# TOWARD ENSURING ADEQUATE LANDFILL CAPACITY

*Prepared as Part of the Integrated Waste Management Planning Study*

*Contract #C1089*

*May 9, 1995*

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NOTE: Subsequent to the preparation of this report, legislation (SB 63, Strickland) signed into law by Gov. Arnold Schwarzenegger eliminated the California Integrated Waste Management Board (CIWMB) and its six-member governing board effective Dec. 31, 2009.

CIWMB programs and oversight responsibilities were retained and reorganized, effective Jan. 1, 2010, and merged with the beverage container recycling program previously managed by the California Department of Conservation.

The new entity is known as the Department of Resources Recycling and Recovery (CalRecycle).

This landfill capacity analysis was prepared for the six-member governing board in May 1995 but was not published at the time as a formal CIWMB publication.

This document was originally printed in hard-copy format in 1995 and was declared out of print when all known copies had been distributed. A complete version of this report was located in 2011 and was scanned to a digital format, making it available for downloading.

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Publication # DRRR-2012-010

# TABLE OF CONTENTS


| | | Page |
|---|---|---|
| | EXECUTIVE SUMMARY | |
| | Background | 1 |
| | Methodology and Limitations | 2 |
| | Summary of Findings | 3 |
| | Summary of Conclusions | 10 |
| 1.0 | REPORT PURPOSE, APPROACH, AND CONTENT | 13 |
| | 1.1 Purpose | 13 |
| | 1.2 Approach | 14 |
| 2.0 | OVERVIEW OF THE LANDFILL SITING AND PERMITTING PROCESS | 15 |
| | 2.1 Relevant Legislation and Regulations | 15 |
| | 2.2 Countywide and Regional Agency Siting Elements | 15 |
| | 2.3 Major Steps in the Current Landfill Permitting Process | 16 |
| 3.0 | CURRENT LANDFILL CAPACITY IN CALIFORNIA | 18 |
| 4.0 | IDENTIFYING AND RESOLVING ACUTE SHORTAGES OF LANDFILL CAPACITY | 23 |
| | 4.1 Definition of Acute Shortage | 23 |
| | 4.2 Methods for Ensuring Adequate Landfill Capacity | 25 |
| | 4.3 Resolving Acute Shortages of Landfill Capacity | 30 |
| 5.0 | RECENT EXPERIENCE WITH LANDFILL SITING | 35 |
| 6.0 | FACILITATING THE SITING PROCESS | 38 |
| | 6.1 Problems | 38 |
| | 6.2 Solutions | 40 |
| | 6.3 Summary of Approaches | 45 |
| | REFERENCES | 46 |
| | APPENDICES | |
| | A. Solid Waste Disposed (1990-94) | A-1 |
| | B. Landfills Receiving Solid Wastes in 1994, Sorted By Size | B-1 |
| | C. Prior Studies and Reports | C-1 |
| | D. Landfill Initial Data Report | D-1 |
| | E. Survey Materials | E-1 |

## TABLE OF CONTENTS (Continued)

Page

### LIST OF FIGURES


1. Estimated Years of County Landfill Capacity 6
2. Landfill Remaining Capacity in Cubic Yards, 1993 7
3. Projected Landfill Remaining Capacity in Cubic Years, 1995 8
4. Projected Landfill Remaining Capacity in Cubic Yards, 2000 9
5. Remaining Landfill Capacity in Cubic Yards by Region as of January 1, 1993 11
6. Percentage of California's Population by Remaining Capacity as of January 1, 1995 11
7. California Landfill Locations 20
8. Example of GIS Detail (Inyo County) 21


### LIST OF TABLES


1. Years of Remaining Permitted Landfill Disposal Capacity for Counties by Region as of January 1, 1995 5

## EXECUTIVE SUMMARY

### BACKGROUND

The California Integrated Waste Management Act of 1989 (Act), as specified in Public Resources Code (PRC) Section 41701(b), requires that each county prepare a Countywide Siting Element to be part of a Countywide Integrated Waste Management Plan. The Siting Element shall include "an estimate of the total transformation or disposal capacity in cubic yards that will be needed for a 15-year period to safely handle solid wastes generated within the county that cannot be reduced, recycled, or composted."

This report examines the adequacy of remaining permitted landfill disposal capacity in California, and methods for ensuring the conservation of existing landfill capacity and the development of additional capacity for waste which cannot be reduced, recycled, or composted. This report builds upon an earlier report prepared by the California Integrated Waste Management Board, *Reaching the Limit, An Interim Report on Landfill Capacity in California (CIWMB 1992a).* The conclusions of that report stated that as of January 1, 1990, counties representing approximately 70 percent of the state's population indicated that they would be facing a landfill capacity shortage within the next 15 years. More importantly, at that time almost 40 percent of the state's population resided in ten counties that indicated they had less than five years remaining landfill disposal capacity. The purpose of the contract was to compile information on remaining capacity on a landfill specific basis.

The contract for this report involves collection of landfill capacity and disposal information in order to estimate the amount of remaining capacity as of January 1, 1993. As part of this contract, a Geographic Information System (GIS) was designed to allow the Board to store updated capacity information about each active landfill in the state, and provide data reports and maps that display the information in a variety of ways. The GIS provides this information in reports and thematic maps. Board staff now have a tool to quickly analyze areas facing critical landfill shortages. The GIS can quickly identify all the landfills in a region and provide information on the remaining capacity and tons per day (TPD) limits. Furthermore, the GIS contains county population information and has data layers to display highways and railroads so that transportation routes can be analyzed.

A draft of this report was released in May 1994. That draft report contained landfill information received at that time, and identified problems and solutions to the development and conservation of landfill capacity in California. Two public workshops were convened (one in Long Beach on June 1, 1994, and one in Sacramento on June 7, 1994) to discuss the draft report and to receive feedback about the problems and solutions identified in the draft report. Through the workshops and written responses, it became apparent that workshop participants agreed with some of the proposed solutions and disagreed with others. Workshop participants also identified other problems and recommended enhancements to the GIS. That feedback helped the preparers of this report to identify solutions that have support from the public, from county staff and waste haulers that rely upon disposal facilities, and from operators of landfills in California.

## METHODOLOGY AND LIMITATIONS

This report identifies 1) the remaining capacity of landfills in California that received solid wastes as of January 1, 1993, and 2) the counties that may now have less than 15 years of remaining landfill capacity for the wastes currently disposed of in the county. The data were collected by a variety of methods:

- two rounds of surveys to the landfill operators;
- a review of the data by Local Enforcement Agencies (LEAs) of about 35 counties;
- a review of facility files; and
- a review of landfill Certification of Initial Cost Estimates and Financial Assurances for Closure and Postclosure.

The methodology for determining years of remaining capacity was to divide the cubic yards of remaining capacity in a county by the estimated annual disposal rate. The GIS system takes into account the most likely landfills to receive county waste and their reported or default waste compaction rates. The GIS also routes county waste when counties have ongoing export agreements.

There was considerable criticism of the preliminary findings of this report when it was released as a draft in May 1994. Much of the criticism dealt with issues beyond the scope for this contract. A strong criticism of the June 1994 draft report that was relevant was that the draft report overestimated the remaining capacity in some counties because it is simplistic to assume that all landfill capacity in a county is available to receive all the wastes generated in a county. This point and others from the workshops were incorporated into this report and the reader should be aware that even counties with more than 15 years of capacity do experience critical capacity shortages. This can occur because of restrictions in the types of wastes received at

various landfills, restriction on the jurisdictions using certain landfills, prohibitive tipping fees, competition between companies, and high transportation costs. Wastesheds within a county can face a critical shortage of affordable landfill capacity even when the county mathematically has more than 15 years of landfill capacity. There are several counties with more than 15 years of landfill capacity in which the solid waste system operators are trying to permit new or expanded landfills or are exporting wastes to nearby counties or even out of state.

The landfill owners and operators who attended the workshops and/or submitted written responses also indicated a need for the Board to educate the public on the key role of landfills in the integrated waste management systems.

## SUMMARY OF FINDINGS

### STATEWIDE

#### Daily Disposal

Based on disposal information from the Board of Equalization (BOE) in Appendix A, the amount of solid waste disposed in California each day was 5.9 lbs. per person throughout 1993. This compares to 7.9 lbs. per day as of January 1, 1990, and 7.4 lbs. per day as of June 1985. The reduction in disposal amount is generally believed to be the result of the start-up of many new recycling programs and the reduction in generation amounts because of a prolonged recession in California.

#### Annual Disposal

The BOE information indicates the total amount of solid waste disposed annually in California during 1993 was approximately 34 million tons. This is a 20 percent reduction from the rate of 42.5 million tons per year as of January 1, 1990 (CIWMB, 1992a).

#### Remaining Permitted Landfill Disposal Capacity

As reported by landfill operators and LEAs and data obtained from the CIWMB landfill records, disposal capacity in California as of January 1, 1993, was approximately 1.61 billion cubic yards. This compares to 1.12 billion cubic yards as of January 1, 1990, and 985 million cubic yards, as of January 1, 1987. Since 1990, estimated landfill capacity increased by approximately 490 million cubic yards.

## ACTIVE LANDFILLS, NUMBER AND SIZE

BOE information indicates that the number of landfills in the state paying fees has dropped from 234 in 1990 to 201 in 1994. This indicates an approximate 14 percent reduction in the number of landfills between 1990 and 1994. There has been a concern that the Federal Subtitle D regulation for landfills will result in additional closures. Since many of the surveys returned by the smaller landfills indicated they planned to close sooner because of Subtitle D, the inability of landfills to meet the requirements of Subtitle D probably is the main reason for the reduced number of active landfills.

The BOE information was sorted by the amount of wastes received in landfills in the most recent year, 1994 (see Appendix B). A summary of the amount of wastes received by landfills is shown below:

- Seven (7) landfills received more than 1,000,000 tons of waste in 1994.
- Eight (8) landfills received between 500,000 and 1,000,000 tons of waste in 1994.
- Fifty-four (54) landfills received between 100,000 and 500,000 tons of waste in 1994.
- The remaining one hundred thirty-two (132) landfills received less than 100,000 tons of waste in 1994.
- The sixty-nine (69) landfills that received the most waste in 1994 (all receiving >100,000 tons) received a total of 30,916,675 tons, about 91 percent of all solid wastes disposed in 1994.

## BY REGION

### Remaining Permitted Landfill Disposal Capacity

To make this report as current as possible in terms of estimating the years of remaining capacity, years of remaining capacity has been estimated as of January 1, 1995. Twenty-one (21) counties in California potentially have less than 15 years of estimated disposal capacity as of January 1, 1995 (see Table 1). Remaining landfill capacity is distributed regionally as shown in Figures 1 through 4.

Although many areas of the state have easy access to reasonably priced landfills, there continue to be counties and sub-county wastesheds with poor access to disposal capacity. As one would expect, areas with poor access to disposal capacity occur in many counties with less than 15

TABLE 1: YEARS OF REMAINING PERMITTED LANDFILL DISPOSAL CAPACITY FOR COUNTIES BY REGION AS OF JANUARY 1, 1995 /1,2/

| REGION 1: NORTHERN CALIFORNIA | |
|---|---|
| Alpine | /3/ |
| Amador | 29 - 38 years |
| Butte | 32 - 28 years |
| Colusa | 144 - 297 years |
| Del Norte | 1 - 8 years |
| El Dorado | 3 - 11 years |
| Glenn | 34 - 31 years |
| Humboldt | 16 - 16years |
| Lake | 4 - 10 years |
| Lassen | 51 - 71 years |
| Mendocino | 3 - 6 years |
| Modoc | 3 - 35 years |
| Nevada | /3/ |
| Placer | 39 - 29 years |
| Plumas | 4 - 7 years |
| Sacramento | 84 - 74 years |
| Shasta | 25 - 22 years |
| Sierra | 148 - 143 years |
| Siskiyou | 37 - 65 years |
| Tehama | 7 - 13 years |
| Trinity | 30 - 37 years |
| Yolo | 152 - 119 years |
| Sutter/Yuba | 4 - 5 years |

| REGION 2: BAY AREA | |
|---|---|
| Alameda | 21 - 15 years |
| Contra Costa | 66 - 107 years |
| Marin | 9 - 5 years |
| Napa /4/ | 25 - 12 years |
| San Francisco | /3/ |
| San Mateo | 30 - 21 years |
| Santa Clara | 36 - 30 years |
| Solano | 38 - 34years |
| Sonoma /4/ | 16 - 12 years |

| REGION 3: CENTRAL CALIFORNIA | |
|---|---|
| Calaveras | 131 - 174 years |
| Fresno | 33 - 32 years |
| Inyo | 95 - 178 years |
| Kern | 25 - 19 years |
| Kings | 3 - 5 years |
| Madera | 1 - 2 years |
| Mariposa | 102 - 110 years |
| Merced | 9 - 8 years |
| Mono | 110 - 256 years |
| Monterey | 84 - 58 years |
| San Benito | 50 - 59 years |
| San Joaquin | 134 - 85 years |
| San Luis Obispo | 21 - 22 years |
| Santa Barbara | 44 - 47 years |
| Santa Cruz | 31 - 26 years |
| Stanislaus | 21 - 109 years |
| Tulare | 33 - 28 years |
| Tuolumne | 2 - 7 years |

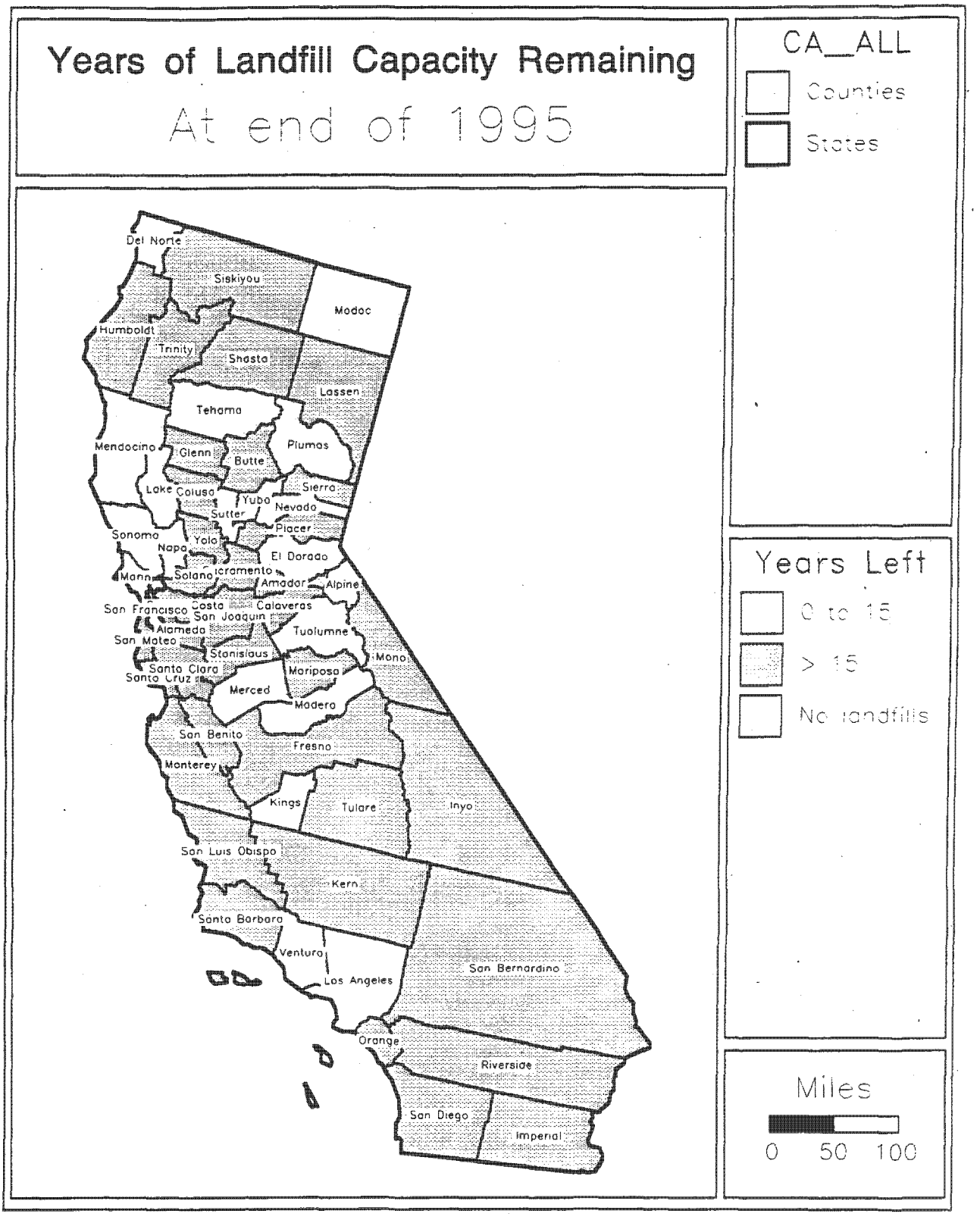
| REGION 4: SOUTHERN CALIFORNIA | |
|---|---|
| Imperial | 106 - 69 years |
| Los Angeles /4/ | 17 - 13 years |
| Orange | 69 - 44 years |
| Riverside | 26 - 20 years |
| San Bernardino | 35 - 30 years |
| San Diego | 30 - 24 years |
| Ventura /4/ | 17 - 14 years |

/1/ A range of years is given. The first estimate is from the CIWMB GIS, and is based on generation rates of 1 ton per person per year in all counties and diversion rate of 20% in 1993, 22% in 1994 and 25% for 1995 and future years. The second estimate uses the same cubic yard (CY) capacity, but uses average county disposal rates reported by BOE for 1993 and 1994.

/2/ Estimates are provided as preliminary planning tools for board staff and may vary greatly from estimates that rely on an indepth understanding of a particular county. These estimates will become more accurate as the GIS modifies assumptions on the basis of disposal counting reports and County Siting Elements.

/3/ 100% of waste exported.

/4/ Counties that have less than 15 years of capacity when BOE disposal rates (1994) are used.

