COUNTYWIDE SITING ELEMENT

of the

MONO COUNTY INTEGRATED WASTE MANAGEMENT PLAN

Mono County, California

FINAL DRAFT

November 2014



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Countywide Siting Element



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 <u>Public Resources Code section</u>
 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 recycledcontent 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 postclosure 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	Status or	Completion Date	Policy	Status or	Completion Date			
No.	Frequency		No.	Frequency				
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.

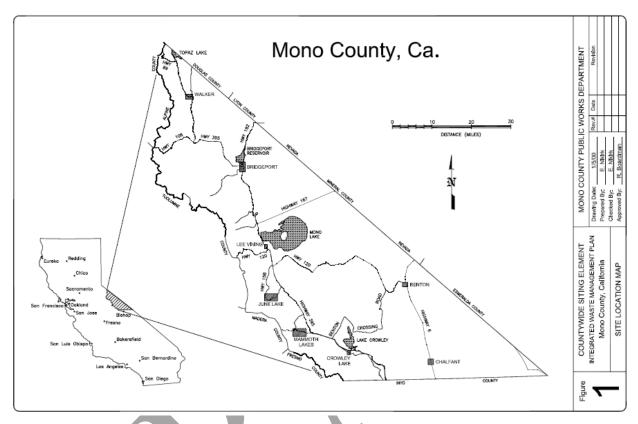
3.1 Geographic Setting

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 2 nd 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 2 nd 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.

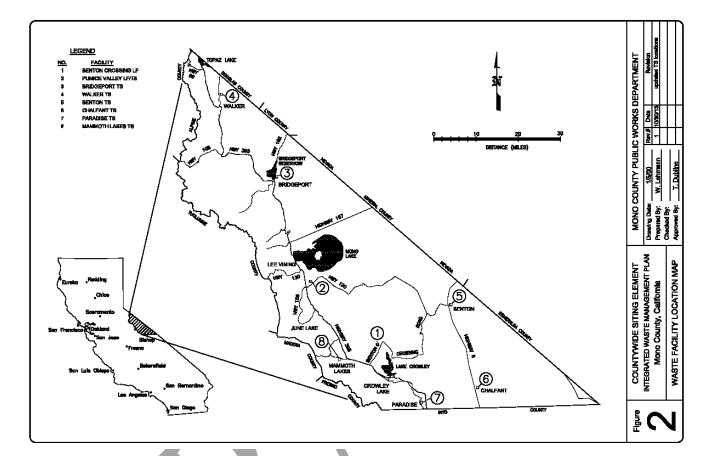


Figure 2 – Waste Facility Location Map

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					
	I.	andfill Admini	stration and Per	mit Information	n	
	1	unum 110111111	ottation and i ci			
Landfill	Facility	Property	Facility	Operational	Permit Date	
Landin	1 acmey	Troperty	1 acmey	Operational	Telline Date	
Name	Permit No.	Owner	Operator	Status		
1 vanie	Terring 1 vo.	Owner	Operator	Status		
Benton	26-AA-0006	Mono County	Mono County	Post-Closure	6/17/2013	
		,			, ,	
Benton	26-AA-0004	LADWP	Mono County	Active	3/8/2013	
Crossing						
S						
Bridgeport	26-AA-0002	Mono County	Mono County	Post-Closure	6/17/2013	
0.1			,			
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	
			Ź			
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. Disp	oosal 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. Da	ily 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 Condi	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.

Countywide Siting Element 2014 Update

TABLE 8 15-Year Countywide Disposal Capacity Projections In-Place Disposal 1 Cover Soil Required² Total Annual Fill Remaining Calendar No. of Capacity² (tons/yr) Year Years (tons/yr) (cy/yr) (tons/yr) (cy/yr) (cu.yds.) (cy/yr)2014 1 33,280 66,144 13,312 26,458 46,592 92,602 1,164,488 46,825 2015 2 33,446 66,475 13,379 26,590 93,065 1,071,423 26,723 47,059 2016 3 33,614 66,807 13,445 93,530 977,893 26,856 93,998 2017 4 33,782 67,141 13,513 47,294 883,896 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 48,007 599,074 95,415 13,785 27,398 48,247 2021 8 34,462 68,494 95,892 503,182 68,837 2022 9 34,635 13,854 27,535 48,489 96,371 406,811 34,808 69,181 13,923 2023 10 27,672 309,958 48,731 96,853 69,527 11 34,982 13,993 2024 27,811 48,975 97,337 212,621 69,874 2025 12 35,157 14,063 27,950 114,797 49,220 97,824 14,133 2026 13 35,333 70,224 28,089 98,313 16,484 49,466 2027 14 35,509 14,204 -82,321 70,575 28,230 49,713 98,805 70,928 2028 15 35,687 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.

Environmental Considerations

• 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 lowpermeable 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.

Environmental Impacts

- 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 2014 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 XXXXXXX, 2014.



SECTION 9.0

REFERENCES

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