.0%	281	0	281	0.0%
Manure	30	305	336	90.9%	31	307	338	90.9%
Misc. Organics	145	0	145	0.0%	146	0	146	0.0%
Subtotal	4,668	328	4,996	6.6%	4,695	330	5,025	6.6%
Other Wastes								
Inert solids	1,274	82	1,356	6.0%	1,282	82	1,364	6.0%
HHW	287	0	287	0.0%	288	0	288	0.0%
Subtotal	1,561	82	1,643	5.0%	1,570	82	1,652	5.0%
Special Wastes								
Ash	100	0	100	0.0%	101	0	101	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	81	0	81	0.0%	81	0	81	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	375	0	375	0.0%	377	0	377	0.0%
Subtotal	557	0	557	0.0%	560	0	560	0.0%
Total Waste	14,889	623	15,512	4.0%	14,976	626	15,602	4.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

With SRRE Implementation

WASTE TYPE	1991				1992			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,060	0	1,060	0.0%	1,066	0	1,066	0.0%
Mixed Paper	1,596	0	1,596	0.0%	1,605	0	1,605	0.0%
Newspaper	645	0	645	0.0%	649	0	649	0.0%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	168	0	168	0.0%	169	0	169	0.0%
Subtotal	3,470	2	3,472	0.1%	3,490	2	3,492	0.1%
Plastic								
HDPE	167	0	167	0.0%	168	0	168	0.0%
PET	46	1	47	2.8%	46	1	48	2.8%
Film plastics	447	0	447	0.0%	450	0	450	0.0%
Other plastics	548	0	548	0.0%	551	0	551	0.0%
Subtotal	1,208	1	1,210	0.1%	1,215	1	1,217	0.1%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	484	64	549	11.7%	487	65	552	11.7%
Other recyclable glass	697	0	697	0.0%	701	0	701	0.0%
Other non-recyclable glass	88	0	88	0.0%	89	0	89	0.0%
Subtotal	1,269	64	1,333	4.8%	1,276	65	1,341	4.8%
Metals								
Aluminum cans	253	36	289	12.4%	254	36	290	12.4%
Bi-Metal	57	0	57	0.0%	57	0	57	0.0%
Ferrous metals	468	92	561	16.5%	471	93	564	16.5%
Non-ferrous metals	130	0	130	0.0%	131	0	131	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	908	128	1,037	12.4%	914	129	1,043	12.4%
Yard Waste	618	0	618	0.0%	622	0	622	0.0%
Organics								
Food waste	1,574	21	1,594	1.3%	1,583	21	1,604	1.3%
Tires & Rubber	197	0	197	0.1%	198	0	198	0.1%
Wood	1,742	0	1,742	0.0%	1,752	0	1,752	0.0%
Textiles and leather	373	0	373	0.1%	375	0	375	0.1%
Diapers	258	0	258	0.0%	259	0	259	0.0%
Manure	28	282	310	90.9%	28	283	311	90.9%
Misc. Organics	133	0	133	0.0%	134	0	134	0.0%
Subtotal	4,305	303	4,607	6.6%	4,329	304	4,634	6.6%
Other Wastes								
Inert solids	1,175	75	1,251	6.0%	1,182	76	1,258	6.0%
HHW	264	0	264	0.0%	266	0	266	0.0%
Subtotal	1,440	75	1,515	5.0%	1,448	76	1,524	5.0%
Special Wastes								
Ash	93	0	93	0.0%	93	0	93	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	75	0	75	0.0%	75	0	75	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	346	0	346	0.0%	348	0	348	0.0%
Subtotal	513	0	513	0.0%	516	0	516	0.0%
Total Waste	13,731	574	14,305	4.0%	13,811	577	14,388	4.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

With SRRE Implementation

WASTE TYPE	1993				1994			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	1,072	0	1,072	0.0%	521	558	1,078	51.7%
Mixed Paper	1,614	0	1,614	0.0%	1,586	38	1,624	2.3%
Newspaper	653	0	653	0.0%	477	179	656	27.3%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	170	0	170	0.0%	171	0	171	0.0%
Subtotal	3,510	2	3,513	0.1%	2,756	777	3,533	22.0%
Plastic								
HDPE	169	0	169	0.0%	149	20	170	12.0%
PET	47	1	48	2.8%	32	17	48	34.5%
Film plastics	452	0	452	0.0%	455	0	455	0.0%
Other plastics	555	0	555	0.0%	527	31	558	5.5%
Subtotal	1,222	1	1,224	0.1%	1,163	68	1,231	5.5%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	490	65	555	11.7%	288	270	558	48.4%
Other recyclable glass	705	0	705	0.0%	300	409	709	57.7%
Other non-recyclable glass	89	0	89	0.0%	90	0	90	0.0%
Subtotal	1,284	65	1,349	4.8%	677	679	1,357	50.1%
Metals								
Aluminum cans	256	36	292	12.4%	134	159	294	54.2%
Bi-Metal	58	0	58	0.0%	58	0	58	0.0%
Ferrous metals	474	93	567	16.5%	476	94	570	16.5%
Non-ferrous metals	132	0	132	0.0%	133	0	133	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	919	130	1,049	12.4%	802	253	1,055	24.0%
Yard Waste	626	0	626	0.0%	629	0	629	0.0%
Organics								
Food waste	1,592	21	1,613	1.3%	1,601	21	1,622	1.3%
Tires & Rubber	199	0	199	0.1%	200	0	200	0.1%
Wood	1,762	0	1,762	0.0%	1,752	20	1,773	1.2%
Textiles and leather	377	0	377	0.1%	379	0	379	0.1%
Diapers	261	0	261	0.0%	262	0	262	0.0%
Manure	28	285	313	90.9%	29	287	315	90.9%
Misc. Organics	135	0	135	0.0%	136	0	136	0.0%
Subtotal	4,355	306	4,661	6.6%	4,359	328	4,688	7.0%
Other Wastes								
Inert solids	1,189	76	1,265	6.0%	1,196	77	1,272	6.0%
HHW	268	0	268	0.0%	269	0	269	0.0%
Subtotal	1,456	76	1,533	5.0%	1,465	77	1,541	5.0%
Special Wastes								
Ash	94	0	94	0.0%	94	0	94	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	75	0	75	0.0%	76	0	76	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	350	0	350	0.0%	352	0	352	0.0%
Subtotal	519	0	519	0.0%	522	0	522	0.0%
Total Waste	13,891	581	14,472	4.0%	12,373	2,182	14,556	15.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

With SRRE Implementation

WASTE TYPE	1995				1996			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	524	561	1,085	51.7%	527	564	1,091	51.7%
Mixed Paper	1,595	38	1,633	2.3%	1,553	90	1,643	5.5%
Newspaper	480	180	660	27.3%	483	181	664	27.3%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	172	0	172	0.0%	173	0	173	0.0%
Subtotal	2,772	781	3,554	22.0%	2,737	838	3,574	23.4%
Plastic								
HDPE	150	21	171	12.0%	151	21	172	12.0%
PET	32	17	49	34.5%	32	17	49	34.5%
Film plastics	457	0	457	0.0%	460	0	460	0.0%
Other plastics	530	31	561	5.5%	533	31	564	5.5%
Subtotal	1,170	68	1,238	5.5%	1,177	69	1,245	5.5%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	290	272	561	48.4%	291	273	565	48.4%
Other recyclable glass	301	412	713	57.7%	303	414	717	57.7%
Other non-recyclable glass	90	0	90	0.0%	91	0	91	0.0%
Subtotal	681	683	1,364	50.1%	685	687	1,372	50.1%
Metals								
Aluminum cans	135	160	295	54.2%	136	161	297	54.2%
Bi-Metal	58	0	58	0.0%	59	0	59	0.0%
Ferrous metals	479	94	574	16.5%	482	95	577	16.5%
Non-ferrous metals	134	0	134	0.0%	134	0	134	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	806	255	1,061	24.0%	811	256	1,067	24.0%
Yard Waste	633	0	633	0.0%	637	0	637	0.0%
Organics								
Food waste	1,611	21	1,632	1.3%	1,620	21	1,641	1.3%
Tires & Rubber	201	0	201	0.1%	202	0	203	0.1%
Wood	1,762	21	1,783	1.2%	1,773	21	1,793	1.2%
Textiles and leather	381	0	382	0.1%	332	52	384	13.5%
Diapers	264	0	264	0.0%	265	0	265	0.0%
Manure	29	288	317	90.9%	29	290	319	90.9%
Misc. Organics	137	0	137	0.0%	137	0	137	0.0%
Subtotal	4,385	330	4,715	7.0%	4,358	384	4,742	8.1%
Other Wastes								
Inert solids	1,203	77	1,280	6.0%	1,210	78	1,287	6.0%
HHW	271	0	271	0.0%	272	0	272	0.0%
Subtotal	1,473	77	1,550	5.0%	1,482	78	1,559	5.0%
Special Wastes								
Ash	95	0	95	0.0%	95	0	95	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	76	0	76	0.0%	77	0	77	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	354	0	354	0.0%	356	0	356	0.0%
Subtotal	525	0	525	0.0%	528	0	528	0.0%
Total Waste	12,445	2,195	14,640	15.0%	12,414	2,311	14,725	15.7%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