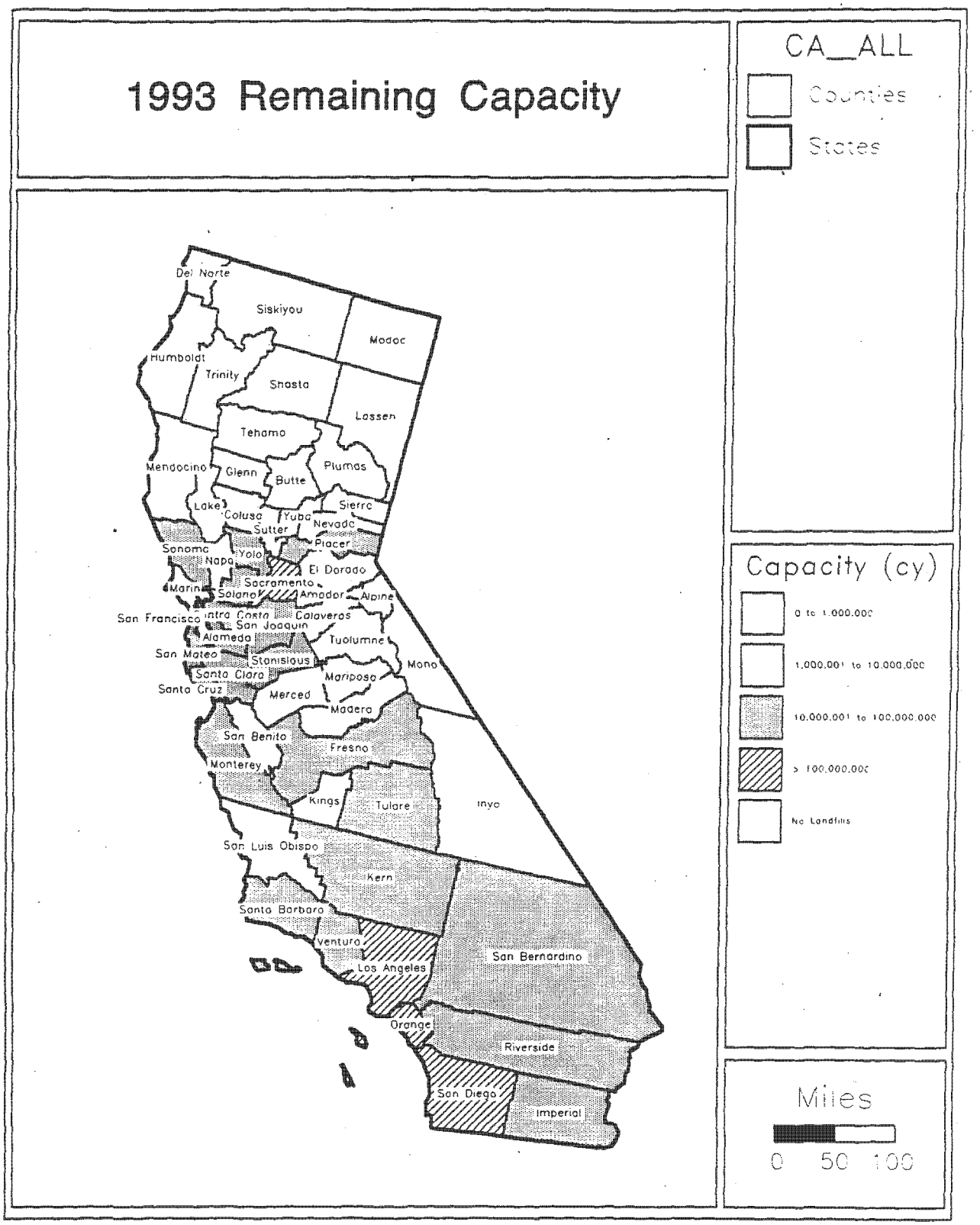



*Toward Ensuring Adequate Landfill Capacity / 920279*

SOURCE: Environmental Science Associates

**Figure 1**
Estimated Years of
County Landfill Capacity

**This figure shows the minimum years from the ranges provided in Table 1.**

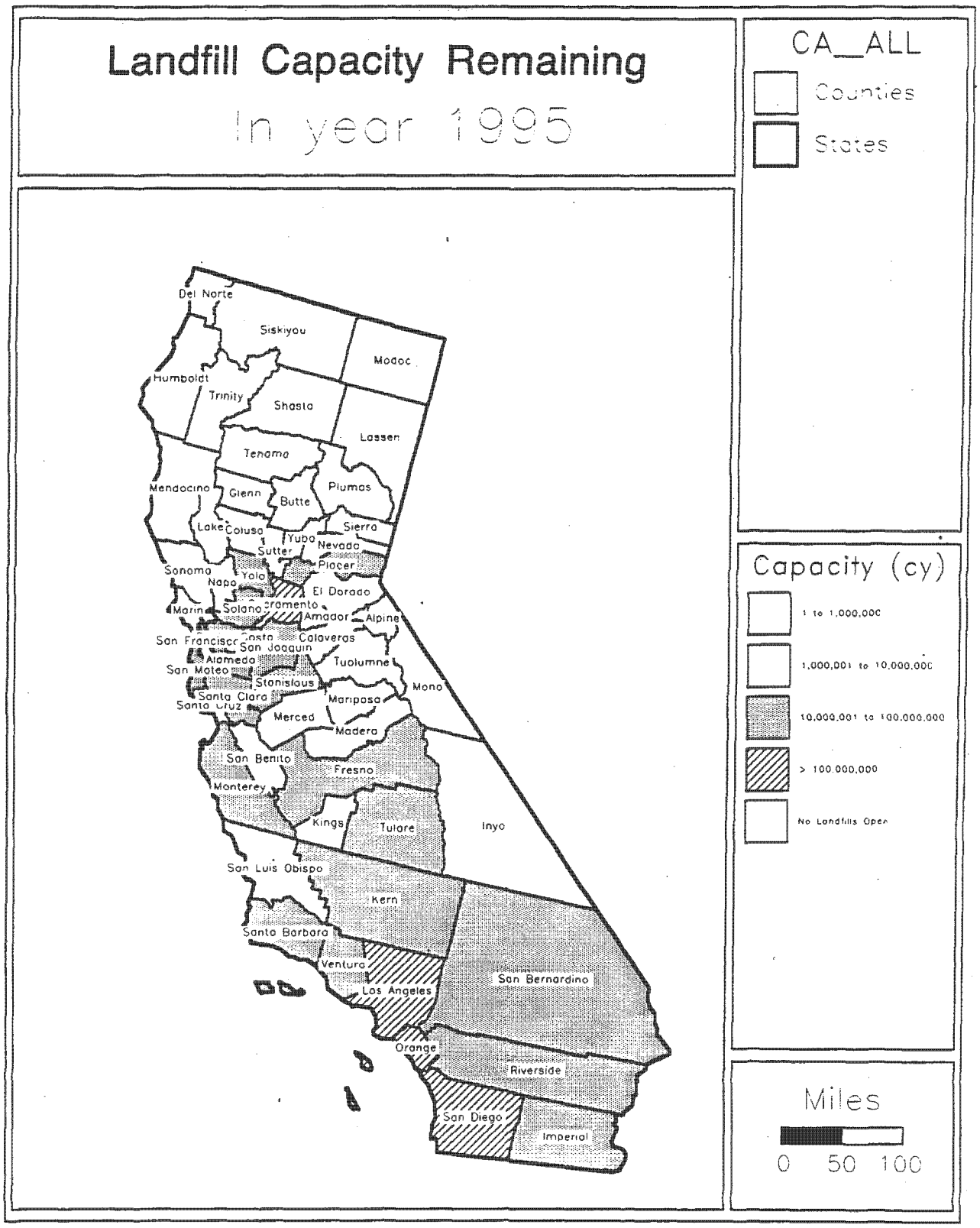



*Toward Ensuring Adequate Landfill Capacity / 920279*

SOURCE: Environmental Science Associates

**Figure 2**
Landfill Remaining Capacity
in Cubic Yards, 1993

**The capacities for each county are from the totals shown in Appendix D.**

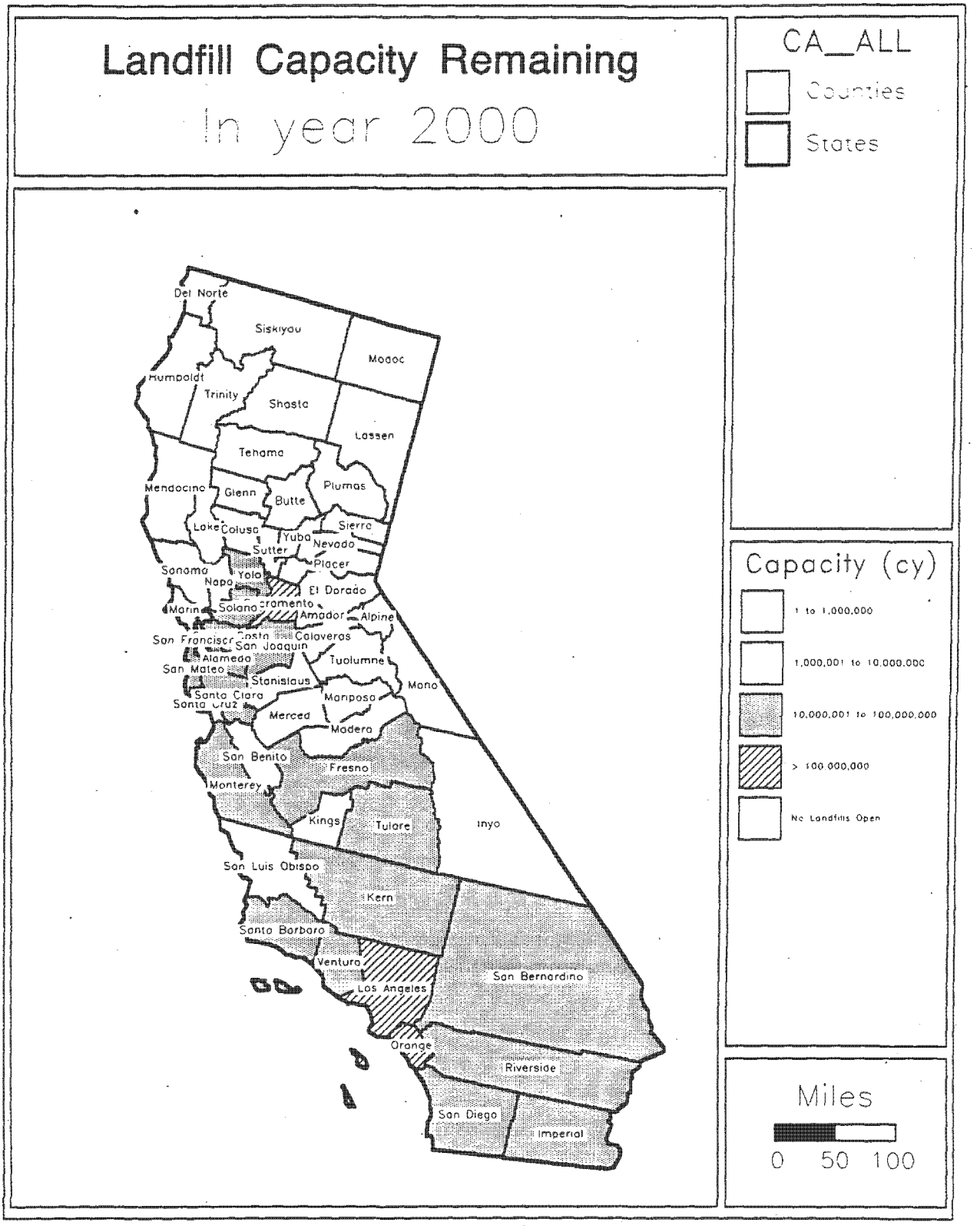



*Toward Ensuring Adequate Landfill Capacity / 920279*

SOURCE: Environmental Science Associates

**Figure 3**
Projected Landfill Remaining Capacity in Cubic Yards, 1995

**Projected capacity for 1995 uses the initial capacities (Appendix D) and factors in population growth and continued progress in attainment of the AB 939 goals of 25% diversion by 1995 and 50% diversion by 2000.**




*Toward Ensuring Adequate Landfill Capacity / 920279*

SOURCE: Environmental Science Associates

**Figure 4**
Projected Landfill Remaining Capacity in Cubic Yards, 2000

**Projected capacity for 1995 uses the initial capacities (Appendix D) and factors in population growth and continued progress in attainment of the AB 939 goals of 25% diversion by 1995 and 50% diversion by 2000.**

years of estimated disposal capacity, but many sub-county wastesheds also have poor access to disposal capacity even in the counties that are estimated to have more than 15 years of disposal capacity. For solid wastes that cannot be reduced, recycled, transformed or composted, many sub-county regions face few options other than to haul the solid waste residuals long distances and/or pay substantial tipping fees.

BY COUNTY

Remaining Permitted Landfill Disposal Capacity

Because of an increase in the estimate of remaining capacity and a reduction in wastes being landfilled, this report identifies fewer counties as having less than 15 years (as of January 1, 1993) of remaining capacity than the previous report identified (as of January 1, 1990). This report estimates that as of January 1, 1995, there might be as many as twenty-one (21) counties with less than 15 years of in-County landfill capacity, in 1990, 32 counties were identified as having less than 15 years of in-County landfill capacity (CIWMB, 1992a). Landfill capacity distribution in the state is shown in Figure 5.

Using a 1.0 ton per person generation rate and diversion rates of 20 percent for 1993, 22 percent for 1994 and 25 percent for 1995 and beyond, and major known export agreements, the GIS projects the following information as of January 1, 1993.

- There are 21 counties that have less than 15 years of remaining in-County landfill capacity (see Table 1).
- About 41 percent of the residents of California live in counties that may have less than 15 years of permitted landfill disposal capacity as of January 1, 1995 (see Figure 6).
- Four counties have no landfills.

## SUMMARY OF CONCLUSIONS

The following are preliminary conclusions based upon the data provided by the landfills that responded to the surveys and feedback from the two workshops.

- Although the methodologies were different, the total amount of remaining landfill capacity seems almost certainly to have increased between January 1, 1990 and January 1, 1993.

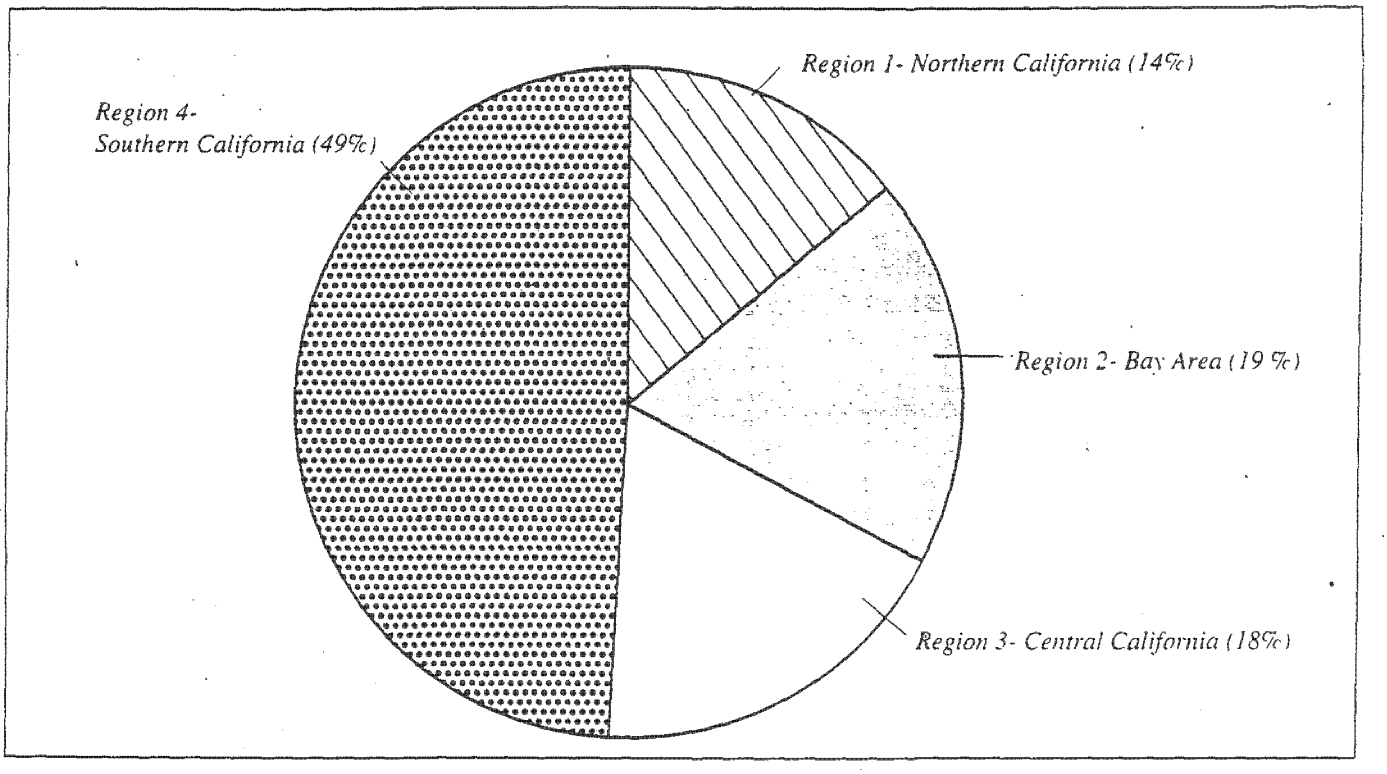



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**Figure 5**

Remaining Landfill Capacity in Cubic Yards by Region as of January 1, 1993

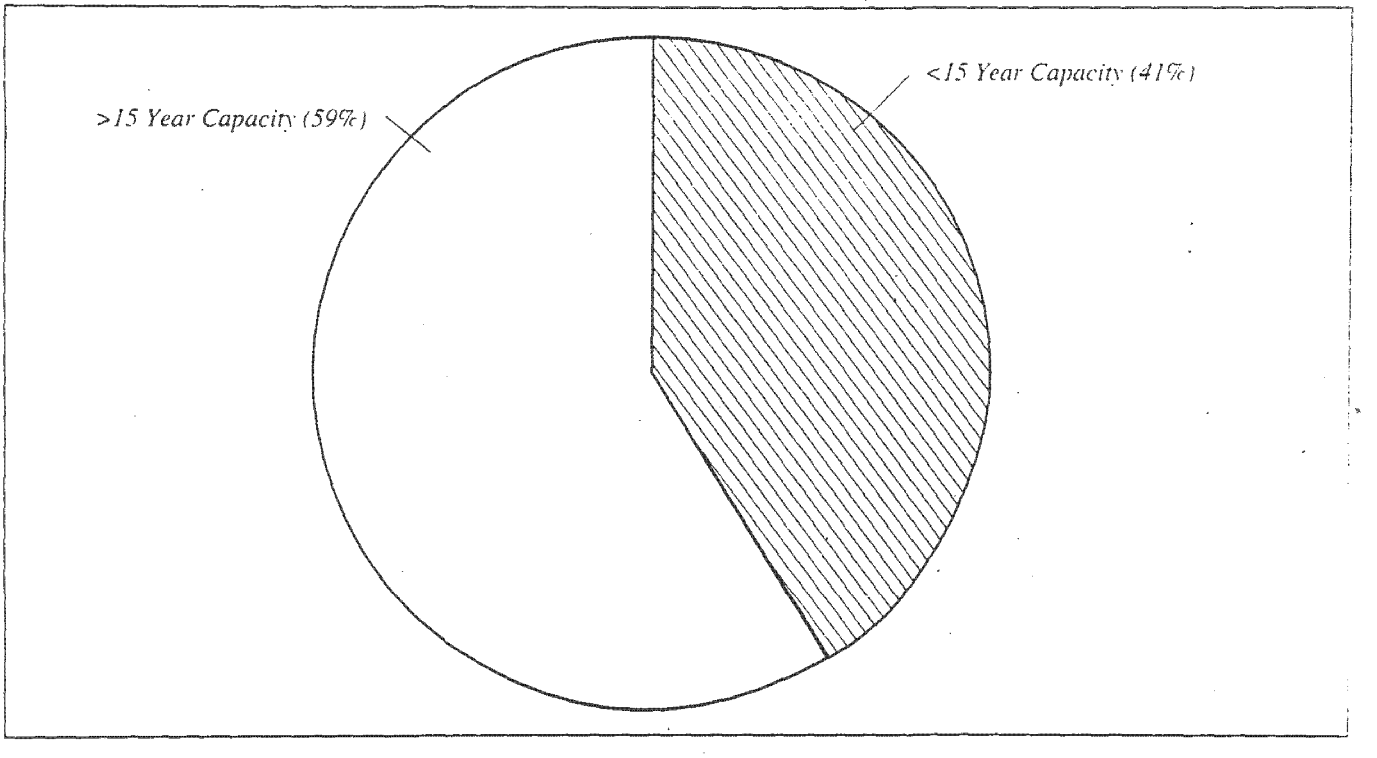


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**Figure 6**

Percentage of California's Population by Remaining Landfill Capacity as of January 1, 1995

- Annual disposal has dropped from a rate of 42.5 million tons per year as of January 1, 1990 (CIWMB, 1992a) to 34 million tons in 1993, a reduction of approximately 20 percent (see Appendix A).

- By dividing the remaining landfill capacity by the 1993 rate of disposal, the state may have as much as 28 years of remaining landfill disposal capacity, but this capacity may not be available to all areas of the state.

- Because the remaining landfill capacity is not readily available to all areas of the state, many cities and counties are already exporting wastes to other jurisdictions. Whereas existing landfills continue to experience some successes in permitting expansion areas, jurisdictions find the siting and permitting of new landfills to be extremely difficult and costly.

- There is a continuing role for the state to support the development of options, including the regionalization of solid waste facilities so that areas without landfills can feasibly develop regional landfills or Materials Recovery Facility (MRF) / transfer stations to minimize the solid wastes being disposed and to provide for more efficient transportation of solid wastes to distant landfills.

- There is a continuing role for CIWMB to act as a clearinghouse to assist local jurisdictions in solid waste issues related to siting facilities and identifying new technologies to reduce solid wastes and to conserve permitted landfill capacity.

- In order to enhance the use of the GIS there needs to be a system established to periodically obtain the remaining capacity, typical compaction rates, and associated data for each active landfill.

# 1.0 REPORT PURPOSE, APPROACH, AND CONTENT

## 1.1 PURPOSE

The purpose of this report is to provide the California Integrated Waste Management Board (CIWMB) with current information on the state's remaining landfill capacity and to suggest strategies for assisting local governments in achieving their mandate to have 15 years of disposal capacity permitted or identified. The report identifies those counties with less than 15 years remaining capacity, delineates circumstances that create an acute shortage of landfill capacity, and identifies steps that should be considered to address acute shortages. The report identifies obstacles to timely and cost-effective landfill siting and permitting, and proposes strategies that the CIWMB, local governments, and prospective landfill operators should consider to overcome these obstacles.

The landfill siting and permitting processes involve a spectrum of interested parties: local government planning departments and commissions, boards of supervisors or city councils, local enforcement agencies, public or private landfill operators, neighbors of proposed landfill sites, environmental and community activists, and several state and federal agencies. Furthermore, landfill siting and permitting are to some extent separate, but overlapping processes. Landfill siting is primarily a matter of local land use planning. Permitting, on the other hand, typically involves a number of state and federal agencies.

This report is intended to complement recent reports of the CIWMB and other state agencies dealing with streamlining the permitting process, by focusing on means of facilitating the siting process. This report finds that the siting process, like the permitting process, has potential for conflict, misunderstanding, and costly delay. The chances for success of a siting process may be improved, however, through a carefully coordinated and open planning process that involves all interested parties from the beginning, and through increased assistance or resources from the CIWMB to local government agencies and others involved in landfill siting.

## 1.2 APPROACH

The approach used to perform the necessary research for this report included:

- a review of reports by the California Integrated Waste Management Board, the former California Waste Management Board, Cal/EPA, the Office of Permit Assistance, and the Council on California Competitiveness;
- an evaluation of comments on published reports and printed testimony in public hearings on permit processing and Cal/EPA recommendations on permit streamlining;
- discussions with staff of CIWMB, Cal/EPA, and the Office of Permit Assistance;
- telephone interviews with local government planning experts, local enforcement agencies, citizen advocates, and permit applicants for new landfills or landfill expansions;
- surveys were sent to every landfill in the state to determine remaining capacity as of January 1, 1993 (160 surveys were returned);
- verification of returned landfill surveys by the Local Enforcement Agency (LEA) -- these were distributed at LEA roundtables in the fall of 1994, at which time the Board presented an overview of the data collection efforts to that time;
- receiving comments from public workshops that were held at Long Beach and Sacramento in June 1994 to review the Draft Report -- participants included experts in landfill siting and development, Board members and staff, the contractor, and interested public;
- review of CIWMB landfill records to verify and supplement remaining landfill capacity data; and
- written comments that followed the public workshops.

## 2.0 OVERVIEW OF THE LANDFILL SITING AND PERMITTING PROCESS

### 2.1 RELEVANT LEGISLATION AND REGULATIONS

Section 44001 of the *California Public Resources Code* requires permits for the operation of solid waste facilities; Section 44004 requires that permits be revised if there is a significant change in the design or operation of a solid waste facility. Procedures for administering solid waste facilities permits are specified in *California Code of Regulations*, Title 14, Chapter 5, Article 3.1, 18200 et seq.

Current law requires the preparation of Countywide or Regional Agency Siting Elements for solid waste disposal facilities under *California Public Resources Code*, Sections 41700 et seq. These requirements are further clarified in *California Code of Regulations*, Title 14, Division 7, Chapter 9, Article 6.5. This legislation is intended to ensure that each county has planned for adequate safe disposal capacity for a minimum of 15 years. When a county determines that existing capacity will be exhausted within 15 years, then an area or areas for the location of new solid waste disposal facilities, or existing facilities that will be expanded, must be identified.

### 2.2 COUNTYWIDE AND REGIONAL AGENCY SITING ELEMENTS

The Countywide or Regional Agency Siting Elements identify areas throughout the county or region for locating landfills and/or transformation facilities. The area(s) must be consistent with the applicable City or County General Plan, unless the county determines that existing capacity will be exhausted within 15 years, or additional capacity is desired, but there is no area available that is consistent with the applicable General Plan(s). In this case, the statutes allow counties to "tentatively reserve" sufficient land area until such time as it is made consistent with the applicable General Plan. Counties and regional agencies have until the first 5-year revision of the siting element to revise general plans to incorporate "tentatively reserved" sites, or to disapprove and remove them from further consideration.

## 2.3 MAJOR STEPS IN THE CURRENT LANDFILL PERMITTING PROCESS

According to the *Permit Desk Manual* (CIWMB, 1992b), a new or revised Solid Waste Facility Permit (SWFP) represents the last of a series of approvals necessary before operations can begin or be modified at a landfill. As a minimum, the following additional permits or certifications are almost required.

- Certification of compliance with the California Environmental Quality Act (CEQA).
- Local land use permit.
- Findings of consistency and conformance with appropriate City or County General Plan and County Integrated Waste Management Plan (CIWMP).
- Waste Discharge Requirements (WDRs) issued by the Regional Water Quality Control Board (RWQCB).

In some cases, other permits or approvals may be required: Permits to Construct and Operate from the local Air Quality Management District or the local Air Pollution Control District; Wetlands Fill Permit from the U.S. Army Corps of Engineers; Streambed Alteration agreements from the California Department of Fish and Game; a Habitat Conservation Plan from the California Department of Fish and Game, or; a Coastal Development Permit from the California Coastal Commission. If the landfill will handle hazardous wastes, a permit or variance may be required from the California Department of Toxic Substances Control.

Following is a summary of the key steps in obtaining a landfill permit for a new facility; certain variations exist for permit revisions.

1. The initial application will be for a local land use permit, land use zoning change, local General Plan amendment, or a combined application for all three. The applicant submits the application to the appropriate local agency, depending on local regulations and requirements. Where multiple agency approvals are required, the agency that issues the first of these approvals is generally designated as the lead agency.

2. As required by CEQA, the lead agency prepares required environmental documents for an Initial Study, followed by a Negative Declaration, a Mitigated Negative Declaration, or an Environmental Impact Report.

3. Air quality permit approvals vary from district to district, but generally require a request for Authority to Construct and a Permit to Operate. This application must contain detailed project information regarding the nature and estimated quantities of emissions.

4. Water Discharge Requirements (WDRs) are necessary for all new landfills and the WDRs may have to be revised for changes in landfill construction or operations. The applicant submits a Report of Waste Discharge (ROWD) to the Regional Water Quality Control Board (RWQCB). This report describes in detail the geologic and hydrologic setting of the proposed landfill and the facility features designed to prevent infiltration of surface water and to prevent leachate from contaminating surface or groundwater resources.

5. A wetlands permit is required for landfill projects that fill wetlands. The permit program is administered by the U.S. Army Corps of Engineers, with oversight by the U.S. Environmental Protection Agency.

6. The *California Fish and Game Code* requires an agreement if development of a landfill will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, or if the development uses materials from a streambed.

7. When all other approvals have been obtained, the proponent submits an application for a Solid Waste Facility Permit (SWFP) to the Local Enforcement Agency (LEA). The LEA is required to provide public notice of the SWFP application and accept public comments.

8. If the LEA determines the application is complete, they will prepare a proposed permit and forward it to the CIWMB.

9. Within 60 days of its receipt, the CIWMB will concur with or object to the proposed permit. An appeals process is available in the event a permit is denied. If the CIWMB concurs, the LEA will then present the SWFP to the applicant (CIWMB, 1992b).

## 3.0 CURRENT LANDFILL CAPACITY IN CALIFORNIA

Prior to this project there has been no computer database at the CIWMB that contains estimates of remaining capacity for individual landfills. That information is available at CIWMB in various places such as the Closure Postclosure Financial Assurance Files, and the Facility files. But in each case the capacity information is not compiled in a way to obtain easy access to remaining capacity information. To find remaining information on a particular landfill requires pulling that landfill file from one of the sources and reviewing it. Landfills are required to update information annually in the Closure Postclosure Financial Assurance Files, but this does not require stating the remaining capacity.

As one of the primary goals of this project was to assemble remaining capacity data by individual landfill, using January 1, 1993 as the reference point, several steps were taken to obtain the capacity information, and other pertinent information. Appendix E contains copies of the letters and survey forms mailed as part of this project. The first task involved designing a survey form that would be mailed to each landfill operator. Approximately 300 surveys were mailed. The intent of the form was to collect all pertinent information to understand remaining capacity at each landfill and also information about how remaining capacity was determined. When the responses to the first survey stopped slowed dramatically (about 130 responses were received) a second round of surveys was sent to landfills that did not respond, and finally additional follow-up phone calls were made by CIWMB staff to encourage landfills to complete and return the surveys. One hundred and sixty (160) active landfills returned the surveys.

At the suggestion of the June 1994 workshop participants, the next step was to request information from the Local Enforcement Agency (LEA) about landfills that had not returned surveys and to verify the information that was received. The LEA were also asked to provide information about landfill restrictions by material type and jurisdictions (see letter and form in Appendix E).

If the landfill operator did not return either survey and the LEA did not provide remaining capacity data, the next step was to review the capacity information in the Closure Postclosure Financial Assurance files. ESA used this data to establish an known capacity, which was adjusted to January 1, 1993 using information from the Board of Equalization (BOE) about tons

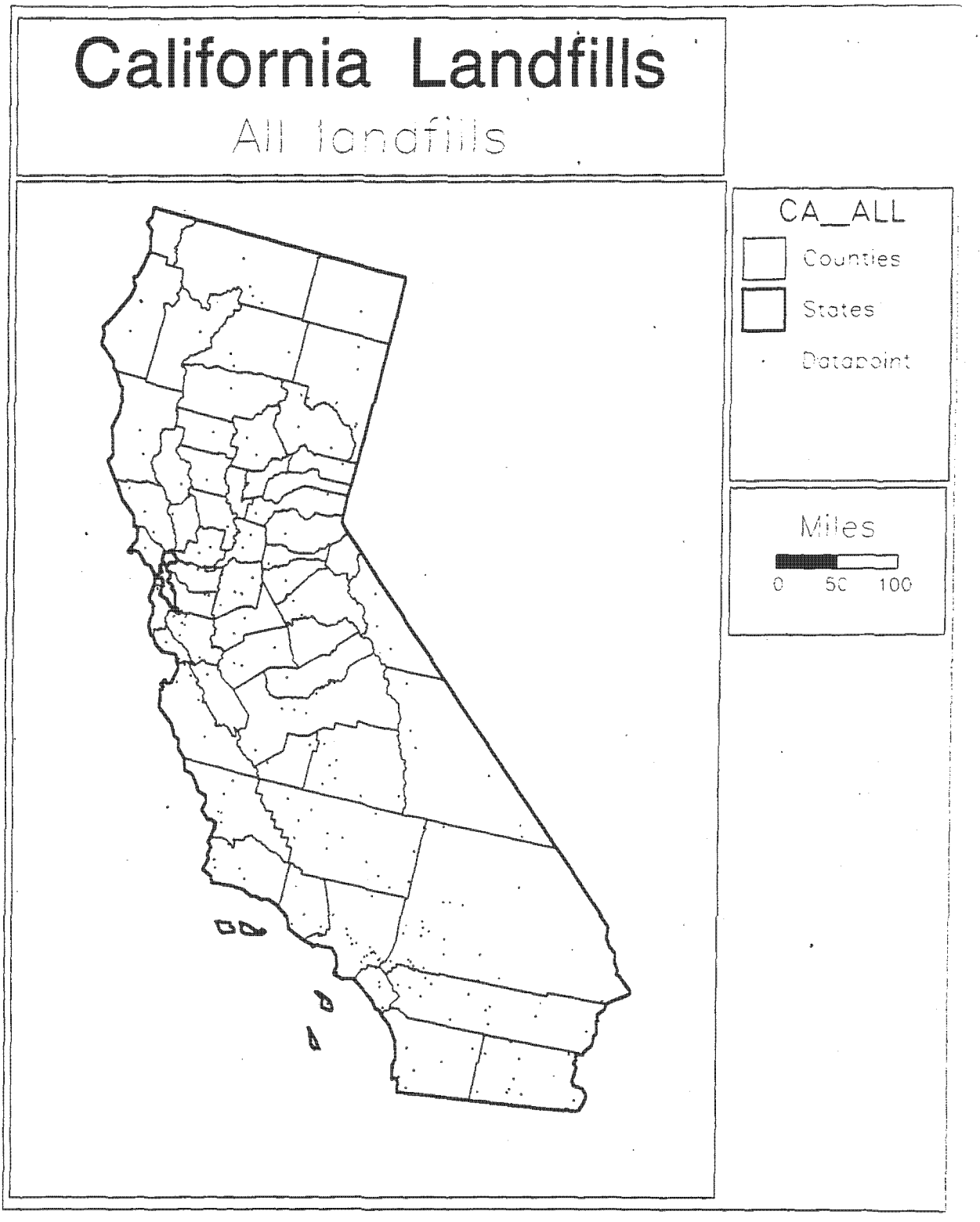
of solid waste disposed during 1990 - 93. About 40 landfills were reviewed using this method, of which about 10 were calculated to have negative capacity. The final data collection for these 10 landfills was to call the LEAs and to review facility files at the Board.

The Landfill Initial Data Report is presented as Appendix D. This report is 9 pages in length and gives additional detail about all of the landfills in the system. Appendix D provides information on all the landfills now being tracked by the GIS system. These are the landfills that seem to be actively receiving wastes on the basis of the returned surveys, information from the LEAs and information from the BOE. More information about this landfills is stored in text files within the GIS system, including all responses to the surveys.

The remaining capacity for the state as of January 1, 1993 was estimated to be 1,612,097,876 cubic yards (cy). Although a detailed review of the conversion factor of tons per cubic yard was not undertaken as part of this report, a common conversion factor in the surveys was 0.6 tons per cubic yard. If this factor is applied to the total cubic yards shown above, the remaining capacity as of January 1, 1993 would be approximately 967,258,725 tons. This exceeds by about 40% the total capacity of 1,123,757,000 cy (669,060,000 tons) as of January 1, 1990, as reported in *Reaching the Limit, An Interim Report On Landfill Capacity in California* (CIWMB, 1992a).

The CIWMB plans to integrate the disposal reporting data collected from individual landfills into the system, thereby resulting in further verification and updates of these results. The system will allow the CIWMB to track disposal capacity in a consistent manner and make model runs to determine the effects of certain actions on the remaining capacity of any county.

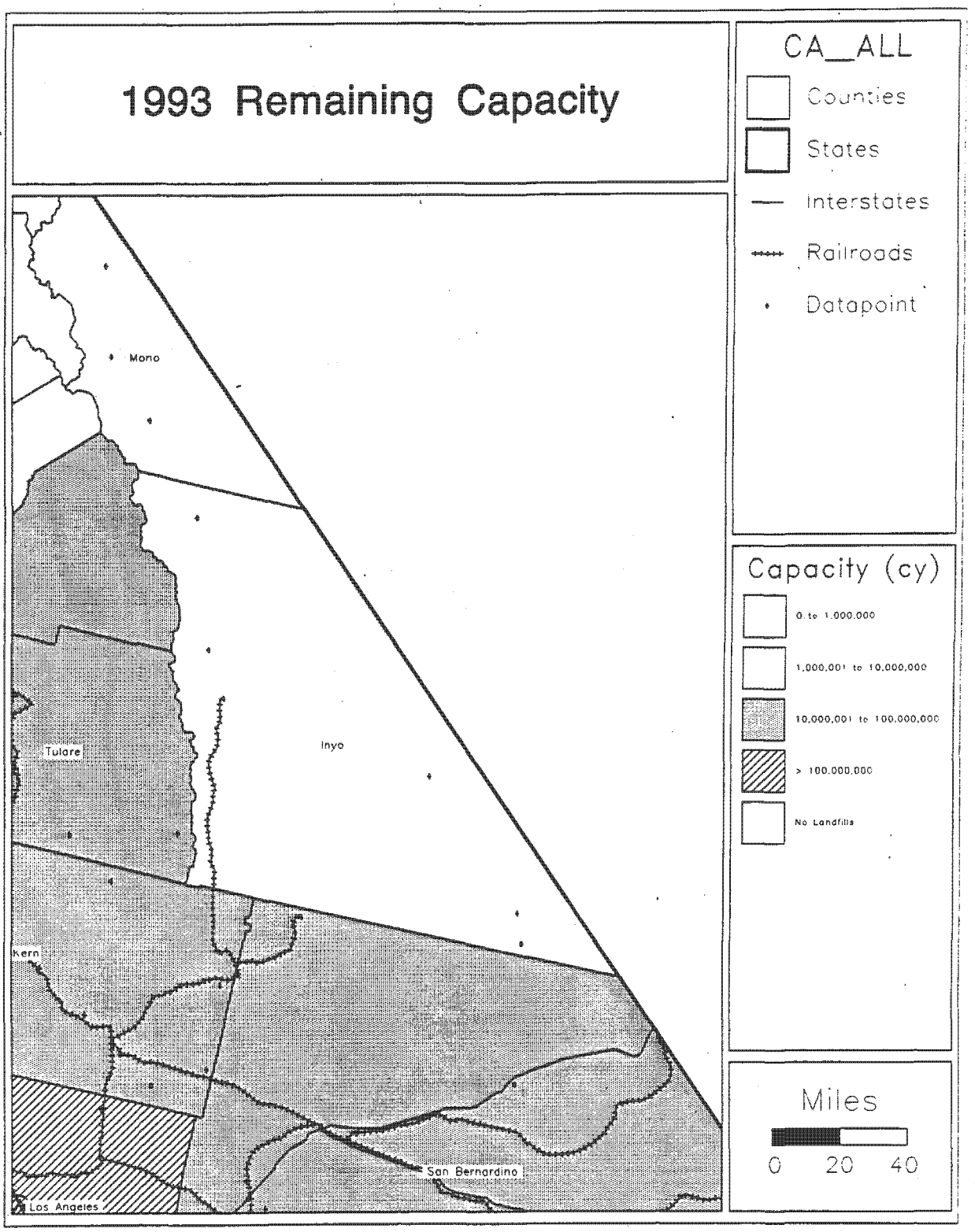
Figures 1-4 in the Executive Summary show the overview of the landfill capacity situation in maps that are output of the GIS. Figures 7 and 8 which follow show other outputs from the GIS.




SOURCE: Environmental Science Associates

*Toward Ensuring Adequate Landfill Capacity / 920279*

**Figure 7**
California Landfill Locations




SOURCE: Environmental Science Associates

*Toward Ensuring Adequate Landfill Capacity / 920279*

**Figure 8**
Examples of GIS Detail (Inyo County)

## 4.0 IDENTIFYING AND RESOLVING ACUTE SHORTAGES OF LANDFILL CAPACITY

The California Integrated Waste Management Act of 1989 (AB 939) places responsibility on counties or regional agencies to demonstrate that they have, or are planning for, 15 years of disposal capacity for all anticipated disposal needs for all of the member agencies or jurisdictions within their boundaries. The vehicle for demonstrating this capacity is the County or Regional Agency Siting Element. The siting element identifies remaining disposal capacity, projects disposal capacity needs, and determines whether a shortage of landfill capacity will occur within 15 years of submittal of the Countywide Integrated Waste Management Plan. If a shortage is anticipated, the Siting Element must specify possible sites for a new landfill (or transformation site), and criteria and an evaluation method for selecting appropriate sites.

The Board's 1992 report, *Reaching the Limit*, based estimates of remaining capacity on reports from County Local Task Forces as of January 1, 1990. At that time, 29 of California's 58 counties reported 15 years or less of remaining landfill capacity (CIWMB, 1992). About 70 percent of the state's residents live in these counties. Since 1990, there may have been some easing of the state's landfill capacity shortage, due to a combination of freer flow of waste across county and state lines, siting of new or expanded landfills in areas formerly acutely short of permitted capacity, the positive effects of implementation of new or expanded recycling, composting, source reduction programs, transformation, and the recession, which has reduced the flow of materials, especially commercial materials, to landfills. Nevertheless, many counties still have less than 15 years capacity (see Table 1), and several others may, due to other circumstances, find 15 years of capacity an insufficient buffer. In the workshops held on the draft of this report, it became apparent that although mathematically a county has 15 years of remaining capacity, parts of the county can face an acute shortage of disposal capacity. Furthermore, natural disasters and other sudden events may cause immediate shortages of landfill capacity. For counties and regional agencies suffering local shortages, for those who predict shortages occurring within the foreseeable future, and for those without disaster or contingency plans, concerted planning is required to ensure that wastes are handled in the most cost-effective and the most environmentally safe manner.

This section first defines acute shortage of landfill capacity. It then reviews the basic means (diversion, extension of landfill life, new capacity, and export) available to resolve acute

shortages, and finally, it discusses constructive roles and actions that may be taken by the agencies, organizations, and individuals involved in local integrated waste management to resolve an acute shortage situation.

## 4.1 DEFINITION OF ACUTE SHORTAGE

### 4.1.2 ACUTE

The term "acute" is not synonymous with "crisis." Rather, the determination that there is an acute shortage of landfill capacity within a county or region should be taken to mean that the county, regional agency, and individual jurisdictions should begin to take steps to ensure that a crises is avoided. An "acute" shortage of landfill capacity can perhaps be best defined as a situation where the remaining amount of *existing* landfill capacity will be depleted in less time than is needed to create *new* or expanded disposal capacity.

In addition to predictable shortages that are or may soon become acute, localities may experience sudden changes in the amount of waste they generate or in the availability of disposal capacity. Situations that may result in a sudden and acute shortage include:

- natural disasters, such as earthquakes, that produce large amounts of debris;
- early closure of landfills because of Subtitle D requirements;
- errors discovered in measurement of remaining capacity, in calculation of current disposal levels, or in diversion projections;
- existing landfills becoming inaccessible or unusable, due to landfill fires, bridges or roads becoming impassable, or other catastrophic events;
- sudden loss of a market for a recovered material; and
- abandonment or denial of a landfill siting or expansion project in the latter stages of the siting and permitting process.

These situations may result in a sudden and acute shortage of capacity, or may result in an unexpectedly rapid depletion of landfill capacity.

A determination of a situation as an acute shortage indicates that immediate actions should be taken to increase diversion from landfills, to extend the life of existing landfills, to site or expand disposal facilities, or to arrange for export to landfills in other jurisdictions. These efforts should

involve many parties: local jurisdictions, interested citizens and community groups, private sector providers of source reduction, recycling, and composting services, and operators of existing disposal facilities.

### 4.1.3 SHORTAGE

The determination of whether a jurisdiction is suffering a shortage of landfill capacity should be based on several factors. The first and foremost is whether the county or regional agency has 15 years of permitted disposal capacity identified for projected disposal needs from the date of submission of the CIWMP. This capacity does not have to be in-county capacity but can also be committed capacity outside the county. This should be determined by the county or regional agency in the Siting Element (if not before), based on the projections in the Facility Capacity components of the SRREs. Other factors may, however, determine whether 15 years of capacity is insufficient, or, on the other hand, if less than 15 years capacity is adequate.

Situations that may lead a county or regional agency to determine that 15 years capacity is insufficient include the following:

- unexpected population growth or increase in economic activity;
- difficulties with new diversion programs, such as implementation being behind schedule, programs achieving lower diversion than projected, unforeseen conflicts or technical difficulties, problems in financing or siting new processing facilities, or difficulty in marketing recovered materials;
- history of difficulty in siting landfills or other controversial facilities;
- lack of suitable sites for new landfills;
- lack of access to landfills in other jurisdictions that accept imported wastes; and
- lack of public funds and private interest to develop a new landfill.

Situations in which a county or regional agency may determine that less than 15 years capacity does not constitute a shortage may include the following:

- diversion programs more effective than projected;
- the CIWMP has as an objective to extend diversion goals beyond 50 percent;
- a new or expanded facility is in the latter stages of the permitting process, and there are no major foreseen obstacles;

- landfill operators are taking steps to extend existing capacity; and
- there are new export agreements in effect that could cover the shortage.

Individual jurisdictions should determine whether they are experiencing a shortage. The basic test is whether there is a current and implementable plan to ensure adequate disposal capacity for the projected generation of wastes.

## 4.2 METHODS FOR ENSURING ADEQUATE LANDFILL CAPACITY

This section presents a brief overview of methods that counties, regional agencies, and cities may consider in order to extend or increase landfill capacity.

AB 939 establishes a hierarchy of waste management practices, placing source reduction as the first and best method of dealing with solid wastes, followed by recycling and composting, and finally landfilling or transformation. With modifications, this hierarchy can be applied to strategies for dealing with an acute shortage of landfill capacity. Within the context of the hierarchy, increased source reduction, recycling, and composting should first be considered as a means to extend the life of existing landfills. Second, local jurisdictions should seek means of more efficiently utilizing the capacity of existing landfills. Third, jurisdictions should attempt to site a new landfill within the county or region. Finally, jurisdictions may be compelled to seek and establish either short-term or long-term agreements for exportation of wastes to another jurisdiction. Following this hierarchy as a general guide for dealing with an acute shortage of landfill capacity will ensure that jurisdictions plan for their long-term disposal needs in a manner that is both environmentally preferable, and that places emphasis on finding local solutions to local problems.

Local agencies experiencing a sudden acute shortage of landfill capacity, or wanting to avoid depleting their long-term disposal capacity to resolve a sudden acute situation should also consider their options in reference to the hierarchy. For example, after an earthquake, a local agency should first explore means of reusing or recycling the demolition debris produced. If debris has to go to a landfill, local agencies may find it expedient to seek short-term export agreements to avoid depleting limited remaining landfill capacity, even if they receive permission to exceed their permitted daily capacity.

### 4.2.1 SOURCE REDUCTION

Most of the Source Reduction and Recycling Elements place little emphasis on source reduction. This may be understandable in the context of the old method of counting diversion (the diversion-based method) and the difficulty in defining what specific activities could be truly described as source reduction. Since AB 2494 (Statutes of 1992, c. 1292, PRC Section 41780.2 et seq) established disposal-based counting, local jurisdictions are no longer obligated to quantify the results of all source reduction programs. Within this new context, local governments may find it easier to justify increasing source reduction programs.

The most ambitious source reduction plans have projected reductions of 6 to 10 percent of the waste stream (see SRREs for City of El Cerrito, City of Berkeley, City of Pacifica, Solano County cities and unincorporated County) and, because most source reduction programs involve minimal investment in capital equipment and have few ongoing operational costs, it is often the least expensive method per unit of diversion. The most successful local government-sponsored source reduction programs have sought to establish common goals with individuals and businesses, and to assist them in making the changes necessary to reduce the generation of wastes. The CIWMB is aiding in this endeavor through conducting a state-wide media campaign, and through its waste prevention clearinghouse, which provides information to local jurisdictions, businesses, and individuals on a wide variety of source reduction programs (CIWMB, 1993a).