With SRRE Implementation

WASTE TYPE	1997				1998			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	301	796	1,097	72.6%	303	801	1,104	72.6%
Mixed Paper	1,562	91	1,652	5.5%	1,571	91	1,662	5.5%
Newspaper	486	182	668	27.3%	488	183	672	27.3%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	174	0	174	0.0%	175	0	175	0.0%
Subtotal	2,523	1,071	3,595	29.8%	2,538	1,078	3,616	29.8%
Plastic								
HDPE	131	42	173	24.1%	132	42	174	24.1%
PET	11	38	49	76.9%	11	38	49	76.9%
Film plastics	463	0	463	0.0%	465	0	465	0.0%
Other plastics	151	416	568	73.3%	152	419	571	73.3%
Subtotal	757	496	1,252	39.6%	761	499	1,260	39.6%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	241	327	568	57.6%	242	329	571	57.6%
Other recyclable glass	305	416	721	57.7%	307	419	725	57.7%
Other non-recyclable glass	91	0	91	0.0%	92	0	92	0.0%
Subtotal	637	743	1,380	53.9%	641	748	1,388	53.9%
Metals								
Aluminum cans	137	162	299	54.2%	138	163	301	54.2%
Bi-Metal	59	0	59	0.0%	59	0	59	0.0%
Ferrous metals	485	96	580	16.5%	153	431	584	73.8%
Non-ferrous metals	135	0	135	0.0%	136	0	136	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	816	258	1,073	24.0%	485	594	1,079	55.0%
Yard Waste	640	0	640	0.0%	644	0	644	0.0%
Organics								
Food waste	1,629	21	1,651	1.3%	1,639	21	1,660	1.3%
Tires & Rubber	204	0	204	0.1%	100	105	205	51.1%
Wood	1,783	21	1,804	1.2%	77	1,737	1,814	95.8%
Textiles and leather	334	52	386	13.5%	336	53	388	13 5%
Diapers	267	0	267	0.0%	268	0	268	0.0%
Manure	29	292	321	90.9%	29	293	322	90.9%
Misc. Organics	138	0	138	0.0%	139	0	139	0.0%
Subtotal	4,384	386	4,770	8.1%	2,588	2,209	4,797	46.0%
Other Wastes								
Inert solids	1,217	78	1,295	6.0%	700	602	1,302	46.2%
HHW	274	0	274	0.0%	275	0	275	0.0%
Subtotal	1,490	78	1,568	5.0%	976	602	1,578	38.1%
Special Wastes								
Ash	96	0	96	0.0%	96	0	96	0.0%
Sludges	0	0	0	0.0%	0	0	0	0 0%
Auto Parts	77	0	77	0.0%	78	0	78	0 0%
Auto Bodies	0	0	0	0.0%	0	0	0	0 0%
Other special waste	358	0	358	0.0%	360	0	360	0.0%
Subtotal	531	0	531	0.0%	534	0	534	0 0%
Total Waste	11,778	3,032	14,811	20.5%	9,168	5,729	14,897	38 5%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

With SRRE Implementation

WASTE TYPE	1999				2000			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	304	806	1,110	72.6%	306	810	1,116	72.6%
Mixed Paper	935	737	1,671	44.1%	940	741	1,681	44.1%
Newspaper	491	184	676	27.3%	494	185	679	27.3%
Ledger	1	2	4	62.2%	1	2	4	62.2%
Other Paper	176	0	176	0.0%	177	0	177	0.0%
Subtotal	1,908	1,729	3,637	47.5%	1,919	1,739	3,658	47.5%
Plastic								
HDPE	133	42	175	24.1%	134	42	176	24.1%
PET	11	38	50	76.9%	12	38	50	76.9%
Film plastics	468	0	468	0.0%	471	0	471	0.0%
Other plastics	153	421	574	73.3%	154	424	578	73.3%
Subtotal	766	501	1,267	39.6%	770	504	1,274	39.6%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	244	331	575	57.6%	245	333	578	57.6%
Other recyclable glass	308	421	730	57.7%	310	424	734	57.7%
Other non-recyclable glass	92	0	92	0.0%	93	0	93	0.0%
Subtotal	644	752	1,396	53.9%	648	756	1,405	53.9%
Metals								
Aluminum cans	138	164	302	54.2%	139	165	304	54.2%
Bi-Metal	60	0	60	0.0%	60	0	60	0.0%
Ferrous metals	154	433	587	73.8%	154	436	590	73.8%
Non-ferrous metals	137	0	137	0.0%	137	0	137	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	#DIV/0!
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	488	597	1,086	55.0%	491	601	1,092	55.0%
Yard Waste	332	316	648	48.7%	334	317	651	48.7%
Organics								
Food waste	875	795	1,670	47.6%	880	800	1,680	47.6%
Tires & Rubber	101	105	206	51.1%	101	106	207	51.1%
Wood	78	1,747	1,825	95.8%	78	1,757	1,835	95.8%
Textiles and leather	338	53	391	13.5%	340	53	393	13.5%
Diapers	270	0	270	0.0%	271	0	271	0.0%
Manure	29	295	324	90.9%	30	297	326	90.9%
Misc. Organics	140	0	140	0.0%	141	0	141	0.0%
Subtotal	1,830	2,995	4,825	62.1%	1,841	3,013	4,853	62.1%
Other Wastes								
Inert solids	704	605	1,310	46.2%	709	609	1,317	46.2%
HHW	277	0	277	0.0%	279	0	279	0.0%
Subtotal	981	605	1,587	38.1%	987	609	1,596	38.1%
Special Wastes								
Ash	97	0	97	0.0%	98	0	98	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	78	0	78	0.0%	79	0	79	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	362	0	362	0.0%	365	0	365	0.0%
Subtotal	538	0	538	0.0%	541	0	541	0.0%
Total Waste	7,487	7,496	14,983	50.0%	7,530	7,539	15,070	50.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

With SRRE Implementation

WASTE TYPE	2001				2002			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	308	815	1,123	72.6%	310	820	1,129	72.6%
Mixed Paper	946	745	1,691	44.1%	951	750	1,701	44.1%
Newspaper	497	186	683	27.3%	500	188	687	27.3%
Ledger	1	2	4	62.2%	2	2	4	62.2%
Other Paper	178	0	178	0.0%	179	0	179	0.0%
Subtotal	1,930	1,749	3,679	47.5%	1,941	1,759	3,700	47.5%
Plastic								
HDPE	134	43	177	24.1%	135	43	178	24.1%
PET	12	39	50	76.9%	12	39	51	76.9%
Film plastics	474	0	474	0.0%	476	0	476	0.0%
Other plastics	155	426	581	73.3%	156	428	584	73.3%
Subtotal	774	507	1,282	39.6%	779	510	1,289	39.6%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	247	335	581	57.6%	248	336	585	57.6%
Other recyclable glass	312	426	738	57.7%	314	429	742	57.7%
Other non-recyclable glass	93	0	93	0.0%	94	0	94	0.0%
Subtotal	652	761	1,413	53.9%	656	765	1,421	53.9%
Metals								
Aluminum cans	140	166	306	54.2%	141	167	308	54.2%
Bi-Metal	60	0	60	0.0%	61	0	61	0.0%
Ferrous metals	155	439	594	73.8%	156	441	597	73.8%
Non-ferrous metals	138	0	138	0.0%	139	0	139	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	494	604	1,098	55.0%	497	608	1,105	55.0%
Yard Waste	336	319	655	48.7%	338	321	659	48.7%
Organics								
Food waste	885	804	1,689	47.6%	890	809	1,699	47.6%
Tires & Rubber	102	107	208	51.1%	102	107	210	51.1%
Wood	78	1,767	1,846	95.8%	79	1,778	1,857	95.8%
Textiles and leather	342	53	395	13.5%	344	54	397	13.5%
Diapers	273	0	273	0.0%	275	0	275	0.0%
Manure	30	298	328	90.9%	30	300	330	90.9%
Misc. Organics	141	0	141	0.0%	142	0	142	0.0%
Subtotal	1,851	3,030	4,881	62.1%	1,862	3,048	4,910	62.1%
Other Wastes								
Inert solids	713	612	1,325	46.2%	717	616	1,333	46.2%
HHW	280	0	280	0.0%	282	0	282	0.0%
Subtotal	993	612	1,605	38.1%	999	616	1,614	38.1%
Special Wastes								
Ash	98	0	98	0.0%	99	0	99	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	79	0	79	0.0%	79	0	79	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	367	0	367	0.0%	369	0	369	0.0%
Subtotal	544	0	544	0.0%	547	0	547	0.0%
Total Waste	7,574	7,583	15,157	50.0%	7,618	7,627	15,245	50.0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