### 4.2.2 RECYCLING AND COMPOSTING

Counties and regional agencies with acute shortages of landfill capacity could consider increasing their efforts to divert materials through recycling and composting. These methods, while taking second place in the hierarchy after source reduction, are capable of diverting large portions of the waste stream. Where landfill costs are low, recycling and composting may not appear cost-effective. However, when compared to long-term trends in landfill costs, particularly with the cost of developing new landfills under Subtitle D regulations, recycling and composting generally are less expensive than landfilling (CIWMB, 1991). In addition to the short-term benefits of reducing dependence on landfills, recycling and composting offer the long-term benefits of conservation of energy and natural resources.

Jurisdictions facing competition for recycling and composting services from low-priced landfills may wish to consider surcharging disposal to subsidize recycling and composting, as Alameda

County has done with Measure D. This citizen initiative places a $6 surcharge on all wastes going to landfills located in the unincorporated areas of the county, and mandates that the county spend funds on development and maintenance of source reduction, recycling, composting, and market development programs. In effect, this surcharge makes landfilling more expensive and source reduction, recycling, and composting more affordable, thus adjusting market forces in favor of preferred management methods.

### 4.2.3 MORE EFFICIENT USE OF EXISTING LANDFILL CAPACITY

Several non-diversion methods exist for extending the useful life of existing landfills, such as landfill mining, use of alternative daily cover material (ADCMs), increasing the density of emplaced material, and transformation of selected materials. These are reviewed here briefly.

#### 4.2.3.1 Landfill Mining

Most landfills are likely to have a store of recoverable materials that could be salvaged, as provided for in 14 CCR Section 18687. Also referred to as landfill mining, the regulations permit extraction of materials such as metal, paper and glass. Removal of marketable or usable materials can reclaim space in existing landfills and, depending on volumes extracted, defer closing of a landfill that is near capacity.

Landfill mining efforts can be designed to segregate wastes into recyclable material, combustible material, soil/compost material, and residual wastes. Mined materials can be marketed to recyclers, used or sold as fuel, or used as daily cover. Sale of mined materials may not produce significant income, but landfill operators may benefit from reducing remediation and closure costs of older landfills, and from creation of additional space. East coast landfill mining operations costs in the range of $9-$16.75 per ton of excavated material (Bader, 1994).

#### 4.2.3.2 ADCMs as a Space-Saving Option

Maximum space savings can be obtained from use of an alternative material that would end up in a landfill anyway, such as yard and other green wastes, paper slurries, and auto shredder fluff; that takes up no air space, such as a fabric cover; or that uses less than six inches of material daily (U.S. EPA, 1992a; CIWMB, 1990). Examples of each of these options are discussed below.

1. Green Waste: In 1990, only 8.5 percent of yard wastes and 21.4 percent of paper were being diverted (CIWMB, 1994). Use of green waste or slurry made from recycled paper has the additional benefit of providing a market for currently unsalable materials, and, having an economic development benefit through creation or expansion of a local (or regional) industry to process materials for use as alternative daily cover (Yolo County, 1992). At its January 25, 1995 meeting, the CIWMB recently adopted a policy to allow use of green waste as alternative daily cover (ADC), under certain conditions, to count toward disposal reduction goals. Specific limitations apply, such as the maximum thickness of green material as ADC is limited to 12 inches.

2. Geosynthetic Textiles: Fabric tarpaulins, made from such materials as polypropylene and polyethylene, can be used to cover the working face at the end of each day. These covers are weather-proof, chemically inert, and can be re-used for periods ranging from three weeks to one year, depending on the material and its composition. Such covers can be treated for fire retardance; some are repairable and can be recycled. A typical fabric cover nearly could save all of the space annually consumed when soil is used as daily cover.

3. Synthetic Foam: Products are applied over the compacted landfill face and have proven to be effective at a depth of only two inches.

4.2.3.3 Compaction

Baling and shredding solid waste prior to placement in landfills, and increased compaction after placement, are methods for preserving space in landfills. These methods can effectively double the amount of material that can be placed in landfills compared to low compaction levels. For example, using heavier compaction equipment and making more passes over emplaced wastes can increase density of in-place material from 800 lbs. per cubic yard to 1,600 lbs. per cubic yard (ESA, 1992). Baling at transfer stations or landfills prior to placement can result in densities as high as 1,400 lbs. per cubic yard (ESA, 1992). Shredding bulky items prior to landfilling, such as furniture, tires, and yardwaste, can greatly reduce the volume of these materials, and add significantly to compaction rates and landfill life.

4.2.3.4 Transformation of Selected Materials

Transformation may be used where markets do not exist and cannot be developed for material types with high Btu values. Currently, this would include, in some areas of the state, wood waste and tires. While recycling markets for these materials are weak, fuel markets are quite strong, particularly for wood waste. Rerouting of these materials from landfill to transformation facilities can increase a jurisdiction's AB 939 diversion rate, and significantly increase landfill life. Ground wood waste derived from wood products, landscaping, pallets, and construction and

demolition debris can be separated into fines, which are a valuable soil amendment, and coarse material, which has a ready market as boiler fuel.

An estimated 21 million tires are generated in California each year. According to a feasibility report of the CIWMB, use of tires as an energy source in some types of manufacturing is very practical because "locked in the chemistry of each passenger tire is the equivalent of two and one-half gallons of recoverable petroleum" (CIWMB, 1992).

The CIWMB's study concluded that use of tires as an energy source in cement plants alone has the potential to utilize all of the waste tires accumulated annually. Capital investments of $500,000 to $1 million per plant would be paid back in about one year (CIWMB, ibid). Tires also can be used as fuel by lumber and paper mills, other factories, and power plants that have the proper pollution control equipment, without extensive design changes.

A letter received on the draft of this report from Stanislaus County wanted to stress that this report seriously consider all options including waste-to-energy. The letter assured the "horror stories [about waste-to-energy] are simply not true." The positive aspects are noted in the paragraph below: (Shuler, 1994)

> "In Stanislaus County our Waste-to-Energy facility transforms waste and produces enough electricity to supply 25,000 homes; enough to replace the need for more than one half million barrels of crude oil. In terms of waste volume, the facility annually processes about 300,000 tons. Without transformation, this waste would occupy a pile of garbage three city blocks across and 37 stories high or a two land road for more than 25 miles -- piled six feet deep. Every year, the facility recovers enough ferrous metal to make more than 4,300 automobiles."

### 4.2.4 DEVELOPING NEW CAPACITY

The county or regional agency Siting Element must include development of criteria for evaluating prospective landfill sites, as well as a methodology for applying these criteria by the public agency. All counties and regional agencies that have determined that they have an acute shortage of landfill capacity, including those that have 15 years of capacity, should evaluate new sites based on the system to be used for the siting element.

### 4.2.5 EXPORT

Exporting can be a short-term solution until planned landfills come on line, or a long-term solution that avoids additional landfill development in the community altogether.

Exporting is not a viable alternative for all counties and regional agencies with an acute shortage of landfill capacity. Exporting counties must find landfills willing to take the waste, obtain all necessary environmental documentation, and be able to afford the extra costs associated with hauling wastes long distances and surcharges on tipping fees. A county or regional agency may also lose control over future rates when the export agreement expires or is canceled.

## 4.3 RESOLVING ACUTE SHORTAGES OF LANDFILL CAPACITY

### 4.3.1 INVOLVED PARTIES

Resolving an acute landfill capacity shortage is a long-term, complex process that affects many aspects of the integrated waste management system and the region as a whole. The California Integrated Waste Management Act specifies that the establishment of an integrated system is to be a joint effort of the state and local agencies, and is to include the input of interested citizens and incorporate the private sector (see Section 40001(a) et seq., and Section 40900(b) et seq. of the PRC). All of these parties have an interest in resolving landfill capacity shortages, and all should be included in the process.

In general, the roles of these parties may be delineated as follows:

1. Local agencies (counties, regional agencies, and incorporated cities) control land use, and are responsible for compliance with environmental and other regulations and for fulfilling integrated waste management planning requirements. It is the responsibility of local agencies to ensure that the planning process is conducted in an open manner, and involve and be responsive to the interests of citizens, groups, and businesses.

2. The CIWMB is bound by statute to oversee and either object or concur in local planning and permitting, and to provide assistance to local agencies to increase the effectiveness of their diversion programs, especially with assistance on source reduction and market development (see Section 40911a of the PRC).

3. Local jurisdictions should work with citizens and community groups interested in ensuring that waste management projects do not result in adverse environmental and social impacts. Local jurisdiction need to ensure that environmental and social impacts are mitigated or minimized.

4. Local jurisdictions should work with source reduction, recycling, and composting and transformation service providers to maximize diversion from landfills.

5. Landfill operators should use diligence in using permissible means to extend the useful life of existing landfills.

### 4.3.2 ACTIONS AND METHODS

This section provides suggestions on roles, actions, and methods that each of the above parties may consider in addressing acute shortages of landfill capacity through each of the means discussed above.

#### 4.3.2.1 Increase Source Reduction

*Local jurisdictions* place increased emphasis on implementation of the source reduction programs selected in the SRREs, and plan to increase the role of source reduction in the first revision of the SRRE. Work to implement programs that produce the greatest reduction for each dollar spent by involving the private sector and individuals in source reduction efforts.

*CIWMB* assist local jurisdictions, through technical assistance programs, continued development of the waste prevention clearinghouse, and continued state-wide mass media campaigns to effect changes in public and corporate behavior that will result in source reduction.

*Citizens and community groups* advocate for increased attention paid to source reduction; serve as role models for source reduction practices; assist in implementation of programs.

*Service Providers* seek means of expanding source reduction as a business venture, both through providing waste prevention services to others, and through development of products or marketing strategies that result in less waste. Work with local jurisdictions to devise programs using private sector service providers as intermediaries for instituting source reduction practices.

*Landfill operators* use long-term analysis to determine the benefits of reduced flow and increased landfill life over short-term gain from higher volumes of waste entering the facility.

#### 4.3.2.2 Recycling and Composting

*Local jurisdictions* place increased emphasis on implementation of recycling and composting programs planned in the SRREs. Where costs for development of new processing facilities have

proven prohibitive, consider alternatives such as expanding existing recycling processing facilities; relying on existing private sector commercial service providers rather than capitalizing new programs; and seeking low-cost alternatives that rely on source separation, such as drop-off centers. Place increased emphasis on market development to stabilize long-term markets.

*CIWMB* continue market development activities for recycled materials; place greater emphasis on developing markets for compost products; increase technical and financial assistance to local jurisdictions experiencing difficulties in achieving diversion objectives.

*Citizens and community groups* work with local jurisdictions to resolve problems with delivery of services; work to increase participation in programs.

*Service Providers* process materials to highest standards to ensure maximum marketability of product; demonstrate willingness to expand programs to include other types of generators, new materials, and new geographic areas; cooperate with other service providers to strengthen marketability of product.

*Landfill operators* investigate salvage opportunities; install drop-off boxes for recyclables before scales, if feasible and appropriate; explore feasibility of compost or recyclables processing operations at the landfill site.

4.3.2.3 Extension of Landfill Life

*Local jurisdictions* evaluate and, if applicable, support use of landfill extension measures, such as use of ADCMs, increasing compaction, and landfill mining; work with CIWMB and landfill operator to test and implement these methods.

*CIWMB* streamline the process for approval of ADCMs, provide technical assistance for use of ADCMs to jurisdictions with acute shortages; lend technical assistance on increasing compaction; conduct feasibility studies of landfill mining; prepare how-to manual on landfill mining.

*Citizens and community groups* support and use of ADCMs; increased density, and landfill mining, if they present a viable alternative to siting a new facility.

*Service Providers* work to comply with changing requirements of landfill operators; investigate sources and processes for producing ADCMs from recycled or composted materials; work with landfill operators on feasibility of landfill mining; expand collection and processing of low-value materials, such as wood waste and tires, for transformation in cogeneration facilities.

*Landfill operators* investigate feasibility of using ADCMs, increased compaction, and landfill mining, consisting either of materials previously landfilled, such as composted yard debris or auto shredder fluff, or of low-volume materials, such as foam or geotextiles; consider separating tires, wood waste, and yard debris for transformation.

4.3.2.4 Developing New Capacity

*Local jurisdictions* identify appropriate sites for new landfills or expansion of existing landfills; work with community groups from the start of the project; through zoning and land use designation, preserve areas around future landfill sites from incompatible land uses.

*CIWMB* provide technical assistance with siting permitting and environmental review process; continue to streamline the permitting process, while still ensuring highest environmental standards.

*Citizens and community groups* work with local jurisdictions to evaluate sites and identify best, most agreeable site or area for a new landfill; advocate for reasonable host community compensation.

*Service Providers* advocate for strong support of diversion programs to extend the useful life of any new landfills.

*Landfill operators* explore possibilities for expansion of existing sites.

4.3.2.5 Export

*Local Jurisdictions* consider long-term costs and benefits of exporting as opposed to siting new landfill capacity.

*CIWMB* for counties and regional agencies with no local siting options, assist in identifying neighboring jurisdictions with excess capacity, provide model export agreements.

*Citizens and community groups* consider environmental and other effects of the receiving community before advocating for export; consider effects of loss of control of the wastestream.

*Service Providers* point out that increased cost of exports and the true cost of landfilling makes diversion more cost-competitive.

*Landfill operators* explore role in export, e.g., developing transfer station on site of closed landfill.

## 5.0 RECENT EXPERIENCE WITH LANDFILL SITING

When a jurisdiction identifies an imminent local landfill capacity shortfall, the jurisdiction generally has three options to develop additional capacity, it can:

- expand existing landfills;
- contract for out-of-jurisdiction landfill space (this often involves enhancement of existing recycling and source reduction programs and the development transfer stations, which may be associated with large-scale Material Recovery Facilities (MRFs)); or
- develop a new landfill.

Of these three options, the development of a new landfill is perceived by most jurisdictions to be the path of greatest resistance and highest uncertainty. The length of time, costs, and uncertainty of ever opening a new landfill have resulted in many California jurisdictions (counties, cities, or regional agencies) abandoning any immediate plans for developing new landfills. Expansion of existing landfills, however, is generally a more straightforward process. Although new design requirements necessitated by Subtitle D have added increasing costs and engineering complexity to horizontal landfill expansions, the success of proposed vertical or horizontal expansions for existing sites seems to be several times more likely than the success of proposed new landfills. Based on the construction of many new MRF/transfer stations in California since 1990, the success in developing these facilities is also far greater than the success of proposed new landfills.

As part of this Integrated Waste Management Planning Study, individuals throughout the state were interviewed by telephone to discuss their recent experiences in siting and permitting landfills. Five new landfill projects and five landfill expansions projects were included, covering large and small, public and private landfills located in both rural and urban areas. The interviews indicated that permitting a new landfill in California can take seven to ten years or longer. One project in particular had been through a siting process lasting 13 years, followed by five years for the Environmental Impact Report (EIR) and permitting. The interviews indicated that landfill expansions and re-permitting seem to require approximately two and a half to three years on the average.

In general the interviews confirmed that developing a new landfill is a difficult and uncertain process. The following is a review of major barriers in the process.

Elapsed Time - throughout the process there are several steps that may take years longer than anticipated. These include finding a site, preparing the EIR, receiving permits from CIWMB, the Regional Water Quality Control Board (RWQCB), other agencies, and litigation.

California Environmental Quality Act (CEQA) Issues - the interviews indicated that EIRs seldom were completed without problems that caused delays and increased costs. CEQA is the primary vehicle for informing local decision makers, the public, and other responsible agencies (those that issue other permits for the project) of the significant environmental effects of the project and impacts that can lessen the effects. Because new landfill projects generally result in a greater change of the environment than landfill expansions or the development of a MRF/transfer station, the EIR for a new landfill project will usually be more costly, take longer, and have a higher chance of being litigated than an EIR for a MRF/transfer station or a landfill expansion.

In 1989 Mitigation Monitoring and Reporting Plans (MMRP) were required for all projects that would have a significant impact on the environment if mitigations are not implemented. These plans require monitoring of all of the mitigation measures adopted as part of the approval of a project. The MMRP is developed at the end of the EIR process and results in another set of requirements for the project applicant. Many of the monitoring requirements of the MMRP for new landfills will be similar to requirements in the Solid Waste Facility Permit (SWFP). Ideally, the CIWMB should strive to coordinate the requirements of the SWFP with the monitoring requirements of the MMRP whenever possible.

Landfill Litigation - lawsuits have emerged as a major barrier to the siting and permitting of landfills. Lawsuits are filed not only by the public but by public agencies as well. A major issue of litigation is the adequacy of the EIR. This is often challenged in court.

A new litigation issue is environmental racism. In one case that was investigated, neighbors of a recently permitted new landfill filed a lawsuit based on "environmental racism." The suit was filed in Federal Court on very broad grounds, given the county's assertion that the immediately adjacent census tracts are white and middle class.

Coordination Issues - There is an overall belief that there is considerable inefficiency in the interactions between various agencies in developing a new landfill site. With so many agencies potentially involved and having different responsibilities, this is not an unexpected finding. One of the counties interviewed indicated that agencies should be able to permit simultaneously with the EIR process.

Recommendations presented in the next section suggest that CIWMB assistance with the siting process would probably be helpful. This support might include assistance to jurisdictions to aid their preparation and planning for a new landfill, and after a site is identified, to assist with obtaining permits.

## 6.0 FACILITATING THE SITING PROCESS

This section identifies and discusses several problems in the siting and permitting processes identified in this report, and proposes solutions for resolving them. In general, the siting and permitting process can be divided into three distinct, but overlapping phases: siting, which is primarily a local concern; environmental review (CEQA compliance); and permitting, which involves local, regional, state, and federal agencies. Permitting issues have recently been examined elsewhere (CIWMB/SWRCB, 1993), and CEQA is largely outside the scope of this report. This section, therefore, focuses primarily on issues and problems that commonly occur when local government agencies attempt to site a new landfill or expand an existing landfill. While the Board has limited authority in local land use planning, it may be possible and appropriate for the Board to lend technical and other assistance to help facilitate the local siting process. Most of the solutions presented in this section, therefore, take the form of suggestions that the Board may wish to consider that involve outreach, mediation, assistance, and information programs directed at local governments, interested and concerned members of the public, and prospective landfill operators. The section is organized as a series of "Problems" followed by several suggested "Solutions." Solutions are intended to be outline proposals of actions that the Board may wish to consider in order to facilitate siting processes in counties, regional agencies, and cities.

### 6.1 PROBLEMS

PROBLEM A: PUBLIC OPPOSITION TO PROPOSED LANDFILL SITES

Almost any proposed new or expanded landfill can be expected to encounter opposition from site neighbors, local community groups and community activists, and environmental organizations. While state-of-the-art landfills minimize environmental impacts, they are major industrial facilities that permanently alter the landscape and the character of their environs. Interested citizens may oppose a landfill project for a number of reasons:

- potential destruction of the natural environment;
- perception that emphasis is on developing new landfill capacity, rather than on new diversion programs that could pre-empt the need for additional landfill capacity;

- charges of environmental injustice for facilities planned in or near low-income and minority communities;
- potential for devaluation of property through aesthetic degradation;
- traffic and other secondary environmental impacts; and
- inducement of other development, due to infrastructure improvement.

People opposed to landfill projects have several avenues for delaying or stopping a project, including the CEQA process, public hearings for permits, ballot initiatives, working through elected officials, and collaborating with developers of alternative sites.

## PROBLEM B: SHORT-TERM DECISION MAKING VS. LONG-TERM SOLUTIONS AND PLANNING

Local decision makers working on landfill siting are often caught in a dilemma. They must answer to their constituents for unpopular decisions on siting a new facility, even if they believe that the site is sound and represents the best long-term strategy. CIWMB's best approach may be to provide assistance to local governments as a clearinghouse for issues related to facilitating the siting, environmental review, and permitting processes.

## PROBLEM C: LACK OF FLOW CONTROL AUTHORITY

Two recent Supreme Court decisions have severely limited the ability of states and local governments to control the flow of wastes in or out of their jurisdictions. In addition, recent technological advances, such as rail-haul, have allowed for the development of landfills capable of serving remote wastesheds. These legal and technical changes have contributed to a much more dynamic movement of waste, and have led to many jurisdictions signing or planning to sign long-term contracts to use distant landfills. In this climate, the lengthy and costly process of siting, permitting, and constructing a new landfill may seem unwise, when a city or county might instead contract for long-term disposal outside of the jurisdiction at relatively low cost. Furthermore, the lack of certainty regarding an adequate flow of waste to a new landfill may inhibit efforts to site and permit a new facility, and jurisdictions that are seeking long-term disposal contracts may not want to commit their wastestream to a facility that still has numerous hurdles to clear.

PROBLEM D: POTENTIAL LIMITED RESOURCES AND LIMITED LOCAL JURISDICTION EXPERTISE

Since few new landfills have been sited in California in recent years, there may be a general lack of experience and expertise in landfill siting procedures at the local level. In many cases, most or all of the parties involved in the siting process have no prior experience in siting a landfill, and the first several years of the process may involve considerable expenditure of time and effort for all parties to understand the process and technical issues, and to overcome prejudices and misconceptions. Furthermore, to be legally defensible, the review, scoring, and ranking of sites must be done accurately and thoroughly. Some local jurisdictions may need assistance in evaluating landfill specific issues.

PROBLEM E: HIGH COST OR SCARCITY OF LAND SUITABLE FOR A LANDFILL

In some areas of the state, either land costs are very high, or there are few if any suitable sites for a new landfill. Even if the political will exists to site and construct a new landfill, the lack of inexpensive or available land may thwart these efforts.

## 6.2 SOLUTIONS

PROBLEM A: PUBLIC OPPOSITION TO PROPOSED LANDFILL SITES

In many instances, public opposition to a landfill project may be minimized if interested members of the public are brought into the siting process from the beginning. All too often, interested members of the public are not involved in the early stages of the siting process, leaving them offended and public officials in the position of having to defend an unpopular project. If, however, public agencies set up a forum for the public to air their concerns about a new or expanded landfill, and for public agencies to incorporate these concerns into the siting process, then siting a new landfill stands a better chance of success.

The CIWMB may be able to employ several strategies to assist local agencies in including interested members of the public in the critical early stages of the siting process, for assisting public agencies in responding to public concerns, and for resolving conflicts between parties with opposing views.

Solution A1 - Assistance With Establishment of a Local Siting Committee

The Board could lend assistance to the Local Task Force (LTF) charged with preparing the Countywide or Regionwide Siting Element, and may consider encouraging the LTF to make the siting process as open and inclusive as possible. One recent effort in which interested members of the public were included in the siting process occurred in Ventura County, where the LTF established a Community Advisory Committee made up of environmental organization representatives, prospective landfill operators, and other interested members of the public. The LTF also established a Technical Advisory Committee made up of City and County staff. These two committees jointly formed a Landfill Siting Criteria Committee to establish criteria for siting a new landfill, in the context of the Countywide Siting Element. While the process was not always smooth or free from strife, it did result in a set of criteria that the committee, the LTF, the cities, and the County agreed to, and which are now being applied to determine appropriate sites throughout the County.

The Board could consider establishing a program within the Local Assistance Branch to assist counties and regional agencies in establishing institutions and processes for including interested members of the public in the siting process.

Solution A2 - Development of a Mediation Protocol

The strategy would be to develop a framework to implement alternative dispute resolution (ADR). In consultation with mediation experts, the CIWMB would develop a mediation protocol in order to explain the parameters of ADR. The Office of Local Assistance could then develop a guidance document and hold workshops with local governments on the issue in order to bring this option to their attention. Implementation of an ADR program would seek to develop consensus between various parties who would otherwise be engaged in protracted and costly litigation. Many courts now order the parties involved in civil suits to engage in ADR prior to taking up the court's valuable time. When a dispute can be resolved through ADR, the potential is for all parties to win, since needs can be met more quickly at far less expense. This strategy would include a review of successful mediation protocols in other states.

Solution A3 - Information and Educational Programs

This strategy would have the CIWMB create an information program that could be tailored by the local government for specific landfill projects. The program could include various types of

communication tools (pamphlets, videos, public meeting forums, etc.) to illustrate the safeguards of the landfills currently being constructed and operated. Furthermore, this strategy could involve a statewide public information campaign to promote an understanding of solid waste disposal issues, and how landfills fit into the hierarchy of waste management practices.

The Board could assist landfill operators and local governments in instituting social and educational activities at existing state-of-the-art landfills, in order to educate the public about landfills, waste disposal, and integrated waste management in general. Landfills often have considerable visual and emotional impact, and can serve as an effective tool to learn about where garbage goes, what happens once it gets there, and the reasons to practice source reduction and recycling. One successful example of using social activities at a public waste-related facility to bolster the facility's public image is the Los Angeles County Sanitation District's sewage treatment plant, where social events, including weddings, are held.

Solution A4 - Compensation for Impacted Communities

Negotiating host community compensation or Host-Community Benefits (HCBs) is often an essential component in the process of siting a new landfill. Host communities may reasonably expect some form of financial or other compensation for hosting a regional facility with significant environmental and social impacts. Compensation may ease the pain of a host community by allowing them to accomplish other desired projects, such as civic improvements or to mitigate some of the specific impacts of the facility. This has occurred in a number of localities, such as a midwestern community that has used the compensation they receive for hosting a regional landfill to build a community center and a new city hall, fund a symphony, and institute other rather costly improvements that the entire community enjoys.

Some states have legislation to encourage or require some form of compensation; Massachusetts, Minnesota, Maine, New Jersey, Wisconsin, and Tennessee. In some cases, in the process of siting privately owned landfills, some local governments have been legally required to set up local negotiating committees. These committees have been limited in scope in order to not involve the environmental and technical matters. If no contract is struck, outside mediation has been involved. According to the Reason Foundation Policy Report, in almost all cases involving this process, the signing of an agreement has resulted. According to the report, "Negotiated compensation enhances efficiency, perceived fairness, and the changes for successful landfill siting."

The report goes on further in concluding:

> "HCBs (Host-community benefits) help to reduce externalities associated with landfill siting, institutionalize citizen choice and negotiation at the outset of the process, and smooth the siting process in the long run. Absent HCBs, landfill-siting activities largely ignore compensation and the result is increased NIMBYism as people react to costs imposed on them."

Santa Barbara County's Coastal Resources Enhancement Fund (CREF) project is intended to help mitigate the negative impacts of continued oil exploration and drilling in the Gulf of Carpenteria. Funds may be used to mitigate impacts in four areas: recreation, tourism, aesthetics, and coastal resources. The County administers the funds, which are distributed through a competitive grant process to local government agencies and non-profit organizations. CREF has funded marine resource preservation and educational projects, capital acquisition and improvement for parks, wildlife preserves, and recreation areas, and other projects. The funds originate from the oil companies engaged in exploration and drilling, and are negotiated based on a valuation of the impacts of specific projects and activities. All exploration and drilling projects are reevaluated every five years in order to re-set the compensation level.

The LA County Sanitation District negotiated an agreement with California Polytechnical Institute in Pomona to expand the La Spadra Landfill onto Cal Poly land. In exchange for the land, Cal Poly received funds from the LACSD for the new Institute for Regenerative Studies. This institute is devoted to the study of sustainable development and restoration of damaged environments, and uses the area around the La Spadra landfill for field studies.

The CIWMB could facilitate host community compensation negotiations by providing information to local governments on model compensation packages.

## PROBLEM B: SHORT-TERM DECISION MAKING VS. LONG-TERM SOLUTIONS AND PLANNING

### Solution B1 - Preparation and Distribution of a Siting Manual

The CIWMB could prepare and distribute a siting manual similar to the existing Permit Desk Manual. The Permit Desk Manual is used by the LEA's, the Siting Manual would be used more by local jurisdictions. The siting manual would incorporate the Guidelines and Model for Preparation of the Regional or Countywide Siting Element, adding non-regulatory strategies for facilitating the siting process. These may include:

- how to establish a local Siting Committee;
- strategies for identifying potential sites;
- suggestions for soliciting public input on consideration and establishment of siting criteria; and
- mechanisms for funding the siting process.

The siting manual could become the principal tool of Local Assistance Branch efforts to assist local agencies in facilitating the siting of new landfill capacity. The siting manual should emphasize long-term solutions.

PROBLEM C: LACK OF FLOW CONTROL AUTHORITY

Solution C1 - Assistance Negotiating Flexible Export Contracts

Flow control is an issue largely outside the control of the CIWMB. CIWMB might consider encouraging local governments to explore the option of short-term, flexible export contracts. Features of such an export agreement would include option clauses allowing or requiring the local agencies to cancel the export agreement and direct materials to a local landfill, when and if one is eventually constructed.

Solution C2 - Technical Assistance for Local Agencies

CIWMB could actively develop, promote, and implement the other solutions identified in this section so that the siting and development of a new landfill becomes less intimidating for counties and regional agencies that have an interest in developing a local landfill.

PROBLEM D: POTENTIAL LIMITED RESOURCES AND LIMITED LOCAL JURISDICTION EXPERTISE

Solution D - Technical Assistance Program

The CIWMB could establish a technical assistance program within the Local Assistance Branch to assist local agencies with landfill siting. The program could include a multidisciplinary team of experts from around the Board versed in Subtitle D compliance, State minimum standards, planning and capacity requirements, public input processes, and CEQA. The program could lend technical assistance to Local Task Forces and siting criteria committees, and could help assess the suitability of potential sites in terms of geology, hydrology, biology, traffic, land-use

compatibility, and socioeconomics. The program could hold workshops around the state, become directly involved in particular siting processes upon request, and could develop the siting manual discussed above.

PROBLEM E: HIGH COST OR SCARCITY OF LAND SUITABLE FOR A LANDFILL

Solution E1 - Encouraging Formation of Regional Agencies

The CIWMB could actively encourage those jurisdictions with a lack of inexpensive or available land to form regional agencies with neighboring jurisdictions that do have available land. The resulting regional agency might have a larger rate base, more resources to devote to the siting and permitting process, and suitable, affordable sites for a new landfill. The CIWMB can draw on this study's Analysis of Regional Integrated Waste Management Systems (Task A; CIWMB, 1994a), and the development of a model for regional cooperation now proceeding in the Counties of Butte, Colusa, and Glenn as an example, and perhaps a model, for the advantages of regional cooperation in program planning, as well as siting and permitting facilities.

Solution E2 - Encouraging Land Reservation or Acquisition for Future Needs

The CIWMB would encourage jurisdictions with rapidly rising land costs and expansion of populated areas to reserve land as quickly as possible for future landfill needs. This may be done through tentatively reserving sites, purchasing options on parcels, or purchasing and holding suitable sites.

## 6.3 SUMMARY OF APPROACHES

1. Assistance Establishing Siting Criteria Committees
2. Development of a Mediation Protocol
3. Information and Education Programs
4. Assistance Negotiating Compensation for Host Communities
5. Preparation and Distribution of a Siting Manual and Holding Siting Workshops
6. Assistance Negotiating Flexible Export Contracts
7. Technical Assistance Program
8. Encouraging Formation of Regional Agencies
9. Encouraging Land Reservation or Acquisition for Future Needs

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## APPENDIX A. SOLID WASTE DIPOSED (1990-94)

## APPENDIX A: SOLID WASTE DISPOSED (1990-94)

| | | | Tons Disposed | | | | | Total Disposed (County Total) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SWIS ID | SITE NAME | COUNTY | 1990 | 1991 | 1992 | 1993 | 1994 | 1990 | 1991 | 1992 | 1993 | 1994 |
| 01-AA-0008 | DURHAM ROAD SANITARY LANDFILL | ALAMEDA | 492,254 | 331,757 | 329,445 | 294,981 | 283,547 | | | | | |
| 01-AA-0009 | ALTAMONT SANITARY LANDFILL | ALAMEDA | 1,980,768 | 1,810,422 | 1,513,657 | 1,537,907 | 1,508,100 | | | | | |
| 01-AA-0010 | VASCO ROAD SANITARY LANDFILL | ALAMEDA | 589,255 | 499,652 | 465,118 | 429,204 | 390,668 | 3,062,277 | 2,641,831 | 2,308,220 | 2,262,092 | 2,182,315 |
| 03-AA-0001 | AMADOR CO SANITARY LANDFILL | AMADOR | 53,707 | 40,194 | 42,714 | 25,022 | 19,939 | 53,707 | 40,194 | 42,714 | 25,022 | 19,939 |
| 04-AA-0002 | NEAL ROAD LANDFILL | BUTTE | 119,906 | 124,223 | 117,984 | 168,470 | 168,832 | | | | | |
| 04-AA-0009 | OROVILLE LANDFILL | BUTTE | 19,199 | 7,787 | 8,070 | 3,778 | 13,665 | 139,105 | 132,010 | 126,054 | 172,248 | 182,497 |
| 05-AA-0014 | RED HILL SANITARY LANDFILL | CALAVERAS | 30,970 | 0 | 0 | 0 | 0 | | | | | |
| 05-AA-0015 | CALAVERAS CEMENT-DIV OF FLINTKOTE | CALAVERAS | 0 | 0 | 0 | 0 | 0 | | | | | |
| 05-AA-0023 | ROCK CREEK LANDFILL | CALAVERAS | 5,841 | 40,673 | 26,182 | 25,530 | 25,025 | 36,811 | 40,673 | 26,182 | 25,530 | 25,025 |
| 06-AA-0001 | EVANS RD LANDFILL AP #18-160-46 | COLUSA | 16,259 | 15,610 | 17,108 | 14,013 | 0 | | | | | |
| 06-AA-0002 | STONYFORD DISPOSAL SITE | COLUSA | 0 | 0 | 0 | 0 | 0 | 16,259 | 15,610 | 17,108 | 14,013 | 0 |
| 07-AA-0001 | WEST COUNTY LANDFILL | CONTRA COSTA | 322,044 | 264,270 | 225,799 | 251,239 | 281,707 | | | | | |
| 07-AA-0002 | ACME LANDFILL | CONTRA COSTA | 20,752 | 7,865 | 139,472 | 52,967 | 24,167 | | | | | |
| 07-AA-0003 | CONTRA COSTA SANITARY LANDFILL | CONTRA COSTA | 202,847 | 182,933 | 58,068 | 0 | 0 | | | | | |
| 07-AA-0025 | C AND H SUGAR DISPOSAL SITE | CONTRA COSTA | 14,673 | 14,076 | 15,488 | 10,860 | 9,375 | | | | | |
| 07-AA-0032 | KELLER CANYON LANDFILL | CONTRA COSTA | 0 | 0 | 483 | 63,299 | 169,899 | 560,316 | 469,144 | 439,310 | 378,365 | 485,148 |
| 08-AA-0006 | CRESCENT CITY LANDFILL | DEL NORTE | 11,178 | 11,881 | 10,815 | 11,697 | 12,257 | 11,178 | 11,881 | 10,815 | 11,697 | 12,257 |
| 09-AA-0003 | UNION MINE DISPOSAL SITE | EL DORADO | 34,337 | 40,493 | 67,592 | 67,888 | 68,448 | 34,337 | 40,493 | 67,592 | 67,888 | 68,448 |
| 10-AA-0002 | CHATEAU FRESNO LANDFILL | FRESNO | 349,068 | 344,798 | 362,513 | 371,880 | 318,731 | | | | | |
| 10-AA-0004 | CITY OF CLOVIS LANDFILL | FRESNO | 33,332 | 32,838 | 36,737 | 39,106 | 38,030 | | | | | |
| 10-AA-0006 | COALINGA DISPOSAL SITE | FRESNO | 15,490 | 16,152 | 16,488 | 16,593 | 17,484 | | | | | |
| 10-AA-0009 | AMERICAN AVE DISPOSAL SITE | FRESNO | 34,457 | 30,471 | 34,581 | 99,590 | 262,268 | | | | | |
| 10-AA-0011 | SOUTHEAST REGIONAL SLD WSTE DIS S | FRESNO | 39,974 | 0 | 0 | 0 | 0 | | | | | |
| 10-AA-0013 | ORANGE AVENUE DISPOSAL INC | FRESNO | 12,007 | 20,967 | 9,654 | 14,868 | 20,226 | | | | | |
| 10-AA-0025 | CHESTNUT AVE SANITARY LANDFILL | FRESNO | 158,943 | 185,907 | 181,767 | 122,523 | 0 | 643,271 | 631,133 | 641,740 | 664,560 | 656,739 |
| 11-AA-0001 | GLENN COUNTY LANDFILL SITE | GLENN | 21,955 | 21,856 | 21,532 | 22,700 | 25,060 | 21,955 | 21,856 | 21,532 | 22,700 | 25,060 |
| 12-AA-0005 | CITY GARBAGE COMPANY LANDFILL | HUMBOLDT | 140,064 | 132,002 | 124,218 | 116,156 | 94,572 | | | | | |
| 12-AA-0017 | SOMOA LANDFILL SITE | HUMBOLDT | 8,073 | 5,661 | 893 | 2,339 | 135 | 148,137 | 137,663 | 125,111 | 118,495 | 94,707 |
| 13-AA-0001 | WORTHINGTON CUT AND FILL SITE | IMPERIAL | 4,208 | 4,721 | 4,485 | 2,775 | 2,948 | | | | | |
| 13-AA-0004 | CALEXICO SOLID WASTE DSPSL SITE | IMPERIAL | 16,429 | 19,150 | 22,907 | 25,373 | 18,764 | | | | | |
| 13-AA-0005 | OCOTILLO CUT AND FILL | IMPERIAL | 0 | 0 | 0 | 0 | 0 | | | | | |
| 13-AA-0006 | HOLTVILLE DISPOSAL SITE | IMPERIAL | 10,365 | 9,463 | 6,917 | 6,242 | 5,228 | | | | | |
| 13-AA-0007 | PALO VERDE CUT AND FILL SITE | IMPERIAL | 0 | 0 | 0 | 0 | 0 | | | | | |
| 13-AA-0008 | BRAWLEY DISPOSAL SITE | IMPERIAL | 15,409 | 16,442 | 19,794 | 19,969 | 13,746 | | | | | |
| 13-AA-0009 | NILAND CUT AND FILL SITE | IMPERIAL | 0 | 0 | 0 | 0 | 0 | | | | | |
| 13-AA-0010 | HOT SPA CUT AND FILL SITE | IMPERIAL | 0 | 0 | 0 | 0 | 0 | | | | | |
| 13-AA-0011 | SALTON CITY CUT AND FILL SITE | IMPERIAL | 0 | 0 | 0 | 0 | 0 | | | | | |
| 13-AA-0012 | PICACHO CUT AND FILL SITE | IMPERIAL | 1,878 | 2,223 | 3,417 | 3,830 | 4,017 | | | | | |
| 13-AA-0019 | IMPERIAL COUNTY SANITATION | IMPERIAL | 36,065 | 46,680 | 44,980 | 49,500 | 52,818 | | | | | |
| 13-AA-0022 | DESERT VALLEY COMPANY LANDFILL | IMPERIAL | 0 | 0 | 51,067 | 52,107 | 52,006 | 84,354 | 98,679 | 153,567 | 159,796 | 149,527 |
| 14-AA-0003 | LONE PINE DISPOSAL SITE | INYO | 3,619 | 4,003 | 3,932 | 2,282 | 0 | | | | | |
| 14-AA-0004 | INDEPENDENCE DISPOSAL SITE | INYO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 14-AA-0005 | BISHOP SUNLAND | INYO | 8,843 | 15,683 | 13,862 | 4,406 | 7,812 | | | | | |
| 14-AA-0006 | SHOSHONE DISPOSAL SITE | INYO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 14-AA-0007 | TECOPA DISPOSAL SITE | INYO | 0 | 0 | 0 | 0 | 0 | | | | | |

## APPENDIX A: SOLID WASTE DISPOSED (1990-94)

| | | | Tons Disposed | | | | | Total Disposed (County Total) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SWIS ID | SITE NAME | COUNTY | 1990 | 1991 | 1992 | 1993 | 1994 | 1990 | 1991 | 1992 | 1993 | 1994 |
| 14-AA-0016 | FURNACE CREEK | INYO | 2,400 | 2,786 | 2,312 | 1,905 | 580 | | | | | |
| 14-AA-0017 | HOMEWOOD CANYON DISPOSAL SITE | INYO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 14-AA-0021 | DEEP SPRINGS COLLEGE DISPOSAL ST | INYO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 14-AA-0022 | OLANCHA-CARTAGO DISPOSAL SITE | INYO | 0 | 0 | 0 | 0 | 0 | 14,862 | 22,472 | 20,106 | 8,593 | 8,392 |
| 15-AA-0045 | BORON SANITARY LANDFILL | KERN | 16,746 | 15,224 | 13,575 | 8,207 | 7,232 | | | | | |
| 15-AA-0047 | BUTTONWILLOW SANITARY LANDFILL | KERN | 3,884 | 3,816 | 5,543 | 4,758 | 3,397 | | | | | |
| 15-AA-0048 | CHINA GRADE SANITARY LANDFILL | KERN | 313,396 | 318,332 | 119,737 | 0 | 0 | | | | | |
| 15-AA-0050 | ARVIN SANITARY LANDFILL | KERN | 219,136 | 229,068 | 263,201 | 231,149 | 182,408 | | | | | |
| 15-AA-0051 | GLENNVILLE LANDFILL | KERN | 1,392 | 762 | 0 | 0 | 0 | | | | | |
| 15-AA-0052 | LOST HILLS SANITARY LANDFILL | KERN | 3,156 | 4,632 | 6,108 | 3,218 | 2,922 | | | | | |
| 15-AA-0055 | KERN VALLEY LANDFILL | KERN | 23,216 | 22,156 | 27,379 | 24,287 | 17,870 | | | | | |
| 15-AA-0056 | LEBEC SANITARY LANDFILL | KERN | 19,336 | 15,936 | 0 | 0 | 0 | | | | | |
| 15-AA-0057 | SHAFTER-WASCO SANITARY LANDFILL | KERN | 61,268 | 76,666 | 96,798 | 75,353 | 71,273 | | | | | |
| 15-AA-0058 | MOJAVE-ROSAMOND SANITARY LANDFILL | KERN | 30,216 | 44,216 | 41,067 | 26,276 | 16,029 | | | | | |
| 15-AA-0059 | RIDGECREST-INYOKERN SANITARY LF | KERN | 78,220 | 67,588 | 66,789 | 52,844 | 42,276 | | | | | |
| 15-AA-0061 | TAFT SANITARY LANDFILL | KERN | 58,324 | 48,264 | 60,078 | 39,371 | 23,762 | | | | | |
| 15-AA-0062 | TEHACHAPI SANITARY LANDFILL | KERN | 40,364 | 50,772 | 31,578 | 22,666 | 21,113 | | | | | |
| 15-AA-0063 | MCFARLAND-DELANO SANITARY LNDFL | KERN | 68,072 | 50,900 | 30,334 | 0 | 0 | | | | | |
| 15-AA-0067 | NRTH BELRIDGE SOLID WSTE DIS SITE | KERN | 464 | 0 | 0 | 0 | 0 | | | | | |
| 15-AA-0150 | EDWARDS AFB | KERN | 16,747 | 8,507 | 24,094 | 15,212 | 13,732 | | | | | |
| 15-AA-0151 | EDWARDS AFB | KERN | 0 | 0 | 0 | 0 | 0 | | | | | |
| 15-AA-0153 | VALLEY TREE & CONST DISPOSAL SITE | KERN | 77 | 123 | 10 | 160 | 1,075 | | | | | |
| 15-AA-0273 | BAKERSFIELD S.L.F. (BENA) | KERN | 0 | 0 | 129,097 | 274,698 | 224,495 | | | | | |
| 15-AA-0286 | E.O.D. NO. 2 | KERN | 0 | 0 | 0 | 0 | 0 | 954,014 | 956,962 | 915,388 | 778,199 | 627,584 |
| 16-AA-0001 | HAROLD JAMES INC TIRE DIS SITE | KINGS | 0 | 0 | 0 | 0 | 0 | | | | | |
| 16-AA-0004 | AVENAL LANDFILL | KINGS | 11,891 | 12,086 | 9,135 | 10,059 | 7,703 | | | | | |
| 16-AA-0005 | NAS, LEMOORE SANITARY LANDFILL | KINGS | 0 | 0 | 0 | 0 | 0 | | | | | |
| 16-AA-0009 | HANFORD SANITARY LANDFILL | KINGS | 78,816 | 86,133 | 82,564 | 85,885 | 85,952 | | | | | |
| 16-AA-0012 | WEAVERS TREE SERVICE | KINGS | 0 | 0 | 0 | 0 | 0 | | | | | |
| 16-AA-0012 | HANFORD RECYCLING DISPOSAL SITE | KINGS | 0 | 0 | 0 | 0 | 0 | 90,707 | 98,219 | 91,699 | 95,944 | 93,655 |
| 17-AA-0001 | EASTLAKE SANITARY LANDFILL | LAKE | 48,143 | 47,122 | 45,438 | 28,986 | 29,628 | 48,143 | 47,122 | 45,438 | 28,986 | 29,628 |
| 18-AA-0003 | BIEBER DISPOSAL FACILITY | LASSEN | 0 | 0 | 0 | 185 | 0 | | | | | |
| 18-AA-0004 | MADELINE DISPOSAL FACILITY | LASSEN | 0 | 0 | 0 | 0 | 0 | | | | | |
| 18-AA-0005 | RAVENDALE DISPOSAL | LASSEN | 0 | 0 | 0 | 0 | 0 | | | | | |
| 18-AA-0009 | LASSEN COUNTY LANDFILL | LASSEN | 11,220 | 16,988 | 19,523 | 17,769 | 15,738 | | | | | |
| 18-AA-0010 | WESTWOOD DISPOSAL FACILITY | LASSEN | 914 | 1,090 | 1,253 | 1,068 | 928 | | | | | |
| 18-AA-0011 | HERLONG DISPOSAL FACILITY | LASSEN | 425 | 469 | 268 | 499 | 572 | | | | | |
| 18-AA-0013 | SIERRA ARMY DEPOT | LASSEN | 155 | 12,268 | 2,500 | 426 | 388 | 12,714 | 30,815 | 23,544 | 19,947 | 17,626 |
| 19-AA-0006 | BRAND PARK LANDFILL | LOS ANGELES | 13,960 | 13,177 | 11,210 | 13,561 | 5,451 | | | | | |
| 19-AA-0009 | ANTELOPE VALLEY PUBLIC DUMP | LOS ANGELES | 63,649 | 55,471 | 64,658 | 151,967 | 168,285 | | | | | |
| 19-AA-0012 | SCHOLL CANYON SANITARY LANDFILL | LOS ANGELES | 658,122 | 639,424 | 589,253 | 573,490 | 495,165 | | | | | |
| 19-AA-0013 | AZUSA LAND RECLAMATION CO. INC. | LOS ANGELES | 844,283 | 216,326 | 0 | 57,593 | 216,805 | | | | | |
| 19-AA-0015 | SPADRA SANITARY LANDFILL #2 | LOS ANGELES | 807,466 | 854,782 | 896,043 | 883,371 | 672,663 | | | | | |
| 19-AA-0040 | BURBANK LANDFILL SITE NO. 3 | LOS ANGELES | 67,603 | 61,829 | 64,113 | 55,337 | 50,649 | | | | | |
| 19-AA-0050 | WASTE MNGMNT OF LANCASTER S LF | LOS ANGELES | 122,077 | 109,444 | 130,838 | 108,087 | 135,826 | | | | | |