With SRRE Implementation

WASTE TYPE	2003				2004			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	312	824	1,136	72.6%	313	829	1,143	72.6%
Mixed Paper	957	754	1,710	44.1%	962	758	1,720	44.1%
Newspaper	503	189	691	27.3%	506	190	695	27.3%
Ledger	2	2	4	62.2%	2	2	4	62.2%
Other Paper	180	0	180	0.0%	181	0	181	0.0%
Subtotal	1,952	1,769	3,722	47.5%	1,964	1,780	3,743	47.5%
Plastic								
HDPE	136	43	179	24.1%	137	43	180	24.1%
PET	12	39	51	76.9%	12	39	51	76.9%
Film plastics	479	0	479	0.0%	482	0	482	0.0%
Other plastics	157	431	588	73.3%	158	433	591	73.3%
Subtotal	783	513	1,297	39.6%	788	516	1,304	39.6%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	250	338	588	57.6%	251	340	591	57.6%
Other recyclable glass	316	431	747	57.7%	317	434	751	57.7%
Other non-recyclable glass	94	0	94	0.0%	95	0	95	0.0%
Subtotal	660	770	1,429	53.9%	663	774	1,437	53.9%
Metals								
Aluminum cans	142	168	309	54.2%	143	169	311	54.2%
Bi-Metal	61	0	61	0.0%	61	0	61	0.0%
Ferrous metals	157	444	601	73.8%	158	446	604	73.8%
Non-ferrous metals	140	0	140	0.0%	141	0	141	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	500	611	1,111	55.0%	503	615	1,118	55.0%
Yard Waste	340	323	663	48.7%	342	325	667	48.7%
Organics								
Food waste	896	814	1,709	47.6%	901	818	1,719	47.6%
Tires & Rubber	103	108	211	51.1%	104	108	212	51.1%
Wood	79	1,788	1,867	95.8%	80	1,798	1,878	95 8%
Textiles and leather	346	54	400	13.5%	348	54	402	13 5%
Diapers	276	0	276	0.0%	278	0	278	0 0%
Manure	30	302	332	90.9%	30	304	334	90.9%
Misc. Organics	143	0	143	0.0%	144	0	144	0 0%
Subtotal	1,873	3,065	4,938	62.1%	1,884	3,083	4,967	62 1%
Other Wastes								
Inert solids	721	619	1,340	46.2%	725	623	1,348	46 2%
HHW	283	0	283	0.0%	285	0	285	0 0%
Subtotal	1,004	619	1,624	38.1%	1,010	623	1,633	38 1%
Special Wastes								
Ash	99	0	99	0.0%	100	0	100	0 0%
Sludges	0	0	0	0.0%	0	0	0	0 0%
Auto Parts	80	0	80	0.0%	80	0	80	0 0%
Auto Bodies	0	0	0	0.0%	0	0	0	0 0%
Other special waste	371	0	371	0.0%	373	0	373	0 0%
Subtotal	550	0	550	0.0%	553	0	553	0 0%
Total Waste	7,662	7,671	15,334	50.0%	7,707	7,716	15,422	50 0%

15 YEAR WASTE GENERATION PROJECTIONS - Mono County

With SRRE Implementation

WASTE TYPE	2005				2006			
	Disposal	Diversion	Generation	Diversion Percent	Disposal	Diversion	Generation	Diversion Percent
Paper								
Corrugated Containers	315	834	1,149	72.6%	317	839	1,156	72.6%
Mixed Paper	968	763	1,730	44.1%	973	767	1,740	44.1%
Newspaper	509	191	699	27.3%	512	192	703	27.3%
Ledger	2	3	4	62.2%	2	3	4	62.2%
Other Paper	182	0	182	0.0%	183	0	183	0.0%
Subtotal	1,975	1,790	3,765	47.5%	1,987	1,800	3,787	47.5%
Plastic								
HDPE	137	44	181	24.1%	138	44	182	24.1%
PET	12	40	51	76.9%	12	40	52	76.9%
Film plastics	485	0	485	0.0%	487	0	487	0.0%
Other plastics	159	436	594	73.3%	159	438	598	73.3%
Subtotal	793	519	1,312	39.6%	797	522	1,319	39.6%
Glass								
Refillable glass	0	0	0	0.0%	0	0	0	0.0%
CA redemption glass	252	342	595	57.6%	254	344	598	57.6%
Other recyclable glass	319	436	755	57.7%	321	439	760	57.7%
Other non-recyclable glass	96	0	96	0.0%	96	0	96	0.0%
Subtotal	667	779	1,446	53.9%	671	783	1,454	53.9%
Metals								
Aluminum cans	143	170	313	54.2%	144	171	315	54.2%
Bi-Metal	62	0	62	0.0%	62	0	62	0.0%
Ferrous metals	159	449	608	73.8%	160	451	611	73.8%
Non-ferrous metals	141	0	141	0.0%	142	0	142	0.0%
Mixed metals	0	0	0	0.0%	0	0	0	0.0%
White Goods	0	0	0	0.0%	0	0	0	0.0%
Subtotal	506	618	1,124	55.0%	508	622	1,131	55.0%
Yard Waste	344	327	671	48.7%	346	329	674	48.7%
Organics								
Food waste	906	823	1,729	47.6%	911	828	1,739	47.6%
Tires & Rubber	104	109	213	51.1%	105	110	215	51.1%
Wood	80	1,809	1,889	95.8%	81	1,819	1,900	95.8%
Textiles and leather	350	55	404	13.5%	352	55	407	13.5%
Diapers	279	0	279	0.0%	281	0	281	0.0%
Manure	30	305	336	90.9%	31	307	338	90.9%
Misc. Organics	145	0	145	0.0%	146	0	146	0.0%
Subtotal	1,895	3,101	4,996	62.1%	1,906	3,119	5,025	62.1%
Other Wastes								
Inert solids	729	627	1,356	46.2%	734	630	1,364	46.2%
HHW	287	0	287	0.0%	288	0	288	0.0%
Subtotal	1,016	627	1,643	38.1%	1,022	630	1,652	38.1%
Special Wastes								
Ash	100	0	100	0.0%	101	0	101	0.0%
Sludges	0	0	0	0.0%	0	0	0	0.0%
Auto Parts	81	0	81	0.0%	81	0	81	0.0%
Auto Bodies	0	0	0	0.0%	0	0	0	0.0%
Other special waste	375	0	375	0.0%	377	0	377	0.0%
Subtotal	557	0	557	0.0%	560	0	560	0.0%
Total Waste	7,751	7,761	15,512	50.0%	7,796	7,806	15,602	50.0%

APPENDIX I

Glossary of Terms and Definitions

GLOSSARY OF TERMS AND DEFINITIONS

The following list of definitions and terms are provided for your reference and may be found throughout the Preliminary and Final Drafts of the Waste Generation Studies, Source Reduction and Recycling Elements, Household Hazardous Waste Element and other required elements of the Integrated Solid Waste Management Plan for Mono County.

(1) **Aluminum can or aluminum container**
Any food or beverage container that is composed of 99% or more aluminum.

(2) **Ash**
The residue from the combustion of any solid or liquid material.

(3) **BLM**
United States Department of Interior, Bureau of Land Management.

(4) **Bi-metal container**
Any metal container composed of at least two different types of metals, such as a steel container with an aluminum top.

(5) **Best readily available and Applicable data or representative data**
Information that is available to a jurisdiction from published sources, field sampling, the California Integrated Waste Management Board, or other identifiable sources which is the most current data and which addresses the situation being examined.

(6) **CA Redemption glass**
Glass beverage containers subject to the provisions of AB 2020 and identified with the label 'CA Redemption'.

(7) **Collection/Transfer Station**
A facility, appropriately sized to satisfy a jurisdictions requirements for hazardous and/or solid waste collection and transfer needs.

(8) **Commercial solid wastes**
Solid wastes originating from those generators categorized as stores, business offices, commercial warehouses, hospitals, educational, health care, military, and correctional institutions, non-profit research organizations and government offices. This definition does not include construction and demolition wastes.

(9) **Composition**
A set of identified solid waste materials categorized into waste categories and waste types.

(10) **Composting**
A method of waste treatment in which organic solid wastes are biologically decomposed under controlled aerobic or anaerobic conditions.

(11) **Construction and Demolition waste**
Those solid wastes such as building materials, packaging and rubble resulting from construction, remodeling, repair and demolition operations on pavements, houses, commercial buildings and other structures.

(12) **Corrugated container**
A paperboard container (i.e. cardboard) fabricated from two layers of kraft linerboard sandwiched around a corrugated medium, including, but not limited to, kraft paper grocery bags.

(13) **DHS**
California Department of Health Services

(14) **Discards**
That portion of municipal solid waste remaining after recovery for recycling and composting has occurred.

(15) **Disposal**
The management of solid waste through the landfilling or transformation of wastes at permitted solid waste facilities.

(16) **Disposal Capacity**
The capacity, expressed in either weight in tons or its volumetric equivalent in cubic yards, which is either currently available at a permitted solid waste landfill, or will be needed for the disposal of solid waste generated within the jurisdiction within a specified period of time.

(17) **Diversion**
Any activity which could result in or promote the diversion of solid waste through source reduction, recycling or composting from solid waste landfills and transformation facilities.

(18) **EIR**
Environmental Impact Report

(19) **EIS**
Environmental Impact Statement

(20) **Ferrous Metals**
Any iron or steel scrap which has an iron content sufficient for magnetic separation.

(21) **Film plastic**
A solid waste consisting of thin, flexible plastic sheets, including but not limited to, plastic garbage bags.

(22) **Food waste**
All animal and vegetable solid wastes generated by food facilities or residences that result from the storage, preparation, cooking or handling of food.

(23) **GBUAPCD**
Great Basin Unified Air Pollution Control District

(24) **Generation**
The weight of materials and products as they enter the waste stream from residential, commercial and institutional sources and before materials recovery, composting or combustion takes place.

(25) **HDPE container**
Any container composed of high density polyethylene plastic generally identified with the number '2' on the bottom of the container, including but not limited to, plastic milk jugs.

(26) **Household hazardous waste (HHW)**
Those wastes resulting from products purchased by the general public for household use which because of their quantity, concentration, physical, chemical or infectious characteristics, may pose a substantial known or potential hazard to human health or the environment when improperly treated, disposed or other wise managed.