| | | | Tons Disposed | | | | | Total Disposed (County Total) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SWIS ID | SITE NAME | COUNTY | 1990 | 1991 | 1992 | 1993 | 1994 | 1990 | 1991 | 1992 | 1993 | 1994 |
| 19-AA-0052 | CHIQUITA CANYON SANITARY LANDFILL | LOS ANGELES | 546,892 | 741,562 | 594,583 | 396,695 | 528,101 | | | | | |
| 19-AA-0053 | PUENTE HILLS LANDFILL #6 | LOS ANGELES | 3,655,161 | 3,691,889 | 3,710,797 | 3,679,365 | 3,414,940 | | | | | |
| 19-AA-0056 | CALABASAS LANDFILL #5 | LOS ANGELES | 857,323 | 716,675 | 709,586 | 665,555 | 928,081 | | | | | |
| 19-AA-0057 | PITCHESS HONOR RANCHO LANDFILL | LOS ANGELES | 6,771 | 5,520 | 4,140 | 5,520 | 1,380 | | | | | |
| 19-AA-0061 | PEBBLY BEACH (AVALON) DIS SITE | LOS ANGELES | 0 | 236 | 3,316 | 1,980 | 1,217 | | | | | |
| 19-AA-0061 | PEBBLY BEACH (AVALON) DIS SITE | LOS ANGELES | 5,445 | 2,340 | 0 | 0 | 0 | | | | | |
| 19-AA-0062 | TWO HARBORS LANDFILL SITE | LOS ANGELES | 0 | 0 | 0 | 0 | 0 | | | | | |
| 19-AA-0063 | US NAVY LANDFILL | LOS ANGELES | 1,686 | 5,524 | 0 | 476 | 820 | | | | | |
| 19-AA-0820 | LOPEZ CANYON SANITARY LANDFILL | LOS ANGELES | 974,298 | 638,649 | 522,494 | 679,516 | 733,376 | | | | | |
| 19-AE-0004 | CHANDLERS LANDFILL | LOS ANGELES | 0 | 0 | 0 | 0 | 0 | | | | | |
| 19-AF-0001 | BKK WEST COVINA DISPOSAL SITE | LOS ANGELES | 2,195,241 | 2,997,157 | 3,166,087 | 2,451,353 | 2,770,006 | | | | | |
| 19-AH-0001 | CITY OF WHITTIER-SAVAGE CANYON LF | LOS ANGELES | 99,312 | 89,135 | 82,532 | 74,655 | 67,637 | | | | | |
| 19-AR-0002 | SUNSHINE CANYON/NORTH VALLEY LNDF | LOS ANGELES | 724,633 | 447,113 | 0 | 0 | 0 | | | | | |
| 19-AR-0004 | BRADLEY EAST LANDFILL | LOS ANGELES | 0 | 0 | 0 | 0 | 490,556 | | | | | |
| 19-AR-0008 | BRADLEY AVENUE WEST SANITARY LNDF | LOS ANGELES | 553,755 | 776,647 | 1,523,906 | 1,489,747 | 1,387,754 | 12,197,677 | 12,062,900 | 12,073,556 | 11,288,268 | 12,068,712 |
| 20-AA-0002 | FAIRMEAD SOLID WASTE DISPOSAL STE | MADERA | 79,041 | 77,037 | 83,064 | 64,113 | 88,869 | 79,041 | 77,037 | 83,064 | 64,113 | 88,869 |
| 21-AA-0001 | REDWOOD SANITARY LANDFILL | MARIN | 425,324 | 358,270 | 333,704 | 230,329 | 316,315 | | | | | |
| 21-AA-0002 | WEST MARIN SANITARY LANDFILL | MARIN | 9,214 | 10,988 | 12,123 | 17,575 | 18,383 | 434,538 | 369,258 | 345,827 | 247,904 | 334,698 |
| 22-AA-0001 | MARIPOSA COUNTY SANITARY LANDFILL | MARIPOSA | 11,783 | 11,414 | 8,949 | 12,090 | 12,740 | 11,783 | 11,414 | 8,949 | 12,090 | 12,740 |
| 23-AA-0003 | CASPAR REFUSE DISPOSAL SITE | MENDOCINO | 7,233 | 7,709 | 5,926 | 0 | 0 | | | | | |
| 23-AA-0008 | LAYTONVILLE REFUSE DISPOSAL SITE | MENDOCINO | 253 | 0 | 691 | 0 | 0 | | | | | |
| 23-AA-0012 | COVELO FILL SITE "3" | MENDOCINO | 10,660 | 864 | 0 | 0 | 0 | | | | | |
| 23-AA-0018 | SOUTH COAST REFUSE DISPOSAL | MENDOCINO | 1,759 | 1,620 | 1,083 | 255 | 806 | | | | | |
| 23-AA-0019 | CITY OF UKIAH SOLID WASTE DS | MENDOCINO | 29,461 | 26,638 | 25,443 | 21,986 | 22,255 | | | | | |
| 23-AA-0021 | CITY OF WILLITS DISPOSAL SITE | MENDOCINO | 6,986 | 6,935 | 7,250 | 16,786 | 19,462 | 68,135 | 55,180 | 49,342 | 51,117 | 55,263 |
| 24-AA-0001 | HIGHWAY 59 DISPOSAL SITE | MERCED | 149,895 | 141,666 | 133,476 | 147,141 | 152,287 | | | | | |
| 24-AA-0002 | BILLY WRIGHT DISPOSAL SITE | MERCED | 37,386 | 30,991 | 31,272 | 34,488 | 34,145 | 187,281 | 172,657 | 164,748 | 181,629 | 186,432 |
| 25-AA-0001 | ALTURAS SANITARY LANDFILL | MODOC | 1,999 | 1,282 | 1,131 | 1,377 | 2,984 | | | | | |
| 25-AA-0002 | EAGLEVILLE DISPOSAL SITE | MODOC | 0 | 0 | 0 | 0 | 0 | | | | | |
| 25-AA-0003 | FORT BIDWELL LANDFILL | MODOC | 0 | 0 | 0 | 0 | 0 | | | | | |
| 25-AA-0004 | LAKE CITY LANDFILL | MODOC | 0 | 0 | 0 | 0 | 0 | | | | | |
| 25-AA-0021 | CEDARVILLE LANDFILL-EAST | MODOC | 0 | 0 | 0 | 0 | 0 | 1,999 | 1,282 | 1,131 | 1,377 | 2,984 |
| 26-AA-0001 | WALKER SANITARY LANDFILL | MONO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 26-AA-0002 | BRIDGEPORT SANITARY LANDFILL | MONO | 10 | 0 | 489 | 1,111 | 0 | | | | | |
| 26-AA-0003 | PUMICE VALLEY SANITARY LANDFILL | MONO | 7 | 0 | 467 | 349 | 0 | | | | | |
| 26-AA-0004 | BENTON CROSSING SANITARY LANDFILL | MONO | 2,515 | 3,607 | 3,263 | 2,728 | 3,232 | | | | | |
| 26-AA-0005 | CHALFANT SANITARY LANDFILL | MONO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 26-AA-0006 | BENTON SANITARY LANDFILL | MONO | 0 | 39 | 27 | 0 | 0 | 2,532 | 3,646 | 4,246 | 4,188 | 3,232 |
| 27-AA-0003 | LEWIS ROAD SANITARY LANDFILL | MONTEREY | 5,354 | 6,653 | 5,768 | 6,003 | 17,753 | | | | | |
| 27-AA-0005 | JOHNSON CANYON SANITARY LANDFILL | MONTEREY | 10,270 | 9,417 | 8,854 | 9,705 | 27,236 | | | | | |
| 27-AA-0006 | JOLAN ROAD SANITARY LANDFILL | MONTEREY | 8,431 | 8,025 | 7,592 | 9,227 | 18,157 | | | | | |
| 27-AA-0007 | CRAZY HORSE SANITARY LANDFILL | MONTEREY | 178,785 | 133,915 | 139,040 | 144,640 | 150,728 | | | | | |
| 27-AA-0010 | MONTEREY PENINSULA SANITARY LNDFL | MONTEREY | 255,427 | 257,343 | 247,784 | 244,933 | 217,528 | | | | | |
| 27-AA-0012 | SAN ANTONIO SOUTH SHORE DIS SITE | MONTEREY | 0 | 0 | 0 | 0 | 0 | 458,267 | 415,353 | 409,038 | 414,508 | 431,402 |
| 28-AA-0001 | AMERICAN CANYON SANITARY LANDFILL | NAPA | 0 | 0 | 0 | 0 | 160,847 | | | | | |

## APPENDIX A: SOLID WASTE DISPOSED (1990-94)

| | | | Tons Disposed | | | | | Total Disposed (County Total) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SWIS ID | SITE NAME | COUNTY | 1990 | 1991 | 1992 | 1993 | 1994 | 1990 | 1991 | 1992 | 1993 | 1994 |
| 28-AA-0001 | AMERICAN CANYON SANITARY LANDFILL | NAPA | 198,962 | 195,173 | 184,370 | 133,881 | 0 | | | | | |
| 28-AA-0002 | UPPER VALLEY DIS DERVICE LANDFILL | NAPA | 34,238 | 32,496 | 31,929 | 32,777 | 34,352 | | | | | |
| 28-AA-0003 | BERRYESSA GARBAGE SERVICE DIS S | NAPA | 1,150 | 1,203 | 842 | 0 | 0 | 234,350 | 228,872 | 217,141 | 166,658 | 195,199 |
| 29-AA-0001 | MCCOURTNEY LANDFILL | NEVADA | 42,926 | 33,486 | 23,049 | 0 | 0 | 42,926 | 33,486 | 23,049 | 0 | 0 |
| 30-AB-0016 | OLINDA SANITARY LANDFILL | ORANGE | 359,344 | 1,575 | 63,130 | 500 | 0 | | | | | |
| 30-AB-0017 | COYOTE CANYON SANITARY LANDFILL | ORANGE | 214,027 | 0 | 0 | 0 | 0 | | | | | |
| 30-AB-0018 | SANTIAGO CANYON SANITARY LANDFILL | ORANGE | 824,287 | 879,818 | 811,851 | 357,628 | 1,986 | | | | | |
| 30-AB-0019 | PRIMA DESCHECHA SANITARY LANDFILL | ORANGE | 739,798 | 473,257 | 350,766 | 333,282 | 298,842 | | | | | |
| 30-AB-0035 | OLINDA ALPHA SANITARY LANDFILL | ORANGE | 1,061,566 | 1,115,619 | 1,095,342 | 1,305,441 | 1,363,627 | | | | | |
| 30-AB-0360 | BEE CANYON SANITARY LANDFILL | ORANGE | 848,010 | 982,043 | 1,129,081 | 1,329,090 | 1,308,019 | 4,047,032 | 3,452,312 | 3,450,170 | 3,325,941 | 2,972,474 |
| 31-AA-0210 | PLACER CO-DEPT OF PUBLIC WORKS | PLACER | 184,949 | 181,255 | 185,148 | 188,340 | 174,178 | | | | | |
| 31-AA-0530 | CLIPPER CREEK | PLACER | 0 | 0 | 0 | 0 | 0 | | | | | |
| 31-AA-0560 | EASTERN REGIONAL LANDFILL | PLACER | 35,642 | 35,194 | 32,885 | 35,201 | 35,910 | 220,591 | 216,449 | 218,033 | 223,541 | 210,088 |
| 32-AA-0007 | PORTOLA LANDFILL | PLUMAS | 788 | 786 | 1,027 | 948 | 849 | | | | | |
| 32-AA-0008 | GOPHER HILL SANITARY LANDFILL | PLUMAS | 8,958 | 9,190 | 8,835 | 8,344 | 4,638 | | | | | |
| 32-AA-0009 | CHESTER SANITARY LANDFILL | PLUMAS | 4,208 | 4,214 | 3,728 | 5,906 | 8,130 | | | | | |
| 32-AA-0021 | COLLINS PINE COMPANY LANDFILL | PLUMAS | 0 | 0 | 0 | 0 | 0 | 13,954 | 14,190 | 13,590 | 15,198 | 13,617 |
| 33-AA-0003 | HIGHGROVE SANITARY LANDFILL | RIVERSIDE | 341,927 | 289,900 | 245,888 | 214,112 | 205,811 | | | | | |
| 33-AA-0006 | BADLANDS DISPOSAL SITE | RIVERSIDE | 127,818 | 98,890 | 48,290 | 71,086 | 94,656 | | | | | |
| 33-AA-0007 | LAMB CANYON DISPOSAL SITE | RIVERSIDE | 176,849 | 158,069 | 161,167 | 132,937 | 133,086 | | | | | |
| 33-AA-0008 | DOUBLE BUTTE DISPOSAL SITE | RIVERSIDE | 108,941 | 69,670 | 74,818 | 81,215 | 42,245 | | | | | |
| 33-AA-0009 | MEAD VALLEY DISPOSAL SITE | RIVERSIDE | 176,862 | 166,609 | 194,982 | 175,245 | 175,119 | | | | | |
| 33-AA-0011 | EDOM HILL DISPOSAL SITE | RIVERSIDE | 257,273 | 231,381 | 188,204 | 176,196 | 174,283 | | | | | |
| 33-AA-0012 | COACHELLA VALLEY DISPOSAL SITE | RIVERSIDE | 257,677 | 196,244 | 168,513 | 153,309 | 149,637 | | | | | |
| 33-AA-0013 | ANZA DISPOSAL SITE | RIVERSIDE | 7,956 | 8,262 | 3,978 | 3,991 | 6,447 | | | | | |
| 33-AA-0015 | OASIS DISPOSAL SITE | RIVERSIDE | 8,350 | 6,408 | 6,160 | 6,160 | 4,004 | | | | | |
| 33-AA-0016 | EAGLE MOUNTAIN LANDFILL | RIVERSIDE | 1,825 | 0 | 2,555 | 2,562 | 2,190 | | | | | |
| 33-AA-0017 | BLYTHE DISPOSAL SITE | RIVERSIDE | 17,850 | 16,732 | 16,020 | 18,106 | 21,751 | | | | | |
| 33-AA-0071 | MECCA LANDFILL II | RIVERSIDE | 7,368 | 11,052 | 15,092 | 15,092 | 11,704 | | | | | |
| 33-AA-0217 | EL SOBRANTE SANITARY LANDFILL | RIVERSIDE | 348,465 | 297,906 | 270,299 | 459,394 | 499,868 | 1,839,161 | 1,551,123 | 1,395,966 | 1,509,405 | 1,520,801 |
| 34-AA-0001 | SACRAMENTO CO LANDFILL (KIEFER) | SACRAMENTO | 739,882 | 750,731 | 801,236 | 831,248 | 883,465 | | | | | |
| 34-AA-0006 | AEROJET CLASS III SLD WSTE LNDFL | SACRAMENTO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 34-AA-0007 | DIXON PIT LANDFILL | SACRAMENTO | 6,294 | 3,930 | 4,433 | 4,575 | 5,865 | | | | | |
| 34-AA-0018 | SACRAMENTO CITY LANDFILL | SACRAMENTO | 245,898 | 224,142 | 177,884 | 120,721 | 66,859 | | | | | |
| 34-AA-0020 | L & D LANDFILL | SACRAMENTO | 100,209 | 74,561 | 57,268 | 61,044 | 99,011 | 1,092,283 | 1,053,364 | 1,040,821 | 1,017,588 | 1,055,200 |
| 35-AA-0001 | JOHN SMITH RD SOLID WASTE DIS STE | SAN BENITO | 21,382 | 22,813 | 21,250 | 28,566 | 31,102 | 21,382 | 22,813 | 21,250 | 28,566 | 31,102 |
| 36-AA-0003 | METRO WATER DIST-IRON MOUNTAIN | SAN BERNARDINO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 36-AA-0017 | CALIFORNIA STREET LANDFILL | SAN BERNARDINO | 61,611 | 59,839 | 62,488 | 55,430 | 58,134 | | | | | |
| 36-AA-0019 | AGUA MANSA LANDFILL | SAN BERNARDINO | 1,092 | 4,052 | 5,258 | 2,143 | 1,021 | | | | | |
| 36-AA-0026 | ORO GRANDE LANDFILL | SAN BERNARDINO | 596 | 0 | 0 | 0 | 0 | | | | | |
| 36-AA-0039 | NEWBERRY DISPOSAL SITE | SAN BERNARDINO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 36-AA-0041 | TRONA-ARGUS REFUSE DISPOSAL SITE | SAN BERNARDINO | 10,456 | 4,339 | 4,376 | 6,901 | 5,324 | | | | | |
| 36-AA-0044 | PHELAN REFUSE DISPOSAL SITE | SAN BERNARDINO | 25,896 | 24,492 | 22,883 | 28,560 | 19,481 | | | | | |
| 36-AA-0045 | VICTORVILLE REFUSE DISPOSAL SITE | SAN BERNARDINO | 93,004 | 103,453 | 100,014 | 117,051 | 114,296 | | | | | |
| 36-AA-0046 | BARSTOW REFUSE DISPOSAL SITE | SAN BERNARDINO | 30,350 | 26,960 | 30,808 | 37,405 | 38,375 | | | | | |