(27) **Industrial solid waste**
Solid wastes originating from those generators categorized as mechanized manufacturing facilities, factories, refineries, construction and demolition projects and publicly operated treatment works.

(28) **Inert solids**
A non-liquid solid waste, including but not limited to, soil, rock, concrete and drywall, that does not contain hazardous waste.

(29) **Mean**
The arithmetic average of the weight of a waste category or type.

(30) **Medium term planning period**
A period beginning in the year 1996 and ending in the year 2000.

(31) **Miscellaneous organic**
Organic material which by its composition does not belong in any of the following organic waste types: food wastes, tires and rubber, wood wastes, manure and textiles and leather.

(32) **Mixed Paper**
A waste type which is a mixture, unsegregated by color or quality, of one or more of the following paper wastes: newspaper, corrugated cardboard, office paper, computer paper, white paper, coated paper stock, or other paper wastes.

(33) **Municipal Solid Waste (MSW)**
All solid wastes generated by residential, commercial and industrial sources and all solid waste generated at construction and demolition sites, at food processing facilities and at treatment works for water and waste water which are collected and transported under the authorization of a jurisdiction or are self-hauled.

(34) **Non-ferrous metals**
Metal scraps derived from metals other than iron and its alloys in steel, such as aluminum (including foil), copper, brass, bronze, lead, zinc and other metals to which a magnet will not adhere.

(35) **Normally disposed of**
Those waste categories and waste types which fit the following parameters:

a. wastes which have been identified by the Solid Waste Generation Study to be in the solid waste stream attributed to the jurisdiction as of January 1, 1990;

b. wastes which are deposited at permitted solid waste landfills or transformation facilities subsequent to any recycling or composting activities; and

c. wastes which are allowed to be considered in the establishment of the base amount of solid waste from which source reduction, recycling and composting levels shall be calculated.

(36) **Organic waste**
Non-petroleum based solid wastes originating from living organisms and their metabolic waste products which contain naturally produced organic compounds and which are biologically decomposable by microbial and fungal action into the constituent compounds of water, carbon dioxide and other simpler organic compounds.

(37) **Other non-recyclable glass**
A solid waste which is not easily recyclable, including but not limited to, window glass, ceramics and pottery.

(38) **Other paper**
A solid waste, including but not limited to, paper towels, coated cardboard, milk cartons and paper cups.

(39) **Other plastics**
All waste plastics other than polyethylene terephthalate (PET), film plastics and high density polyethylene (HDPE) containers.

(40) **Other recyclable glass**
A solid waste, including but not limited to, glass jars, glass food containers, wine and liquor bottles.

(41) **PET container**
A container, including but not limited by, plastic soda bottles which are composed of polyethylene terephthalate (PET) plastic generally identified with the number 1 on the bottom of the container.

(42) **Recycling**
The use or reuse of a waste as an effective substitute for a commercial product, or as an ingredient or feedstock in an industrial process.

(43) **Refillable glass beverage container**
A solid waste consisting of glass beverage containers which are refillable and are not subject to the provisions of AB 2020.

(44) **Residential solid waste**
Solid wastes originating from those generators categorized from single-family or multiple family dwellings.

(45) **Rubber**
An amorphous polymer of isoprene derived from natural latex and certain tropical plants, or from petroleum.

(46) **Seasonal**
Those periods of time during the calendar year which are identifiable by distinct cyclical patterns of local climate, demography, trade or commerce.

(47) **Short-term planning period**
A period beginning in the year 1991 and ending in the year 1995.

(48) **Sludge**
Residual solids and semi-solids resulting from the treatment of water, waste water and/or other liquids.

(49) **Source reduction**
The reduction or elimination of waste production, including but not limited to, identifying packaging alternatives, disposable product substitutions, utilization of evergreen and drought tolerant vegetation, disposal rate structures creating incentives to reduce generation volumes and the more efficient utilization of paper, cardboard, glass, metal, plastics and other materials.

(50) **Special waste**
Any solid waste which because of its source of generation, physical, chemical or biological characteristics or unique disposal practices, is specifically conditioned in a solid waste facilities permitted for handling and/or disposal.

(51) **Standard deviation**
A statistical parameter measuring the dispersion of individual data samples about their arithmetic mean.

(52) **Tin can or tin container**
Any food or beverage container that is composed of steel with a tin coating.

(53) **TSD**
Treatment, storage and disposal.

(54) **Volume**
A three dimensional measurement of the capacity of a region of space or container.

(55) **Upper limit**
The highest value of the range of values representing 90% confidence interval.

(56) **Waste category**
The grouping of solid wastes with similar properties which distinguish it from other waste categories.

(57) **Waste type**
Wastes having the features of a group or class of wastes which are distinguishable from any other waste type.

(58) **Weight percent**
The percent composition of the waste stream on a weight basis.

(59) **White goods**
Discarded enamel-coated major appliances such as washing machines, clothes dryers, hot water heaters, stoves and refrigerators.

(60) **Wood waste**
Solid waste consisting of wood pieces or particles which are generated from the manufacturing or production of wood products, harvesting, processing or storage of raw wood materials or construction or demolition activities.

(61) **Yard waste**
Any wastes generated from the maintenance or alteration of public, commercial or residential landscapes including but not limited to, yard clippings, tree trimmings, prunings, brush and weeds.

APPENDIX J

Business Waste Reduction Plan

BUSINESS WASTE REDUCTION PLAN

Mono County, California

Name of Business _____

Address _____

Owner/Manager _____

Telephone _____

Type of Business _____

Number of Employees _____

Types of Waste Produced

Indicate the types of waste that your business produces. Rank the following types in order of the amount of each type produced *(1 - greatest quantity, 15 - least quantity).* If your business does not produce a certain type of waste, enter a zero after the type.

Cardboard _____

Food Waste _____

Metals _____

Plastic Bottles _____

Wood _____

Tin Cans _____

Textiles/Leather _____

Slash/Brush/Yard Waste _____

Office Paper _____

Glass Bottles _____

Other Glass Containers _____

Plastic Packaging _____

Aluminum Cans _____

Tires/Rubber _____

Other Plastic _____

Other Waste Types _____

Primary Sources of Waste

Indicate the primary sources of waste from your business or identify the processes that produce most of the waste that your business generates.

Packaging Materials _____

Office Paper _____

Food Preparation _____

Manufacturing Waste _____

Other _____

_____

_____

_____

_____

Disposal Method

How do you dispose of the waste from your business?

Self hauled to _____ landfill

Picked up by _____

Amount Disposed (please provide an estimated quantity)

_____ pounds/week

_____ 55 gallon barrels/week

_____ bins (____ cubic Yards)

_____ other (describe)_____

_____

____ _____

Current Recycling Activity

What types of materials do you currently recycle?

Material	average pounds per month	where is the material taken
Aluminum Cans		
CA Redemption Glass		
Other Glass Containers		
Cardboard		
Office Paper		
Metals		
Other		

Waste Reduction Plan

How do you plan to reduce the amount of waste disposed by your business?

1. Increase Recycling

Material	Where Will the Material Be Taken

2. Reuse Products That Were Previously Discarded

Specify ways in which your business could reuse materials that are now discarded. Examples of reuse would include:

- office paper reused as scrap paper
- glass containers re-used
- re-use some packaging materials

Material	How Will the Material Be Reused

3. Reduce the Amount of Waste Produced

Examples:

- composting or mulching of slash or yard waste
- using refillable beverage bottles
- changing types of packaging
- purchasing materials or supplies in greater quantities to minimize packaging waste
- requesting suppliers to change the amount or type of packaging used
- double-sided copying
- substituting reuseable materials for disposables

Material	How Will the Material Be Reused

APPENDIX K

Response to CIWMB Staff Comments on the Mono County Preliminary Draft SRRE

Response to CIWMB Staff Comments on the Mono County Preliminary Draft SRRE

GENERAL COMMENTS

- An Executive Summary has been included in the Final Draft Plan.
- All mandated information has been incorporated into the Final Draft.
- The Glossary of Terms and Definitions has been included as an Appendix per Board staff comments.
- Geographic, Demographic and infrastructure information has been incorporated into the Executive Summary.
- All wastes have been classified by waste category and type.
- A comprehensive integration schedule has been developed and is provided in the Integration Component of the Final Draft.
- Contingency plans have been developed and are presented in the model components.

GLOSSARY OF TERMS AND DEFINITIONS

The definition for the percentage of aluminum contained in aluminum cans or containers has been revised per CCR, Article 3.0, Section 18720 (2).

SOLID WASTE GENERATION STUDY

Infrastructure composition: Corrected in Final Draft.

Disposal sites sampled: This justification is presented within the discussion.

Sample size determination: Corrected in Final Draft.

Sample size determination: The industrial sample was a composite of numerous generators. The load was taken from a front loader commercial waste hauler truck that had specifically emptied several bins attributed to industrial generators.

Table III-3: Amended in Final Draft.

Table III-4: Seasonal variation in Mono County is attributed not only to climatic variations, but tourist population. Given the number of tourists visiting the region over the course of the seasons it was indicative that the County displayed four separate and unique seasonal variations.

SOLID WASTE GENERATION STUDY - Continued

Solid Waste Disposal Study: Generation figures from curbside collected refuse in the Town of Mammoth Lakes was utilized in place of national per capita figures.

Table III-7: Comments noted and corrections made.

Solid Waste Diversion Study: A discussion is presented that adequately reflects that data gathering process for the waste diversion study.

Appendix Comments: All comments applied to Appendix corrections have been incorporated into the Final Draft.

SOURCE REDUCTION COMPONENT

Objectives: Materials targeted will include paper (ledger, packaging material, and corrugated), plastics, glass, and wood.

Existing Conditions: The existing source reduction rate has been recalculated at .0013% (existing source reduction of .19 TPY divided by the total waste generation 14,663 TPY). The detailed results of the Waste Diversion Study are provided in Appendix I.

Evaluation of Alternatives: Because of the sparsely settled and rural nature of Mono County, and the limited staff and financial resources of the County, only a limited number of feasible source reduction program alternatives are available to the County.

The ten evaluation criteria listed in the CIWMB guidelines were considered for each feasible alternative identified. A more detailed qualitative or quantitative evaluation mechanism is not required by the guidelines nor was it considered necessary to select the programs most appropriate for implementation.

Program Selection: Targeted materials and estimated diversion quantities have been included. As noted in the plan, success of these programs will be dependent on the cooperation of local merchants and the administrators of public institutions.

Program Implementation: A more detailed implementation schedule has been included in the Integration Component. Actual program implementation will be dependent on the resources available to the County.

Monitoring and Evaluation: The comments have been noted.

RECYCLING COMPONENT

Objectives: The discrepancy noted has been corrected in the Waste Generation Analysis.

Existing Conditions: The quantities listed in Table 12 are by waste type, while those on page 5-1 are summarized by waste category. "Other scrap metal" has been re-classified as "auto bodies". This material has been identified but not included in the calculation of the existing diversion rate of the County.

RECYCLING COMPONENT - Continued

Evaluation of Alternatives: The ten evaluation criteria, including estimated program cost and waste reduction effectiveness, have been addressed for each alternative. Because of the limited number of alternatives available to the County, all identified programs have been selected for implementation. A more detailed qualitative and quantitative mechanism was not deemed feasible or required by the CIWMB guidelines.

Program Implementation: Many of the institutions that will be involved in the County's recycling programs, such as the U.S.M.C. and the U.S. Forest Service, have already initiated recycling activities or policies within their organizations. The commonality of interests and the overall environmental awareness of the businesses and individuals working and living in Mono County will be a significant factor contributing to the success of the County's recycling programs.

During the planning process, the potential buyers of the recovered materials were contacted to determine their level of interest in Mono County's programs. The conditions required to secure the cooperation and involvement of these individuals have been incorporated into the programs.

All landfills are owned by the County and are operated either by the County or under a contract with a private firm. The County is proceeding with a program to consolidate and enclose the existing landfills.

As noted in the component, the County will also be considering the use of a franchise to secure collection and processing services for the materials to be recovered from the various programs.

The facilities required by the various programs have been identified. Program 5.5 identifies a material sorting facility in the Lee Vining area that will serve the County programs.

The County will monitor program effectiveness through its annual monitoring and reporting program. Contingencies will consist of modification to existing programs as existing conditions warrant. Such modifications may include increased public education, alternative or additional locations for collections bins, or increased cooperation between the various government agencies such as the County, U.S. Forest Service, and the U.S. Marine Corps.

COMPOSTING COMPONENT

Evaluation of Alternatives: Due to the rural setting, varied climatic fluctuations and low population densities of the County, active composting programs were not considered within this component. Processing techniques for quantity reduction and potential end-market uses were felt to be more prudent. In the Final Draft no composting programs were selected for implementation.

Discussion of a pelletizing operation was deleted from the component.

Program selection: No composting programs were selected for implementation in the Final Draft plan.

Program implementation: Since no composting program was selected for implementation, no implementation schedule is provided for this component in the Final Draft.

SPECIAL WASTE COMPONENT

General Comment (page 12): This component has been prepared in the same format as the others in the SRRE and in a manner consistent with the model component format specified in the regulations.

Existing Conditions: When available, quantities of special wastes were specified. The quantity of construction and demolition debris disposed is specified in Table 11 on page 3-22 of the Initial Waste Generation Section of the SRRE. The existing management practices for the special wastes are identified.

Evaluation of Alternatives: The ten evaluation criteria specified in the regulations have been addressed for each program identified.

Selection of Program: This section has been revised.

Program Implementation: As indicated in the Component, the County will be responsible for the implementation of the programs.

An implementation schedule is provided in the Integration Component. Funding sources have been identified in the Funding Component.

Monitoring and Evaluation: Additional monitoring and evaluation provisions have been provided.

DISPOSAL FACILITY CAPACITY

- Material previously included within the Waste Generation Study applicable to landfill site data has also been included in this component per Board staff request.

- The landfills are permitted to burn with the Great Basin Air Pollution Unified Control Board. The ash never enters the active trenches in the site, but is turned into the soil in place.

- The text regarding export of waste has been corrected.

FUNDING COMPONENT

Evaluation: The requested information was presented within each model component.

Recommendation: The component was prepared in accordance with regulatory requirements Sufficient detail has been presented in order to identify the funding structure, flow of funds and contingency measures.

INTEGRATION COMPONENT

The combination of the material diversion effects of the implementation of the recycling, composting, source reduction, and special waste components is demonstrated in the table on page 11-3 ' the component. The individual diversion percentages for each program have been carried forward fr the specific components.

A more detailed implementation schedule has been provided.

TE OF CALIFORNIA Pete Wilson, Governor
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD
1020 Ninth Street, Suite 300
Sacramento, California 95814

May 30, 1991

Mr. James M. Ward
Director
Department of Public Works
County of Mono
P.O. Box 457
Bridgeport, California 93517

Subject: Preliminary Draft Source Reduction and Recycling Element for the Unincorporated Area of Mono County

Dear Mr. Ward:

California Integrated Waste Management Board (Board) staff has reviewed the Preliminary Draft Source Reduction and Recycling Element (SRRE) for compliance with Chapter 9, Title 14 of the California Code of Regulations (CCR), Planning Guidelines and Procedures for Preparing and Revising Countywide Integrated Waste Management Plans (Guidelines). Staff comments include both general comments on the SRRE, and specific comments on the Solid Waste Generation Study (SWGS) and each component of the SRRE.

GENERAL COMMENTS:

The following comments should assist the Unincorporated Area of Mono County (County) to successfully implement SRRE programs:

- It would be helpful to Board staff if an Executive Summary is included in the final SRRE to assist in the final evaluation.
- This document requires more information and detail to adequately assess the effectiveness of many existing and proposed solid waste management programs. Please refer to the model component format when preparing the components to ensure that all mandated information is included in the final document.
- The Glossary of Terms and Definitions in Section I contains information that serves no regulatory purpose. Should the County wish to include this information in the final SRRE, please place it in the Appendices.
- The information from Section II regarding the Geographic Setting, Demographics, and Infrastructure Composition should

be included in the Executive Summary or Introduction. It does not warrant a separate section.

- For the final draft, please make sure that all wastes are classified by specific waste categories and types.

- Please provide comprehensive integration schedules which include dates for completing various tasks.

- Please include contingency plans in the event that hauler or processor cannot fulfill agreements.

SPECIFIC COMMENTS:

Though the proposed programs that the County intends to implement may be able to achieve the diversion goals set by the County and State, the information provided in the SRRE does not necessarily substantiate particular program design or selection. While it is recognized that planning is often partly based on many intangible concepts (i.e.- politics, social trends, third party effects, etc.), staff hopes that the following concerns will solicit a thorough analysis of available information to insure that the appropriate course of action has been selected.

I. GLOSSARY OF TERMS AND DEFINITIONS

- The California Code of Regulation's definition for the percentage of aluminum contained in aluminum cans or containers has been revised from 99% to 94% (CCR, Article 3.0, Section 18720 (2)).

II. COMMENTS ON THE SOLID WASTE GENERATION STUDY

Board staff has the following comments regarding the Solid Waste Generation Study:

- **Infrastructure Composition, page 2-6:** A reference is made in the last paragraph to Appendix B. This reference should be corrected to read Appendix A.

- **Disposal Sites Sampled, page 3-4:** Please provide a brief discussion to support your assumption that the waste disposed at Chalfant and Benton is representative of the waste disposed at similar areas of the county. This request is made to assist in determining whether the samples taken were representative of your jurisdiction's waste stream.

- **Sample Size Determination, page 3-8:** The equation presented for determining the number of sorting samples does not correspond with the correct equation on page 3-9. Please correct this inconsistency in the final element.

- **Sample Size Determination, page 3-10:** The ASTM calculations for the industrial sector indicated a sample size of 271. This number of samples was considered " outside the bounds of reasonability". Therefore, minimal sampling was conducted due to the small percentage of the total waste stream represented by the industrial sector. Appendix C shows that only 1 sample was collected from the industrial sector. Please clarify whether the 1 sample is the product of a single generator or a composite of multiple generators. Please provide a discussion of how 1 sample is considered representative (CCR, Section 18722 (h), (1), (2) and (a)).

- **Table 6, page 3-15:** Please include a reference for the in-place compaction ratio listed in the footnote (CCR, Section 18722 (f)).

- **Table 7, page 3-16:** Quantifying seasonal variations in the solid waste stream is accomplished by identifying distinct cyclical patterns of local climate, demography, trade or commerce (CCR, Sections 18720 (65) and 18722 (i)). Seasonal variation is not in reference to specific calendar seasons. After identifying the seasonal variations, the jurisdiction selects the 6-month sampling period that satisfies the requirements of Public Resources Code, Section 41780 (a) (1) as stated in CCR, Section 18722 (i) (2). Please describe how seasonality will be incorporated into the waste management plan.