| | | | Tons Disposed | | | | | Total Disposed (County Total) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SWIS ID | SITE NAME | COUNTY | 1990 | 1991 | 1992 | 1993 | 1994 | 1990 | 1991 | 1992 | 1993 | 1994 |
| 36-AA-0047 | YERMO DISPOSAL SITE | SAN BERNARDINO | 3,212 | 6,529 | 6,309 | 2,209 | 1,024 | | | | | |
| 36-AA-0048 | APPLE VALLEY DISPOSAL SITE | SAN BERNARDINO | 42,596 | 40,660 | 33,838 | 30,262 | 29,136 | | | | | |
| 36-AA-0049 | BAKER REFUSE DISPOSAL SITE | SAN BERNARDINO | 0 | 0 | 183 | 0 | 273 | | | | | |
| 36-AA-0050 | HESPERIA REFUSE DISPOSAL SITE | SAN BERNARDINO | 82,528 | 55,242 | 45,279 | 46,403 | 45,903 | | | | | |
| 36-AA-0051 | COLTON REFUSE DISPOSAL SITE | SAN BERNARDINO | 271,967 | 268,059 | 273,706 | 265,961 | 265,393 | | | | | |
| 36-AA-0054 | MILLIKEN SANITARY LANDFILL | SAN BERNARDINO | 631,603 | 600,995 | 620,466 | 521,684 | 408,222 | | | | | |
| 36-AA-0055 | FONTANA REFUSE DISPOSAL SITE | SAN BERNARDINO | 285,783 | 273,224 | 282,037 | 259,465 | 251,469 | | | | | |
| 36-AA-0056 | BIG BEAR REFUSE DISPOSAL SITE | SAN BERNARDINO | 24,336 | 23,180 | 29,864 | 43,734 | 28,254 | | | | | |
| 36-AA-0057 | LANDERS DISPOSAL SITE | SAN BERNARDINO | 31,372 | 24,597 | 30,083 | 30,045 | 29,591 | | | | | |
| 36-AA-0058 | MORONGO DISPOSAL SITE | SAN BERNARDINO | 15,184 | 8,391 | 9,811 | 7,008 | 5,565 | | | | | |
| 36-AA-0059 | NEEDLES SOLID WASTE DISPOSAL SITE | SAN BERNARDINO | 5,724 | 6,604 | 6,285 | 2,326 | 1,139 | | | | | |
| 36-AA-0060 | TWENTYNINE PALMS DISPOSAL SITE | SAN BERNARDINO | 25,112 | 22,256 | 20,704 | 22,234 | 22,970 | | | | | |
| 36-AA-0061 | LENWOOD-HINKLEY REFUSE DIS SITE | SAN BERNARDINO | 9,984 | 14,453 | 9,630 | 9,734 | 7,673 | | | | | |
| 36-AA-0062 | LUCERNE VALLEY DISPOSAL SITE | SAN BERNARDINO | 2,608 | 2,542 | 4,582 | 3,294 | 0 | | | | | |
| 36-AA-0064 | HOLLIDAY SANITARY LANDFILL | SAN BERNARDINO | 0 | 0 | 0 | 849 | 2,037 | | | | | |
| 36-AA-0067 | USMC 29 PALMS DISPOSAL SITE | SAN BERNARDINO | 1,851 | 4,306 | 3,516 | 796 | 1,631 | | | | | |
| 36-AA-0068 | RESERVE COMP TRAINING CENTER | SAN BERNARDINO | 0 | 0 | 2,436 | 0 | 0 | | | | | |
| 36-AA-0074 | CUSHENBURY PLNT | SAN BERNARDINO | 0 | 0 | 122 | 0 | 0 | | | | | |
| 36-AA-0078 | MONTECITO MEMORIAL PARK | SAN BERNARDINO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 36-AA-0080 | WEST SEVENTH STREET DISPOSAL SITE | SAN BERNARDINO | 485 | 0 | 0 | 0 | 0 | | | | | |
| 36-AA-0084 | GOLDSTONE DEEP SPACE COMM COMPLEX | SAN BERNARDINO | 289 | 0 | 0 | 0 | 0 | | | | | |
| 36-AA-0087 | SAN TIMOTEO SOLID WASTE DIS SITE | SAN BERNARDINO | 160,646 | 150,923 | 138,814 | 138,419 | 130,151 | | | | | |
| 36-AA-0250 | CITY OF RIALTO DISPOSAL SITE | SAN BERNARDINO | 5,241 | 4,240 | 2,949 | 2,674 | 3,449 | 1,823,526 | 1,729,336 | 1,746,441 | 1,634,587 | 1,470,511 |
| 37-AA-0005 | RAMONA LANDFILL | SAN DIEGO | 48,781 | 40,481 | 36,062 | 33,436 | 29,621 | | | | | |
| 37-AA-0006 | BORREGO SPRINGS LANDFILL | SAN DIEGO | 10,156 | 6,115 | 6,500 | 2,473 | 2,345 | | | | | |
| 37-AA-0008 | SAN MARCOS LANDFILL | SAN DIEGO | 881,940 | 784,072 | 706,745 | 622,486 | 500,128 | | | | | |
| 37-AA-0010 | OTAY ANNEX LANDFILL | SAN DIEGO | 696,040 | 523,170 | 493,848 | 416,970 | 334,641 | | | | | |
| 37-AA-0020 | MIRAMAR SANITARY LANDFILL | SAN DIEGO | 1,440,619 | 1,391,932 | 1,359,363 | 1,329,201 | 1,267,809 | | | | | |
| 37-AA-0023 | SYCAMORE SANITARY LANDFILL | SAN DIEGO | 509,901 | 418,767 | 385,473 | 379,756 | 333,191 | | | | | |
| 37-AA-0902 | SAN ONOFRE LANDFILL | SAN DIEGO | 1,408 | 1,225 | 6,279 | 3,652 | 1,758 | | | | | |
| 37-AA-0903 | LAS PULGAS LANDFILL | SAN DIEGO | 11,720 | 29,480 | 28,770 | 12,630 | 28,177 | 3,600,565 | 3,195,242 | 3,023,040 | 2,800,604 | 2,497,670 |
| 39-AA-0001 | AUSTIN ROAD LANDFILL | SAN JOAQUIN | 130,268 | 127,791 | 148,663 | 140,827 | 123,141 | | | | | |
| 39-AA-0002 | FRENCH CAMP LANDFILL SITE | SAN JOAQUIN | 27,466 | 28,889 | 30,261 | 31,242 | 32,482 | | | | | |
| 39-AA-0003 | HARNEY LANE SANITARY LANDFILL | SAN JOAQUIN | 140,538 | 97,720 | 0 | 0 | 0 | | | | | |
| 39-AA-0004 | FOOTHILL SANITARY LANDFILL | SAN JOAQUIN | 150,672 | 140,876 | 141,947 | 145,113 | 139,987 | | | | | |
| 39-AA-0005 | CORRAL HOLLOW LANDFILL | SAN JOAQUIN | 30,088 | 57,882 | 67,318 | 0 | 90,398 | | | | | |
| 39-AA-0005 | CORRAL HOLLOW LANDFILL | SAN JOAQUIN | 29,347 | 0 | 0 | 72,702 | 0 | | | | | |
| 39-AA-0015 | FORWARD INC | SAN JOAQUIN | 64,166 | 64,464 | 85,236 | 98,385 | 129,246 | | | | | |
| 39-AA-0022 | NORTH COUNTY LANDFILL | SAN JOAQUIN | 0 | 35,693 | 122,817 | 138,827 | 165,683 | 572,545 | 553,315 | 596,242 | 627,096 | 680,937 |
| 40-AA-0001 | CITY OF PASO ROBLES LANDFILL | SAN LUIS OBISPO | 31,496 | 33,184 | 28,928 | 26,744 | 41,699 | | | | | |
| 40-AA-0002 | CAMP ROBERTS SOLID WASTE DIS SITE | SAN LUIS OBISPO | 1,037 | 3,474 | 4,392 | 4,591 | 2,828 | | | | | |
| 40-AA-0003 | SANTA FE ENERGY LANDFILL | SAN LUIS OBISPO | 0 | 0 | 0 | 0 | 0 | | | | | |
| 40-AA-0004 | COLD CANYON LANDFILL SLD WASTE DS | SAN LUIS OBISPO | 168,068 | 143,066 | 140,967 | 137,087 | 134,682 | | | | | |
| 40-AA-0008 | CHICAGO GRADE LANDFILL | SAN LUIS OBISPO | 20,072 | 22,752 | 6,843 | 0 | 0 | | | | | |
| 40-AA-0008 | CHICAGO GRADE LANDFILL | SAN LUIS OBISPO | 0 | 0 | 15,469 | 25,511 | 5,254 | | | | | |

## APPENDIX A: SOLID WASTE DISPOSED (1990-94)

| | | | Tons Disposed | | | | | Total Disposed (County Total) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SWIS ID | SITE NAME | COUNTY | 1990 | 1991 | 1992 | 1993 | 1994 | 1990 | 1991 | 1992 | 1993 | 1994 |
| 40-AA-0009 | CAMP SAN LUIS OBISPO LANDFILL | SAN LUIS OBISPO | 0 | 11 | 0 | 0 | 0 | | | | | |
| 40-AA-0014 | CALIFORNIA VALLEY LANDFILL | SAN LUIS OBISPO | 73 | 0 | 0 | 0 | 0 | 220,746 | 202,487 | 196,599 | 193,933 | 184,463 |
| 41-AA-0002 | OX MOUNTAIN SANITARY LANDFILL | SAN MATEO | 787,928 | 804,805 | 832,681 | 633,415 | 790,981 | | | | | |
| 41-AA-0008 | HILLSIDE SOLID WASTE DIS SITE | SAN MATEO | 61,697 | 55,506 | 43,527 | 52,061 | 52,030 | 849,625 | 860,311 | 876,208 | 685,476 | 843,011 |
| 42-AA-0010 | NEW CUYAMA SANITARY LANDFILL | SANTA BARBARA | 0 | 0 | 0 | 0 | 0 | | | | | |
| 42-AA-0011 | FOXEN CANYON SANITARY LANDFILL | SANTA BARBARA | 27,411 | 26,510 | 25,190 | 15,408 | 12,139 | | | | | |
| 42-AA-0012 | VANDENBERG AFB LANDFILL | SANTA BARBARA | 3,285 | 12,912 | 1,813 | 0 | 0 | | | | | |
| 42-AA-0013 | VENTUCOPA SANITARY LANDFILL | SANTA BARBARA | 0 | 0 | 0 | 0 | 0 | | | | | |
| 42-AA-0015 | TAJIGUAS SANITARY LANDFILL | SANTA BARBARA | 295,163 | 245,150 | 184,973 | 129,571 | 105,613 | | | | | |
| 42-AA-0016 | CITY OF SANTA MARIA REFUSE DIS ST | SANTA BARBARA | 141,456 | 124,239 | 117,846 | 126,275 | 115,013 | | | | | |
| 42-AA-0017 | CITY OF LOMPOC SANITARY LANDFILL | SANTA BARBARA | 59,357 | 38,287 | 40,358 | 41,839 | 43,250 | 526,672 | 447,098 | 370,180 | 313,093 | 276,015 |
| 43-AA-0001 | GUADALUPE DISPOSAL SITE | SANTA CLARA | 213,414 | 168,774 | 188,172 | 201,802 | 178,999 | | | | | |
| 43-AA-0004 | PACHECO PASS SANITARY LANDFILL | SANTA CLARA | 82,153 | 75,993 | 69,497 | 68,824 | 67,073 | | | | | |
| 43-AA-0006 | SHORELINE REG PARK SANITARY LNDFL | SANTA CLARA | 9,625 | 8,441 | 9,293 | 8,381 | 0 | | | | | |
| 43-AA-0007 | CITY OF SUNNYVALE LANDFILL | SANTA CLARA | 202,771 | 147,483 | 149,041 | 113,509 | 0 | | | | | |
| 43-AM-0001 | CITY OF PALO ALTO REFUSE DIS SITE | SANTA CLARA | 86,636 | 89,168 | 83,938 | 73,904 | 32,845 | | | | | |
| 43-AN-0001 | OWENS FIBERGLASS CO | SANTA CLARA | 1,663 | 1,158 | 0 | 348 | 0 | | | | | |
| 43-AN-0003 | NEWBY ISLAND SANITARY LANDFILL | SANTA CLARA | 980,477 | 951,440 | 933,162 | 874,493 | 849,436 | | | | | |
| 43-AN-0007 | ZANKER RD (NINE PAR) SANTRY LNDFL | SANTA CLARA | 55,315 | 42,659 | 51,493 | 4,563 | 10,192 | | | | | |
| 43-AN-0008 | KIRBY CANYON SANITARY LANDFILL | SANTA CLARA | 91,410 | 88,190 | 102,379 | 126,636 | 300,538 | | | | | |
| 43-AO-0001 | ALL PURPOSE LANDFILL | SANTA CLARA | 148,863 | 140,429 | 87,634 | 108,377 | 0 | 1,872,327 | 1,713,735 | 1,674,609 | 1,580,837 | 1,439,083 |
| 44-AA-0001 | SANTA CRUZ CITY SANITARY LANDFILL | SANTA CRUZ | 80,158 | 67,065 | 60,049 | 78,112 | 75,043 | | | | | |
| 44-AA-0002 | WATSONVILLE CITY SLD WSTE DIS STE | SANTA CRUZ | 30,254 | 31,652 | 26,349 | 26,525 | 25,558 | | | | | |
| 44-AA-0003 | BEN LOMOND SOLID WASTE DIS SITE | SANTA CRUZ | 52,629 | 34,698 | 29,953 | 30,171 | 31,203 | | | | | |
| 44-AA-0004 | BUENA VISTA DISPOSAL SITE | SANTA CRUZ | 118,136 | 93,951 | 87,392 | 91,779 | 90,788 | 281,177 | 227,366 | 203,743 | 226,587 | 222,592 |
| 45-AA-0019 | CITY OF REDDING SANITARY LANDFILL | SHASTA | 13,552 | 0 | 0 | 0 | 0 | | | | | |
| 45-AA-0020 | ANDERSON SOLID WASTE, INC. | SHASTA | 117,993 | 85,475 | 81,856 | 133,908 | 104,118 | | | | | |
| 45-AA-0021 | SIMPSON PAPER CO. | SHASTA | 10,092 | 0 | 0 | 0 | 0 | | | | | |
| 45-AA-0022 | PACKWAY MATERIALS LANDFILL | SHASTA | 6,411 | 5,959 | 4,856 | 472 | 0 | | | | | |
| 45-AA-0043 | WEST CENTRAL LANDFILL | SHASTA | 88,207 | 102,054 | 105,827 | 104,792 | 106,218 | | | | | |
| 45-AA-0058 | TWIN BRIDGES LANDFILL | SHASTA | 2,900 | 3,512 | 12,285 | 13,507 | 10,165 | 239,155 | 197,000 | 204,824 | 252,679 | 220,501 |
| 46-AA-0001 | LOYALTON LANDFILL | SIERRA | 2,672 | 2,672 | 2,674 | 2,723 | 2,641 | 2,672 | 2,672 | 2,674 | 2,723 | 2,641 |
| 47-AA-0001 | MCCLOUD COMM SERVICES DIST LF | SISKIYOU | 210 | 0 | 0 | 1,694 | 2,150 | | | | | |
| 47-AA-0002 | YREKA SOLID WASTE LANDFILL | SISKIYOU | 12,341 | 11,849 | 12,381 | 11,288 | 11,041 | | | | | |
| 47-AA-0003 | BLACK BUTTE SOLID WASTE DIS SITE | SISKIYOU | 8,412 | 5,626 | 5,627 | 5,627 | 3,634 | | | | | |
| 47-AA-0019 | WEED SOLID WASTE DISPOSAL SITE | SISKIYOU | 3,114 | 3,240 | 3,112 | 3,710 | 3,003 | | | | | |
| 47-AA-0026 | HAPPY CAMP SOLID WASTE DIS SITE | SISKIYOU | 0 | 0 | 0 | 0 | 0 | | | | | |
| 47-AA-0027 | TULELAKE SOLID WASTE LANDFILL | SISKIYOU | 2,487 | 1,658 | 1,655 | 1,655 | 1,401 | | | | | |
| 47-AA-0029 | KELLY GULCH SOLID WASTE DIS SITE | SISKIYOU | 0 | 0 | 0 | 0 | 0 | | | | | |
| 47-AA-0030 | CECILVILLE DISPOSAL SITE | SISKIYOU | 0 | 0 | 0 | 0 | 0 | | | | | |
| 47-AA-0031 | LAVA BEDS DISPOSAL SITE | SISKIYOU | 0 | 0 | 0 | 0 | 0 | | | | | |
| 47-AA-0033 | NEW TENNANT SOLID WASTE DIS SITE | SISKIYOU | 0 | 0 | 0 | 0 | 0 | | | | | |
| 47-AA-0044 | ROGERS CREEK | SISKIYOU | 0 | 0 | 0 | 0 | 0 | | | | | |
| 47-AA-0045 | HOTELLING GULCH DISPOSAL SITE | SISKIYOU | 0 | 0 | 0 | 0 | 0 | 26,564 | 22,373 | 22,775 | 23,974 | 21,229 |
| 48-AA-0002 | B & J LANDFILL | SOLANO | 66,882 | 79,100 | 105,116 | 105,699 | 124,196 | | | | | |

| | | | Tons Disposed | | | | | Total Disposed (County Total) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SWIS ID | SITE NAME | COUNTY | 1990 | 1991 | 1992 | 1993 | 1994 | 1990 | 1991 | 1992 | 1993 | 1994 |
| 48-AA-0004 | RIO VISTA SANITARY LANDFILL | SOLANO | 4,102 | 2,972 | 3,111 | 0 | 0 | | | | | |
| 48-AA-0075 | POTRERO HILLS LANDFILL | SOLANO | 227,070 | 205,894 | 287,034 | 226,660 | 261,148 | 298,054 | 287,966 | 395,261 | 332,359 | 385,344 |
| 49-AA-0001 | CENTRAL LANDFILL | SONOMA | 521,778 | 509,904 | 496,994 | 457,670 | 435,960 | | | | | |
| 49-AA-0002 | ANNAPOLIS LANDFILL | SONOMA | 2,460 | 2,605 | 2,241 | 2,643 | 2,646 | | | | | |
| 49-AA-0008 | TUBBS ISLAND | SONOMA | 0 | 0 | 0 | 0 | 0 | | | | | |
| 49-AA-0009 | CASA GRANDE SITE | SONOMA | 0 | 0 | 0 | 0 | 0 | | | | | |
| 49-AA-0011 | CLOVERDALE LANDFILL | SONOMA | 14,831 | 8,715 | 0 | 4,000 | 0 | | | | | |
| 49-AA-0148 | FMRP SOLIDS DISPOSAL FACILITY | SONOMA | 469 | 5,702 | 0 | 0 | 0 | 539,538 | 526,926 | 499,235 | 464,313 | 438,606 |
| 50-AA-0001 | FINK ROAD LANDFILL | STANISLAUS | 61,863 | 91,878 | 76,606 | 47,735 | 54,915 | | | | | |
| 50-AA-0002 | GEER ROAD SANITARY LANDFILL | STANISLAUS | 60,227 | 0 | 0 | 0 | 0 | | | | | |
| 50-AA-0003 | BONZI SANITARY LANDFILL | STANISLAUS | 1,850 | 8,479 | 15,731 | 24,428 | 21,841 | 123,940 | 100,357 | 92,337 | 72,163 | 76,756 |
| 52-AA-0001 | RED BLUFF SANITARY LANDFILL | TEHAMA | 26,520 | 26,520 | 26,520 | 26,520 | 43,597 | | | | | |
| 52-AA-0002 | RED BLUFF LANDFILL | TEHAMA | 4,206 | 385 | 869 | 175 | 0 | | | | | |
| 52-AA-0009 | DIAMOND LANDFILL | TEHAMA | 0 | 0 | 792 | 0 | 0 | 30,726 | 26,905 | 28,181 | 26,695 | 43,597 |
| 53-AA-0013 | WEAVERVILLE LANDFILL DIS SITE | TRINITY | 8,372 | 11,523 | 10,900 | 9,101 | 9,368 | 8,372 | 11,523 | 10,900 | 9,101 | 9,368 |
| 54-AA-0001 | EARLIMART DISPOSAL SITE | TULARE | 8,450 | 1,512 | 8,305 | 7,591 | 6,367 | | | | | |
| 54-AA-0002 | EXETER DISPOSAL SITE | TULARE | 0 | 0 | 0 | 0 | 0 | | | | | |
| 54-AA-0004 | TEAPOT DOME DISPOSAL SITE | TULARE | 56,165 | 12,479 | 57,473 | 62,570 | 61,201 | | | | | |
| 54-AA-0008 | WOODVILLE DISPOSAL SITE | TULARE | 87,693 | 20,025 | 87,863 | 89,729 | 103,327 | | | | | |
| 54-AA-0009 | VISALIA DISPOSAL SITE | TULARE | 161,882 | 166,387 | 169,982 | 170,587 | 165,142 | | | | | |
| 54-AA-0010 | BALANCE ROCK DISPOSAL SITE | TULARE | 0 | 0 | 0 | 0 | 54 | | | | | |
| 54-AA-0011 | KENNEDY MEADOWS DISPOSAL SITE | TULARE | 0 | 0 | 0 | 0 | 7 | 314,190 | 200,403 | 323,623 | 330,477 | 336,098 |
| 55-AA-0001 | BIG OAK FLAT LANDFILL | TUOLUMNE | 2,597 | 1,771 | 1,408 | 1,615 | 2,277 | | | | | |
| 55-AA-0002 | TUOLUMNE CO CENTRAL SANITARY LF | TUOLUMNE | 29,711 | 5,023 | 17,959 | 24,755 | 25,673 | 32,308 | 6,794 | 19,367 | 26,370 | 27,950 |
| 56-AA-0005 | TOLAND ROAD SANITARY LANDFILL | VENTURA | 37,099 | 7,548 | 31,338 | 26,964 | 40,563 | | | | | |
| 56-AA-0007 | SIMI VALLEY LANDFILL | VENTURA | 238,711 | 252,848 | 242,709 | 276,024 | 305,224 | | | | | |
| 56-AA-0008 | PACIFIC MISSILE TEST CENTER LNDFL | VENTURA | 0 | 0 | 0 | 0 | 0 | | | | | |
| 56-AA-0009 | TEXACO OIL DISPOSAL SITE "C" | VENTURA | 0 | 0 | 0 | 0 | 0 | | | | | |
| 56-AA-0011 | BAILARD LANDFILL | VENTURA | 499,481 | 415,914 | 407,137 | 386,752 | 310,191 | 775,291 | 676,310 | 681,184 | 689,740 | 655,978 |
| 57-AA-0001 | YOLO COUNTY CENTRAL LANDFILL | YOLO | 249,204 | 236,974 | 173,052 | 160,368 | 148,751 | | | | | |
| 57-AA-0004 | UNIV OF CALIF DAVIS SANITARY LNDF | YOLO | 12,412 | 9,553 | 9,066 | 8,878 | 6,358 | 261,616 | 246,527 | 182,118 | 169,246 | 155,109 |
| 58-AA-0001 | BEALE AFB SANITARY LANDFILL | YUBA | 0 | 0 | 8,969 | 5,892 | 0 | | | | | |
| 58-AA-0002 | PONDEROSA SANITARY LANDFILL | YUBA | 3,492 | 1,666 | 265 | 0 | 0 | | | | | |
| 58-AA-0005 | YUBA-SUTTER DISPOSAL | YUBA | 111,068 | 114,215 | 115,850 | 117,350 | 117,928 | | | | | |
| 58-AA-0006 | YUBA-SUTTER DISPOSAL AREA | YUBA | 0 | 0 | 2,857 | 902 | 0 | | | | | |
| 58-AA-0007 | SPECKERTT DISPOSAL AREA | YUBA | 0 | 0 | 0 | 0 | 0 | 114,560 | 115,881 | 127,941 | 124,144 | 117,928 |
| | | | 39,387,465 | 36,517,206 | 35,864,574 | 33,980,273 | 33,954,007 | | | | | |