- **Solid Waste Disposal Study, page 3-17:** Paragraph 3 states that a national per capita waste generation factor of 3.5 pounds per day was used in calculating waste amounts. The regulations do not allow for the use of such nationally generated figures. Figures derived from comparable data can only be used for estimating waste composition and not waste amounts. Another approach is to determine the total volume annually disposed at the landfills and use a conversion factor for municipal solid waste to convert volume to weight.

- **Table 11, page 3-22:** Construction wastes are considered a sub-unit within the industrial source of generation CCR, Section 18720 (30)). Therefore, they should be included with the waste amounts attributed to the industrial sector. Construction debris is not considered a waste type. It must be disaggregated into its respective waste types, (e.g. concrete, soil, metals, asphalt, etc.). Slash is considered wood waste and is within the waste category, "other organics". In most cases the source of slash generation would be the industrial sector. If necessary, wastes that do not fit into the residential, commercial or industrial source of generation can be assigned to the "other sources" classification.

- **Table 11, page 3-22:** The percent of waste stream figures do not include construction and slash materials. It is unclear why these materials were not included when calculating the percent waste stream. Please revise this table to reflect the above comments and include any comments needed to clarify the revisions.

- **Solid Waste Diversion Study, page 3-22:** Please provide a discussion as to how the information collected to quantify the solid waste diversion was representative (CCR, Section 18722 (h)). It would be helpful to Board staff if copies of any questionnaires or surveys used to collect diversion data were included in the final document.

- **APPENDIX C:** Please include the units of measure (pounds, tons, percent etc.) relating to the figures listed in the table on Description of Sampling Statistics.

- **APPENDIX D:** Please include the units of measure (pounds, tons, percent, etc.) relating to the figures listed in the table on Description of Sampling Statistics.

- **APPENDIX F:** The tables as presented indicate that the jurisdiction has four distinct seasons within its waste stream. It is possible that Section 18722 (i) (2) was misinterpreted. See comments for Table 7 on page 3 of this document for information on seasonal variation.

- **APPENDIX H:** It would be useful to Board staff if the County includes a table that contains the combined total residential, commercial and industrial wastes disposed in the final document.

- **APPENDIX I:** In the table, "Mono County Unincorporated Areas Waste Diversion and Source Reduction", scrap metal is listed as a diverted material. Diverted materials should be identified by waste category and type (CCR, Section 18722 (i)). For the SRRE, scrap metal cannot be considered a waste type. It should be disaggregated into its respective types of metal.

- Before scrap metal, inert materials (solids?) and manure can qualify for diversion, they must meet two criteria. They must have been normally disposed in a permitted facility as of January 1, 1990 and there must have been some program or activity in place as of January 1, 1990 that diverted some of these materials from the permitted facility (CCR, Section 18720 (44) (51) and AB 1820, Section 41781 (1) and (2)).

- **APPENDIX J:** It cannot be determined from the information contained in the tables if the data represents a projection of the current waste management conditions or the conditions

expected after implementing the SRR Elements. The fifteen year projection should include waste generated, disposed and diverted under current conditions and under conditions after implementing the SRRE (CCR, Section 18722 (c)). It would be very useful if the County also includes the percentage of diversion represented for each year of the projection in the final SRRE.

- Please include in your solid waste generation study an outline of a system for gathering data on quantities and composition of solid waste generated, diverted and collected as required in CCR, Section 18722 (o).

- Throughout the text and tables in the initial waste generation study, the word "volume" is used incorrectly to imply weight or weight over time. Volume, as defined in the regulations, is a cubic unit measurement (CCR, (Section 18720 (78)). The standard unit ratio for reporting the mass of municipal solid waste is pounds per cubic yard. In many places in the document the word "volume" can be replaced with the word "amount". The waste quantities disposed are reported in both weight and volume (CCR, Section 18722 (f)).

- The total amount of industrial waste disposed as reported in Table 11 and in Appendix H is 554 tons. Board staff is unsure if this figure includes the 362 tons of construction and slash material which are attributed to the County and are disposed at Benton Crossing (p. 3-21). On page 3-16 it states that over 718 tons per year are attributed to disposal at Benton Crossing. Are these 718 tons composed of construction and slash waste also? To eliminate the apparent inconsistencies in the disposal amounts attributed to the industrial sector, please re-evaluate the methods used for reporting the amounts of industrial waste disposed.

- Please include information that identifies the total amount of solid waste generated by source, category and types as stated in CCR, Sections 18722 (f) and (i). This information can be presented in a format similar to the data presented in Appendix H.

- No white goods appeared in the waste stream. To receive credit for future diversion of white goods, they must presently be normally disposed and have a diversion program or activity that diverts them from the landfill. White goods must comply with the same requirements as those for inert solids, manure and scrap metals. Those requirements are presented in the comments for Appendix I on page 4 of this document. Data analysis adjustment is permitted for waste types that are known to be disposed or diverted or may otherwise have been overlooked in the sampling procedure (CCR, Article 6.1, Appendix I, 7).

III. COMMENTS ON THE SOURCE REDUCTION COMPONENT

- The following comments should be addressed to ensure that the Source Reduction Component meets the requirements of the statutes and regulations:

Objectives, Section 18733.1 and 18734.1, Pages 6A-1 through 6A-2:

- The County states that it intends to pursue a number of source reduction activities. It appears, however, that the County has not targeted specific categories of waste for source reduction (i.e. yard wastes, chip board packaging, disposable pallets, etc). A more detailed description of waste types to be reduced by particular program type may be necessary to quantify impacts and receive diversion credit.

Existing Conditions, Section 18733.2 and 18734.2, Page 6-2:

- It is not clear how the County arrived at the estimated existing 0.002% source reduction diversion rate. If a conversion factor is used, such as X tons of shoes per Y population, the County should cite the source. A clarification of any assumptions should also be provided.

- While it is a market development activity, the procurement of recycled content products, such as paper with recycled fiber content, cannot be quantified as a source reduction activity toward meeting diversion goals.

Evaluation of Alternatives, Section 18733.3 and 18734.3, Pages 6A-2 through 6A-7:

- While the identified alternatives appear to be appropriately evaluated from a jurisdiction-specific perspective, the evaluation should also include a quantitative or qualitative mechanism by which to select the most effective programs to implement.

Program Selection, Section 18733.4 and 18734.4, Page 6A-7:

- Descriptions of selected source reduction programs and corresponding anticipated diversion goals could be more complete. It should be noted that source reduction programs must target specific waste types in order for diversion quantification to be allowed. No projected diversion rate percentages are stated for targeted materials, and it is not clear what materials these may include. It should be noted that the procurement of recycled content products, while an encouraged market development mechanism, cannot be quantified towards diversion goals.

Program Implementation, Section 18733.5:

- This section does not contain an adequate implementation schedule for fulfilling source reduction tasks as required in CCR, Section 18733.5 (c). Please provide the necessary information for the final SRRE.

Monitoring and Evaluation, Section 18733.6, Page 6A-8:

- Since the source reduction objectives have not been framed in a quantitative manner, it is unclear how it can be determined whether or not the selected programs are meeting their goals. While monitoring the number of "waste impact surcharges" imposed may provide a measure of program non-compliance, it may be difficult to identify the positive impacts of the programs.

- It is recognized that jurisdictions with limited resources may have difficulty providing extensive technical support for the residential and commercial sector to source reduce their waste streams. Meeting with businesses and business leaders, as stated, is a positive start, and could perhaps be expanded upon as public response and program impacts are evaluated.

IV. COMMENTS ON THE RECYCLING COMPONENT

Board staff has the following comments on the Recycling Component:

Objectives, Section 18733.1 and 18735.1, Pages 6B-1 through 6B-2:

- Stated long term goals appear to target waste types identified in the solid waste generation analysis as waste types not targeted for diversion (page 5-4). This discrepancy should be clarified.

Existing Conditions, Section 18733.2 and 18735.2, Pages 6B-2 through 6B-3:

- County residents and businesses currently have access to waste diversion programs that include drop-off and buy-back centers, as well as a recycling service for certain restaurant recyclable materials. However, because existing program participation appears to be voluntary, detailed and accurate information, on which to base the planning process, appears to be limited.

- In addition, diversion quantities presented in Table 12 (page 6B-2) differ from figures presented earlier on page

5-1. In particular, the origin or fate of the "other scrap metal" is not clear.

Evaluation of Alternatives, Section 18733.3 and 18735.3, Pages 6B-4 through 6B-14:

- It appears that the County has discussed many program alternatives, most based on jurisdiction specific criteria. However, the evaluations again appear to lack a quantitative or qualitative mechanism by which to select the most effective programs to implement. Please provide the appropriate information for the final SRRE.

Program Implementation, Sections 18733.5 and 18735.5, Page 6B-14:

- The implementation of the proposed programs may require activities by a number of entities potentially outside of the County's realm of direct authority. These include the waste haulers, commercial establishments, the landfill(s), as well as the markets for recovered materials. It is not clear by what authority or leverage the County will be able to encourage cooperation by these entities to ensure program success, nor is it clear that the existing facilities have the capabilities to handle the additional materials.

- While contractual arrangements and ordinances can help to facilitate cooperation with some of these entities, the County should make every effort to assure that all parties involved will be acting in a coordinated manner, and develop contingencies should a particular participant fail to perform as planned.

V. COMMENTS ON THE COMPOSTING COMPONENT

Board staff has the following comments on the Composting Component:

Evaluation of Alternatives, Section 18733.3 and 18736.3, Page 6C-3 through 6C-13:

- Though the presented evaluations address jurisdiction specific conditions, it appears that there is limited discussion of actual composting operations, with the majority of programs focusing on simply grinding compostable materials.

- Much of the discussion in this section appears to revolve around what must yet be evaluated, rather than an actual evaluation of the identified alternatives. If the County intends to develop a composting operation, more thorough consideration must be given to the location, development,

and operation of a facility, potential permitting requirements and other regulatory constraints that may affect development, variety of feasible feedstocks, etc.

- o While it is not explicitly stated in the evaluation, staff assumes the end use of the described "pelletized" materials would be some form of combustion. This is not a composting alternative. In addition, it must be noted that, in the near term, no diversion credit will be given for transformation operations, and in the medium and long term only 10% of diversion can be achieved through transformation.

- o In addressing markets, staff questions what is meant by "minimum enterprises in the regional area". Is this a typographical error that should have read "mining enterprises"?

Program Selection, Sections 18733.4 and 18736.4, Pages 6C-13 through 6C-15:

- o It is not clear what program has been selected for development and implementation. While it is stated that specific materials will be processed, it is not clear by what technology or in what location. Please provide the necessary information for Board staff to evaluate this section in the final Element.

- o This SRRE fails to select a particular organic waste management program, and potential end use intentions that may not be eligible to count toward diversion goals.

- o <u>Please note the following concerning organic waste diversion, composting, and landfill cover:</u>

  It is encouraging that municipalities are recognizing the important role that organic waste diversion programs play in the broad scope of integrated waste management. Targeting this significant portion of the waste stream appears to be essential in meeting the challenging goals set by legislation.

  However, there appears to be an emerging widespread expectation among many jurisdictions to receive diversion credit for using chipped or shredded green wastes, or composted materials, as an "alternative daily cover material" at local landfills.

  This expectation may stem from a fundamental misunderstanding surrounding the nature and definition of certain landfill management practices currently employed at some Los Angeles area facilities. While it

may be the case that shredded or chipped, uncomposted green wastes are being incorporated as part of daily operations, this practice does not define this material an approved daily cover. These facilities are assumed to be on what is known as "performance standards" (14 CCR 17683).

"Performance standards" refers to a facility management practice that differs from default landfill cover regulatory requirements (14 CCR 17682) but is aimed at achieving similar environmental protection. The use of green wastes at these facilities does not necessarily constitute the use of an alternative cover material. Rather, the use of green wastes assists the facility in meeting performance standards.

The issue of daily cover material is both one of function and one of definition. While State regulations do not specify that cover material be soil, that material must, when properly used, function as barrier to the emergence or attraction of vectors, progress of fires within the landfill, escape of odors, and excess infiltration of water. In addition, the material must control erosion, prevent unsightliness, and be applied at a compacted minimum thickness of six inches pursuant to sections 14 CCR 17225.16, 17225.17, and 17682. By definition, an alternative, or suitable, daily cover must also be a material that has received approval from both the Board and the local enforcement agency (LEA). To this date, neither shredded green waste or finished compost has received such an approval as an alternative daily cover.

Current interpretation of statute and regulation indicates that a material recovered from the waste stream, which is processed and returned to a use with economic value, constitutes a diversion activity that may count toward the goals of AB 939. Through this interpretation, the use of a material, derived from the waste stream, as an approved alternative cover material may count as a diversion activity. By definition, however, the green waste material being applied at certain facilities is just that: a waste material and not an approved alternative cover material. Therefore, under current statutory and regulatory interpretations, this activity is not eligible to count toward the diversion goals.

Admittedly, there are more facets to this issue than a simple interpretation of regulation. These include:

- availability of approved suitable cover material;

- availability of processing and marketing options for green waste materials;
- need to preserve landfill capacity;
- environmental benefits of keeping raw, organic material out of landfills;
- intent of both statute and regulation.

However, until this issue is addressed by this Board for final determination, staff will view the use of green wastes in the above described manner, as well as the use of any recovered material that has not received appropriate Board approval, as not eligible for diversion credit.

Program Implementation, Section 18733.5, Page 6C-16:

o It appears that since much of the specific program selection is left unresolved, the selected program implementation is proportionally vague. Staff suggests developing task time lines and duty allocation descriptions based on probable program selection to better assess feasibility.

o Recycling does not occur unless the recyclable materials collected and processed are sold and remanufactured into marketable new products. It is imperative for municipalities to establish recycling market development programs and policies to expand and create materials markets to complement their diversion programs, or most often their collection efforts will result in market gluts and the materials being landfilled anyway.

o Therefore, the County should establish recycling market development objectives and commit to specific actions it will take to achieve the objectives. Also, these programs and policies should be scheduled for implementation. The following are market development activities the County may implement.

o The County may consider developing and implementing a <u>formal</u> recycled product procurement policy. This commitment is essential to provide leadership to local communities and help overcome user resistance, in addition to developing new markets for the recycled products. To successfully implement a recycled product procurement policy it may be necessary, at least initially, to provide authority to grant a price preference for recycled products. For example, State procurement policies allow for a 5% price preference for recycled paper and rubber products.

- Some additional recycled market development activities the County may implement include:

  - work with local manufacturers, industry and agricultural concerns to identify opportunities to increase the uses of postconsumer and secondary wastes in their manufacturing/industrial or agricultural processes. This effort would complement any recycled product procurement policy.

  - in order to enhance industry in the area, work with materials recovery facilities to commit a specific percentage of their recycled materials or compost to be available to local manufacturers/industry or agriculture on a consistent basis to ensure a recycled feedstock supply.

  - establish a consumer awareness campaign with local grocery markets to promote procurement of recycled products or products in recycled packaging.

  - conduct seminars with local businesses and schools on "buying recycled" in the workplace.

  - promote a "buy-recycled" advertising campaign in the local media including print, TV, and radio.

  - impose bans or fees on selected non-recyclable products and/or packaging made from non-renewable resources, where alternatives are available and economical.

- For further market development ideas, call (916) 323-3508 for a copy of the recent publication from Californian's Against Waste for the CA Dept. of Conservation, Cutting Our Waste In Half: A Model Planning Approach for Comprehensive City and County Waste Reuse, Reduction, Recycling, and Composting, February, 1991.

- Additionally, any city or county that plans to become a Recycling Market Development Zone must state so in the Recycling Component of the SRRE. This is necessary to be eligible to apply for the program with the CA Integrated Waste Management Board. For more information on this state-sponsored program, contact the Market Development Branch of the Integrated Waste Management Board at (916) 327-9392.

VI. COMMENTS ON THE SPECIAL WASTE COMPONENT

CCR, Section 18733 mandates the use of the model component format when preparing the Special Waste Component. Please use this format in the preparation of the final document to prevent the

omission of necessary data. Board staff has the following comments on this component:

- Construction debris is not considered a waste type. It must be disaggregated into its respective waste types, (e.g. concrete, soil, metals, asphalt, etc.).

- **Existing Conditions:** This section was not adequately addressed. To properly evaluate this component, it is necessary to provide quantities in volume or weight for each alternatives (CCR, Section 18733.2 (a)(2).

- **Page 6D-3:** It is not necessary to separate the identification of special waste management alternatives from the evaluation of alternatives. To avoid confusion, please combine these sections.

- **Evaluation of Alternatives:** The Evaluation of Alternatives section on page 6D-5 does not adequately address the requirements stated in CCR, Section 18733.3. Please follow the model component format to avoid omission of required data.

- **Selection of Program:** The Program Selection on page 6D-6 fails to meet the requirements of CCR, Section 18733.4.

- **Program Implementation:** Please identify government agencies and/or organizations responsible for implementing special waste programs as required by CCR, Section 18733.5. Also, it is necessary to:

  - provide a list of tasks necessary for implementation of special waste programs,

  - identify short- and medium-term implementation schedule addressing each task, and

  - identify known revenue sources necessary for implementation.

- **Monitoring and Evaluation:** The Monitoring and Evaluation section on page 6D-7 fails to meet the requirements of CCR, Section 18733.6. Please refer to the regulations when preparing the final element.

VII. COMMENTS ON THE EDUCTION AND PUBLIC INFORMATION COMPONENT

Board staff has determined that this section adequately addresses all of the requirements of the statutes and regulations.

VIII COMMENTS ON THE DISPOSAL FACILITY CAPACITY COMPONENT

Board staff has the following comments on the Disposal Facility Capacity Component:

- o It is important that all information be present for Board staff to properly evaluate each component. Please be sure that the required information for the Disposal Facility Capacity Component is found within this component. Material from Table 4, Section III of the SRRE should appear in this component (CCR, Section 18744 (a)).

- o The County states that the residue material from the twice annual burns never enter the landfills. Please state if these landfills are permitted for burning. Also, clarify what happens to the ash between the burns.

- o The formula in CCR, Section 18744(b)(2) identifies "E" as the amount of waste generated which is <u>exported</u> to solid waste disposal facilities through agreement. Section 3.2 on page 9-5 of the element shows that Mono County exports solid waste from its jurisdiction. If the County does not export its solid waste, this figure must be changed to zero.

IX. COMMENTS ON THE FUNDING COMPONENT

Board staff has the following comments on the Funding Component:

EVALUATION

- o The Funding Component is the section of the element that should include a recap, of all program costs and revenue sources discussed in the individual component program sections. This Funding Component does not provide cost estimates for component programs scheduled for implementation in the short-term planning period. Adequate revenue sources to fund the County's Source Reduction and Recycling Element must be shown. A summary of this information (actual dollar figures) was not presented to allow a comparison of costs versus revenues.

RECOMMENDATION

- o As required by California Code of Regulations, Section 18746, the Funding Component must identify all program costs and revenue sources for planning, development, and implementation. Identify what kind of financing structure currently exists and what structure will be used in future project or system financing. Describe the flow of funds and discuss in detail which funds, if any, are dedicated to a specific debt or project. In order to show sufficient

flexibility to allow for unexpected developments, discuss in detail viable contingent funding sources and what amounts can be obtained.

CRITERIA

- The Funding Component should include a thorough evaluation of the following:

  1. The Component should identify the current financing structure.

  2. The Funding Component must identify all program costs and revenue sources for each program, including planning and development.

  3. Documentation must address the ability of preferred funding mechanisms to accommodate changing economic conditions, an evaluation of the consequences, and the time required to implement the alternative.

  4. The Funding Component must demonstrate sufficient flexibility in the financing structure to allow for unexpected developments.

  5. The Component must identify the cost estimates for the implementation of the component programs in the short-term planning period.

  6. Documentation should include future cost estimates.

  7. The Component must document the local jurisdiction's anticipated revenue streams.

  8. The revenue streams must be sufficient to support the component programs.

  9. The Documentation should identify and discuss sources of contingency funding.

X. COMMENTS ON THE INTEGRATION COMPONENT

Board staff has the following comments on the Integration Component:

- The Integration Component explains how the Source Reduction, Recycling, Composting, and Special Waste components combine to achieve the 25% and 50% PRC section 41780 goal. This section was not adequately addressed in this document. Please add the required information for the final SRRE.

- The schedule for implementing solid waste alternatives is very vague. As per CCR, Section 18748 (b), please provide a more comprehensive calendar detailing and scheduling all tasks necessary to implement solid waste alternatives.

XI. COMMENTS ON CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

Board staff has reviewed the Negative Declaration for Mono County and has the following comments:

- The SRRE indicates on page 12-1, section 1.0, "that as of the date of the drafting of this component [CEQA Requirement] of the SRRE for the County of Mono, no guidelines or regulations for the preparation of the CEQA component in accordance with the California Integrated Waste Management Act of 1989 have been released for public usage by the CIWMB. Therefore, the content of this component may change significantly from its original format based on the regulations under development and review by the CIWMB."

- Page 12-2, section 1.3, states that "it is anticipated that no significant adverse environmental effects will be perpetuated on the environment through the alternatives discussed in this planning document. It is anticipated that a Negative Declaration will be prepared for this proposed project [SRRE Preliminary Draft] will not have a significant effect on the environment."

- Some of the 'alternatives' discussed in the SRRE identify the need for new facilities: a Materials Recovery Facility, page 6B-9 sections 5.1 & 5.2 and a bailing facility, page 6B-10, section 5.3, and page 6B-13, section 5.7. These facilities will require subsequent environmental documentation and review upon inception.

- The Composting Component, Section C, starting on page 6C-1, identifies several alternatives to divert yard wastes, wood wastes and slash materials (i.e. leaves, shrubbery trimmings, tree limbs and stumps, pine needles etc.) into compost. These alternatives include a roving grinding operation, regional sharing of grinding equipment, and a private enterprise operation. Implementation of these alternatives would not need new facilities if the operations were to occur at existing solid waste disposal facilities, page 6C-8 section 5.1, page 6C-10 section 5.2, and page 6C-11 section 5.3. A composting operation at and existing facility would require a Solid Waste Facility Permit (SWFP) revision or a Composting Facility Permit. In either case, CEQA compliance would be required. New facilities would be required for a pellet operation if an existing structure

could not be identified to house the new venture, therefore, this also would require CEQA compliance.

- Permanent collection and storage facilities for household hazardous waste (HHW) would be needed for the county, page 7-5 section 4.1.2, page 7-11 section 5.1.2, page 7-14 section 5.1.4 and page 7-15 section 5.3, requiring CEQA.

- Page 12-3 indicates that the SRRE, Section III, will be used for "future reference". Staff requests that the Negative Declaration (ND) be self contained and a stand alone document with all references in the SRRE inclusive with the document.

- It is important to note that the following steps are necessary to insure full compliance with CEQA:

  - Notice of Early Consultation;

  - Notice of Preparation; to be circulated through the State Clearinghouse;

  - Preparation of a Negative Declaration or an Environmental Impact Report; the draft environmental document is to be circulated through the State Clearinghouse for agency review and comment;

  - Response to Comments; a copy to be sent to all commenting agencies;

  - A Notice of Determination, filed with the County Clerk, must also be sent to the State Clearinghouse.

- CIWMB staff request that the following issues associated with the County of Mono's SRRE program be addressed in the ND, which would include at a minimum, the following:

  - Transportation/Circulation: How many "custom collection vehicles" would be needed for transport of HHW, what routes are to be followed and what permits will be needed for collection and storage.

  - Air Quality - Include projections by the Air Quality Management District outlining the results of increased air emissions and deterioration of ambient air quality.

  - Risk of Upset - Outline the City's contingency plan for hazardous waste clean-up procedures in the event of a hazardous waste spill, including, but not limited to, emergency personnel and equipment, response of existing

emergency services, traffic control and emergency evacuation.

- Human Health - Include a description of the training program to be instituted to train all personnel in the safety and handling of hazardous materials including first aid and safety equipment to be available for immediate use.

- Statement of Impact to the Environment - The ND should include a statement verifying that the project would not impact the environment. Please refer to CEQA Guidelines, Article 6, section 15071 for required contents of a ND.

XII. COMMENTS ON THE HOUSEHOLD HAZARDOUS WASTE ELEMENT

EXISTING CONDITIONS

o Page 7-4 - Please provide more detail on the loadchecking program. Specifically, include information such as quantities of hazardous waste discovered, a description of the program components (i.e. random and/or working face inspections), enforcement actions taken against violators, and handling and disposal methods for discovered waste.

ALTERNATIVES

4.2 Load Checking Program

o Page 7-6 - Please provide more detail on the loadchecking program. Such detail should include the methods by which the loads are inspected (i.e. random or working face, compacted or uncompacted, etc.), a description of the handling and disposal of discovered waste, and enforcement action taken against violators.

EVALUATION OF ALTERNATIVES

o Page 7-9 - The draft states that the host community must apply for a hazardous waste permit from the Department of Health Services (DHS) for a collection day. This requirement has changed. DHS has noticed permit-by-rule regulations for periodic collection days which should be in effect very soon. Mono County should contact DHS for current permit requirements.

o Page 7-11 - The draft states that a Hazardous Waste Permit would be required from DHS to operate a permanent facility. This permit process will also be streamlined by permit-by-rule. The proposed regulations for permanent HHW

facilities, however, have not been noticed yet. Mono County should contact DHS for current and interim permit requirements to develop a permanent HHW collection facility.

- Page 7-12 - The draft states that, "according to CIWMB, 7 percent of spent lead-acid batteries are currently recycled...". This should be corrected to 70 percent.

- Page 7-15 - The Element should include more detail on the loadchecking program.

This concludes Board staff's comments on Mono County's SRRE and HHWE. Please contact Bridget Brown at (916) 323-5358 with any questions you may have.

Sincerely,

Dianna Range for

John D. Smith
Acting Manager
Local Planning Division

cc: Jack Bertman, LTF Chair

ATTACHMENT 3

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

RESOLUTION #91-91

FOR THE REDUCTION OF DIVERSION REQUIREMENTS FOR THE COUNTY OF MONO

REDUCTIONS IN DIVERSION REQUIREMENTS

WHEREAS, Public Resources Code Section 41782 allows reductions in the diversion requirements specified in Public Resources Code Section 41780 if a city or county can demonstrate that achievement of the mandated requirements is not feasible due to geographic size or low population density, and small waste generation rates; and

WHEREAS, Title 14 of the California Code of Regulations, Section 18775 allows for qualifying jurisdictions to petition the Board for reductions in diversion goals mandated by Public Resources Code Section 41780; and

WHEREAS, the Board has received a petition for a reduction in the diversion requirements from the County of Mono; and

WHEREAS, the County of Mono qualifies based on geographic size, population density, and small waste generation rates to petition the Board for specified reductions; and

WHEREAS, the Board has found that the request for reduction of diversion goals to 15% by the year 1995 is reasonable based on the limitations relating to population density and a small waste generation rate and that achievement of the mandated requirements is not feasible; and

WHEREAS, the County has complied with Public Resources Code Section 41782, and Title 14 of the California Code of Regulations, Section 18775.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby grants the reduction in diversion requirements from 25% to 15% for the goal required to be reached by the year 1995. In addition, the Board directs the County, on an annual basis, beginning one year after approval of this reduction, to report to the Board on all progress and conditions relevant to implementing diversion programs.

CERTIFICATION

The undersigned Executive Director of the California Integrated Waste Management Board does hereby certify that the foregoing is a full true and correct copy of a resolution duly and regularly adopted at a meeting of the California Integrated Waste Management Board on December 11, 1991.

Dated:

Ralph E. Chandler
Executive Director

APPENDIX L

Resolution of the CIWMB on the Mono County Petition for Reduction in Diversion Requirements