## APPENDIX B. LANDFILLS RECEIVING SOLID WASTE IN 1994, SORTED BY SIZE

| Landfill | County | 1994 Tons of Solid Waste Disposed |
|---|---|---|
| PUENTE HILLS LANDFILL #6 | LOS ANGELES | 3,414,940 |
| BKK WEST COVINA DISPOSAL SITE | LOS ANGELES | 2,770,006 |
| ALTAMONT SANITARY LANDFILL | ALAMEDA | 1,508,100 |
| BRADLEY AVENUE WEST SANITARY LNDF | LOS ANGELES | 1,387,754 |
| OLINDA ALPHA SANITARY LANDFILL | ORANGE | 1,363,627 |
| BEE CANYON SANITARY LANDFILL | ORANGE | 1,308,019 |
| MIRAMAR SANITARY LANDFILL | SAN DIEGO | 1,267,809 |
| CALABASAS LANDFILL #5 | LOS ANGELES | 928,081 |
| SACRAMENTO CO LANDFILL (KIEFER) | SACRAMENTO | 883,465 |
| NEWBY ISLAND SANITARY LANDFILL | SANTA CLARA | 849,436 |
| OX MOUNTAIN SANITARY LANDFILL | SAN MATEO | 790,981 |
| LOPEZ CANYON SANITARY LANDFILL | LOS ANGELES | 733,376 |
| SPADRA SANITARY LANDFILL #2 | LOS ANGELES | 672,663 |
| CHIQUITA CANYON SANITARY LANDFILL | LOS ANGELES | 528,101 |
| SAN MARCOS LANDFILL | SAN DIEGO | 500,128 |
| EL SOBRANTE SANITARY LANDFILL | RIVERSIDE | 499,868 |
| SCHOLL CANYON SANITARY LANDFILL | LOS ANGELES | 495,165 |
| BRADLEY EAST LANDFILL | LOS ANGELES | 490,556 |
| CENTRAL LANDFILL | SONOMA | 435,960 |
| MILLIKEN SANITARY LANDFILL | SAN BERNARDINO | 408,222 |
| VASCO ROAD SANITARY LANDFILL | ALAMEDA | 390,668 |
| OTAY ANNEX LANDFILL | SAN DIEGO | 334,641 |
| SYCAMORE SANITARY LANDFILL | SAN DIEGO | 333,191 |
| CHATEAU FRESNO LANDFILL | FRESNO | 318,731 |
| REDWOOD SANITARY LANDFILL | MARIN | 316,315 |
| BAILARD LANDFILL | VENTURA | 310,191 |
| SIMI VALLEY LANDFILL | VENTURA | 305,224 |
| KIRBY CANYON SANITARY LANDFILL | SANTA CLARA | 300,538 |
| PRIMA DESCHECHA SANITARY LANDFILL | ORANGE | 298,842 |
| DURHAM ROAD SANITARY LANDFILL | ALAMEDA | 283,547 |
| WEST COUNTY LANDFILL | CONTRA COSTA | 281,707 |
| COLTON REFUSE DISPOSAL SITE | SAN BERNARDINO | 265,393 |
| AMERICAN AVE DISPOSAL SITE | FRESNO | 262,268 |
| POTRERO HILLS LANDFILL | SOLANO | 261,148 |
| FONTANA REFUSE DISPOSAL SITE | SAN BERNARDINO | 251,469 |
| BAKERSFIELD S.L.F. (BENA) | KERN | 224,495 |
| MONTEREY PENINSULA SANITARY LNDFL | MONTEREY | 217,528 |
| AZUSA LAND RECLAMATION CO. INC. | LOS ANGELES | 216,805 |
| HIGHGROVE SANITARY LANDFILL | RIVERSIDE | 205,811 |
| ARVIN SANITARY LANDFILL | KERN | 182,408 |
| GUADALUPE DISPOSAL SITE | SANTA CLARA | 178,999 |
| MEAD VALLEY DISPOSAL SITE | RIVERSIDE | 175,119 |
| EDOM HILL DISPOSAL SITE | RIVERSIDE | 174,283 |
| PLACER CO-DEPT OF PUBLIC WORKS | PLACER | 174,178 |

| Landfill | County | 1994 Tons of Solid Waste Disposed |
|---|---|---|
| KELLER CANYON LANDFILL | CONTRA COSTA | 169,899 |
| NEAL ROAD LANDFILL | BUTTE | 168,832 |
| ANTELOPE VALLEY PUBLIC DUMP | LOS ANGELES | 168,285 |
| NORTH COUNTY LANDFILL | SAN JOAQUIN | 165,683 |
| VISALIA DISPOSAL SITE | TULARE | 165,142 |
| AMERICAN CANYON SANITARY LANDFILL | NAPA | 160,847 |
| HIGHWAY 59 DISPOSAL SITE | MERCED | 152,287 |
| CRAZY HORSE SANITARY LANDFILL | MONTEREY | 150,728 |
| COACHELLA VALLEY DISPOSAL SITE | RIVERSIDE | 149,637 |
| YOLO COUNTY CENTRAL LANDFILL | YOLO | 148,751 |
| FOOTHILL SANITARY LANDFILL | SAN JOAQUIN | 139,987 |
| WASTE MNGMNT OF LANCASTER S LF | LOS ANGELES | 135,826 |
| COLD CANYON LANDFILL SLD WASTE DS | SAN LUIS OBISPO | 134,682 |
| LAMB CANYON DISPOSAL SITE | RIVERSIDE | 133,086 |
| SAN TIMOTEO SOLID WASTE DIS SITE | SAN BERNARDINO | 130,151 |
| FORWARD INC | SAN JOAQUIN | 129,246 |
| B & J LANDFILL | SOLANO | 124,196 |
| AUSTIN ROAD LANDFILL | SAN JOAQUIN | 123,141 |
| YUBA-SUTTER DISPOSAL | YUBA | 117,928 |
| CITY OF SANTA MARIA REFUSE DIS ST | SANTA BARBARA | 115,013 |
| VICTORVILLE REFUSE DISPOSAL SITE | SAN BERNARDINO | 114,296 |
| WEST CENTRAL LANDFILL | SHASTA | 106,218 |
| TAJIGUAS SANITARY LANDFILL | SANTA BARBARA | 105,613 |
| ANDERSON SOLID WASTE, INC. | SHASTA | 104,118 |
| WOODVILLE DISPOSAL SITE | TULARE | 103,327 |
| L & D LANDFILL | SACRAMENTO | 99,011 |
| BADLANDS DISPOSAL SITE | RIVERSIDE | 94,656 |
| CITY GARBAGE COMPANY LANDFILL | HUMBOLDT | 94,572 |
| BUENA VISTA DISPOSAL SITE | SANTA CRUZ | 90,788 |
| CORRAL HOLLOW LANDFILL | SAN JOAQUIN | 90,398 |
| FAIRMEAD SOLID WASTE DISPOSAL STE | MADERA | 88,869 |
| HANFORD SANITARY LANDFILL | KINGS | 85,952 |
| SANTA CRUZ CITY SANITARY LANDFILL | SANTA CRUZ | 75,043 |
| SHAFTER-WASCO SANITARY LANDFILL | KERN | 71,273 |
| UNION MINE DISPOSAL SITE | EL DORADO | 68,448 |
| CITY OF WHITTIER-SAVAGE CANYON LF | LOS ANGELES | 67,637 |
| PACHECO PASS SANITARY LANDFILL | SANTA CLARA | 67,073 |
| SACRAMENTO CITY LANDFILL | SACRAMENTO | 66,859 |
| TEAPOT DOME DISPOSAL SITE | TULARE | 61,201 |
| CALIFORNIA STREET LANDFILL | SAN BERNARDINO | 58,134 |
| FINK ROAD LANDFILL | STANISLAUS | 54,915 |
| IMPERIAL COUNTY SANITATION | IMPERIAL | 52,818 |
| HILLSIDE SOLID WASTE DIS SITE | SAN MATEO | 52,030 |
| DESERT VALLEY COMPANY LANDFILL | IMPERIAL | 52,006 |
| BURBANK LANDFILL SITE NO. 3 | LOS ANGELES | 50,649 |
| HESPERIA REFUSE DISPOSAL SITE | SAN BERNARDINO | 45,903 |
| RED BLUFF SANITARY LANDFILL | TEHAMA | 43,597 |
| CITY OF LOMPOC SANITARY LANDFILL | SANTA BARBARA | 43,250 |

| Landfill | County | 1994 Tons of Solid Waste Disposed |
|---|---|---|
| RIDGECREST-INYOKERN SANITARY LF | KERN | 42,276 |
| DOUBLE BUTTE DISPOSAL SITE | RIVERSIDE | 42,245 |
| CITY OF PASO ROBLES LANDFILL | SAN LUIS OBISPO | 41,699 |
| TOLAND ROAD SANITARY LANDFILL | VENTURA | 40,563 |
| BARSTOW REFUSE DISPOSAL SITE | SAN BERNARDINO | 38,375 |
| CITY OF CLOVIS LANDFILL | FRESNO | 38,030 |
| EASTERN REGIONAL LANDFILL | PLACER | 35,910 |
| UPPER VALLEY DIS DERVICE LANDFILL | NAPA | 34,352 |
| BILLY WRIGHT DISPOSAL SITE | MERCED | 34,145 |
| CITY OF PALO ALTO REFUSE DIS SITE | SANTA CLARA | 32,845 |
| FRENCH CAMP LANDFILL SITE | SAN JOAQUIN | 32,482 |
| BEN LOMOND SOLID WASTE DIS SITE | SANTA CRUZ | 31,203 |
| JOHN SMITH RD SOLID WASTE DIS STE | SAN BENITO | 31,102 |
| EASTLAKE SANITARY LANDFILL | LAKE | 29,628 |
| RAMONA LANDFILL | SAN DIEGO | 29,621 |
| LANDERS DISPOSAL SITE | SAN BERNARDINO | 29,591 |
| APPLE VALLEY DISPOSAL SITE | SAN BERNARDINO | 29,136 |
| BIG BEAR REFUSE DISPOSAL SITE | SAN BERNARDINO | 28,254 |
| LAS PULGAS LANDFILL | SAN DIEGO | 28,177 |
| JOHNSON CANYON SANITARY LANDFILL | MONTEREY | 27,236 |
| TUOLUMNE CO CENTRAL SANITARY LF | TUOLUMNE | 25,673 |
| WATSONVILLE CITY SLD WSTE DIS STE | SANTA CRUZ | 25,558 |
| GLENN COUNTY LANDFILL SITE | GLENN | 25,060 |
| ROCK CREEK LANDFILL | CALAVERAS | 25,025 |
| ACME LANDFILL | CONTRA COSTA | 24,167 |
| TAFT SANITARY LANDFILL | KERN | 23,762 |
| TWENTYNINE PALMS DISPOSAL SITE | SAN BERNARDINO | 22,970 |
| CITY OF UKIAH SOLID WASTE DS | MENDOCINO | 22,255 |
| BONZI SANITARY LANDFILL | STANISLAUS | 21,841 |
| BLYTHE DISPOSAL SITE | RIVERSIDE | 21,751 |
| TEHACHAPI SANITARY LANDFILL | KERN | 21,113 |
| ORANGE AVENUE DISPOSAL INC | FRESNO | 20,226 |
| AMADOR CO SANITARY LANDFILL | AMADOR | 19,939 |
| PHELAN REFUSE DISPOSAL SITE | SAN BERNARDINO | 19,481 |
| CITY OF WILLITS DISPOSAL SITE | MENDOCINO | 19,462 |
| CALEXICO SOLID WASTE DSPSL SITE | IMPERIAL | 18,764 |
| WEST MARIN SANITARY LANDFILL | MARIN | 18,383 |
| JOLAN ROAD SANITARY LANDFILL | MONTEREY | 18,157 |
| KERN VALLEY LANDFILL | KERN | 17,870 |
| LEWIS ROAD SANITARY LANDFILL | MONTEREY | 17,753 |
| COALINGA DISPOSAL SITE | FRESNO | 17,484 |
| MOJAVE-ROSAMOND SANITARY LANDFILL | KERN | 16,029 |
| LASSEN COUNTY LANDFILL | LASSEN | 15,738 |
| BRAWLEY DISPOSAL SITE | IMPERIAL | 13,746 |
| EDWARDS AFB | KERN | 13,732 |
| OROVILLE LANDFILL | BUTTE | 13,665 |
| MARIPOSA COUNTY SANITARY LANDFILL | MARIPOSA | 12,740 |
| CRESCENT CITY LANDFILL | DEL NORTE | 12,257 |

| Landfill | County | 1994 Tons of Solid Waste Disposed |
|---|---|---|
| FOXEN CANYON SANITARY LANDFILL | SANTA BARBARA | 12,139 |
| MECCA LANDFILL II | RIVERSIDE | 11,704 |
| YREKA SOLID WASTE LANDFILL | SISKIYOU | 11,041 |
| ZANKER RD (NINE PAR) SANTRY LNDFL | SANTA CLARA | 10,192 |
| TWIN BRIDGES LANDFILL | SHASTA | 10,165 |
| C AND H SUGAR DISPOSAL SITE | CONTRA COSTA | 9,375 |
| WEAVERVILLE LANDFILL DIS SITE | TRINITY | 9,368 |
| CHESTER SANITARY LANDFILL | PLUMAS | 8,130 |
| BISHOP SUNLAND | INYO | 7,812 |
| AVENAL LANDFILL | KINGS | 7,703 |
| LENWOOD-HINKLEY REFUSE DIS SITE | SAN BERNARDINO | 7,673 |
| BORON SANITARY LANDFILL | KERN | 7,232 |
| ANZA DISPOSAL SITE | RIVERSIDE | 6,447 |
| EARLIMART DISPOSAL SITE | TULARE | 6,367 |
| UNIV OF CALIF DAVIS SANITARY LNDF | YOLO | 6,358 |
| DIXON PIT LANDFILL | SACRAMENTO | 5,865 |
| MORONGO DISPOSAL SITE | SAN BERNARDINO | 5,565 |
| BRAND PARK LANDFILL | LOS ANGELES | 5,451 |
| TRONA-ARGUS REFUSE DISPOSAL SITE | SAN BERNARDINO | 5,324 |
| CHICAGO GRADE LANDFILL | SAN LUIS OBISPO | 5,254 |
| HOLTVILLE DISPOSAL SITE | IMPERIAL | 5,228 |
| GOPHER HILL SANITARY LANDFILL | PLUMAS | 4,638 |
| PICACHO CUT AND FILL SITE | IMPERIAL | 4,017 |
| OASIS DISPOSAL SITE | RIVERSIDE | 4,004 |
| BLACK BUTTE SOLID WASTE DIS SITE | SISKIYOU | 3,634 |
| CITY OF RIALTO DISPOSAL SITE | SAN BERNARDINO | 3,449 |
| BUTTONWILLOW SANITARY LANDFILL | KERN | 3,397 |
| BENTON CROSSING SANITARY LANDFILL | MONO | 3,232 |
| WEED SOLID WASTE DISPOSAL SITE | SISKIYOU | 3,003 |
| ALTURAS SANITARY LANDFILL | MODOC | 2,984 |
| WORTHINGTON CUT AND FILL SITE | IMPERIAL | 2,948 |
| LOST HILLS SANITARY LANDFILL | KERN | 2,922 |
| CAMP ROBERTS SOLID WASTE DIS SITE | SAN LUIS OBISPO | 2,828 |
| ANNAPOLIS LANDFILL | SONOMA | 2,646 |
| LOYALTON LANDFILL | SIERRA | 2,641 |
| BORREGO SPRINGS LANDFILL | SAN DIEGO | 2,345 |
| BIG OAK FLAT LANDFILL | TUOLUMNE | 2,277 |
| EAGLE MOUNTAIN LANDFILL | RIVERSIDE | 2,190 |
| MCCLOUD COMM SERVICES DIST LF | SISKIYOU | 2,150 |
| HOLLIDAY SANITARY LANDFILL | SAN BERNARDINO | 2,037 |
| SANTIAGO CANYON SANITARY LANDFILL | ORANGE | 1,986 |
| SAN ONOFRE LANDFILL | SAN DIEGO | 1,758 |
| USMC 29 PALMS DISPOSAL SITE | SAN BERNARDINO | 1,631 |
| TULELAKE SOLID WASTE LANDFILL | SISKIYOU | 1,401 |
| PITCHESS HONOR RANCHO LANDFILL | LOS ANGELES | 1,380 |
| PEBBLY BEACH (AVALON) DIS SITE | LOS ANGELES | 1,217 |
| NEEDLES SOLID WASTE DISPOSAL SITE | SAN BERNARDINO | 1,139 |
| VALLEY TREE & CONST DISPOSAL SITE | KERN | 1,075 |

| Landfill | County | 1994 Tons of Solid Waste Disposed |
|---|---|---|
| YERMO DISPOSAL SITE | SAN BERNARDINO | 1,024 |
| AGUA MANSA LANDFILL | SAN BERNARDINO | 1,021 |
| WESTWOOD DISPOSAL FACILITY | LASSEN | 928 |
| PORTOLA LANDFILL | PLUMAS | 849 |
| US NAVY LANDFILL | LOS ANGELES | 820 |
| SOUTH COAST REFUSE DISPOSAL | MENDOCINO | 806 |
| FURNACE CREEK | INYO | 580 |
| HERLONG DISPOSAL FACILITY | LASSEN | 572 |
| SIERRA ARMY DEPOT | LASSEN | 388 |
| BAKER REFUSE DISPOSAL SITE | SAN BERNARDINO | 273 |
| SOMOA LANDFILL SITE | HUMBOLDT | 135 |
| BALANCE ROCK DISPOSAL SITE | TULARE | 54 |
| KENNEDY MEADOWS DISPOSAL SITE | TULARE | 7 |
| TOTAL | | 33,954,007 |

SOURCE: Board of Equalization, March 1995

## APPENDIX C. PRIOR STUDIES AND REPORTS

Starting in 1983, a number of efforts were made to examine the issues, problems and barriers to landfill siting and permitting. Over the years, the resulting studies, reports, and testimony have each identified similar problems and have proposed various corrective strategies. Many of the recommendations continue to be voiced as potential solutions to unresolved problems. The following sections summarize the most important findings of several key studies.

### REPORTS AND PLANS TO THE CALIFORNIA WASTE MANAGEMENT BOARD

The California Waste Management Board's 1985 *Comprehensive Plan for Management of Non-Hazardous Waste in California* was prepared in response to the direction of the legislature in the 1983 Budget Act. While the data contained within the plan is obsolete and out of date, it did suggest some relevant means of streamlining the permit process, including:

- establishment of a state siting assistance program, to include technical assistance and mediation services, and
- providing a siting manual to assist local government officials and private facility proponents in dealing with the siting process.

*Siting and Sustaining Waste Management Facilities in California, A Study for the Comprehensive Plan* centered on the issue of siting waste management facilities and concluded that it took seven or more years to site a landfill, even though the "time frames" on paper suggested that the process can be completed within a year to 18 months. Two major obstacles in the siting process were noted in this report:

- *institutional problems* caused by inefficiencies in those processes required by governmental bodies to permit waste management facilities; and
- *socio-political problems*, referring to public resistance to waste management projects and the inter-relationship between that resistance and the elective political process. The report contended that these problems are further aggravated by the lack of an adequate vehicle for addressing socioeconomic concerns through the institutional process.

Recommendations presented in the report for overcoming these obstacles included the following:

- using public information programs to raise awareness of recycling, resource recovery, and state-of-the-art disposal technologies such as composite liners, leachate recovery systems and landfill gas collection systems;
- preparation and distribution of a siting manual to assist local agencies in siting disposal facilities;
- providing siting consultants or specialists to facilitate the siting process, and mediation services for resolving impasses;
- promoting early citizen involvement in the siting process; and
- consolidating state-level permits into one solid waste facilities permit.

## RECENT REPORTS

### DRAFT RECOMMENDATIONS FOR CONSOLIDATING AND STREAMLINING THE CAL/EPA PERMIT PROCESSES (MARCH 1992)

*Draft Recommendations for Consolidating and Streamlining the Cal/EPA Permit Processes* studied regulatory overlap, duplication in processing, and conflicts in responsibility between the CIWMB and the State Water Resources Control Board (SWRCB). The report recognizes the need to consolidate and streamline the permitting process, but concludes that many permitting problems stem from statutory and regulatory requirements, rather than anything specific to the process of issuing a permit.

The report finds that both public and private applicants want greater clarity and certainty in the permit processes. Specific issues include:

- uncertain application requirements;
- frequently changing regulations;
- inconsistent interpretations of regulations; and
- interactions between agencies when multiple permits are required.

The relationship between permitting processes of the CIWMB and those of SWRCB represent a major area for reform. Provisions governing solid waste facilities are contained in two sets of regulations: the CIWMB's CCR Title 14, Division 7, and the RWQCB's CCR Title 23, Division 3, Chapter 1, which to some extent overlap.

According to this study, LEAs also play a significant role in the difficulties inherent in the landfill siting and permitting process.

- The LEAs and CIWMB both review permit applications; this is a duplication of effort.
- Some LEAs do not thoroughly review a permit, but rely on the CIWMB for a more thorough review.
- Some LEAs do not thoroughly review a permit because of a lack of staff or a lack of staff expertise.
- LEAs, operators, and the CIWMB have different definitions of "complete," with CIWMB estimating that 50 to 75 percent of the permit packages submitted have parts of the package missing, and/or contain inadequate support documentation.
- There are no sanctions against LEA's for submitting an incomplete application, thus there is every incentive to do as little as possible to minimize costs.

## CALIFORNIA'S JOBS AND FUTURE

The Council on California Competitiveness was formed to address the barriers to creating jobs and increasing state revenues. In the Council's April 1992 report, *California's Jobs and Future*, a chapter on regulatory streamlining addressed California's regulatory system and permit processes, which the Council concludes "have gotten out of control."

The council received testimony from over a dozen counties and more than 30 cities on their difficulties navigating the regulatory maze. Their view was that too many agencies are involved, that the statutes and regulations are ambiguous, and that the results being achieved do not justify the high costs of regulatory processing.

## A PROGRAM REVIEW, STREAMLINING THE CALIFORNIA SOLID WASTE DISPOSAL REGULATORY PROCESS (FEBRUARY 1993)

*A Program Review, Streamlining the California Solid Waste Disposal Regulatory Process* pointed out that California currently has over 400 operating solid waste disposal facilities and more than 2,000 closed or abandoned sites that are affected by a multiplicity of regulations and requirements. Recent legislative and regulatory changes at the state, federal, and local levels have significantly changed the solid waste permitting process. Implementation of these requirements has resulted in a long, fragmented process with many redundancies and multiple levels of regulatory oversight. The report indicates that because of the permitting process,

moving from the concept of a landfill to its actual operation is a major undertaking in the state of California and can take more than 10 years to accomplish. It also adds substantially to the costs incurred by the applicant, as well as state and local governments. The process involves securing approvals from every level of government.

Of the 10-15 years currently involved in landfill permitting, state level reviews often require two years or less, with the major delays at the local level in the siting process and in carrying out the environmental review. An example was provided for a landfill in Kern County which provided the following time frames for the major requisite activities:

| Activity | No. Months Elapsed |
|---|---|
| Site Selection | 41 |
| CEQA | 16 |
| Site approval | 2 |
| Site acquisition | 36 |
| Conditional use permit | 3 |
| Construction | 11 |
| RDSI and WDR approval | 3 |
| SWF permit approval | 7 |
| Total Months Elapsed | 119 |

JOINT REPORT: REFORMING THE CALIFORNIA SOLID WASTE DISPOSAL REGULATORY PROCESS (APRIL, 1993)

*Joint Report: Reforming the California Solid Waste Disposal Regulatory Process,* was produced jointly by the CIWMB and the State Water Resources Control Board (SWRCB) in response to AB 3348 (Eastin, Statutes of 1992), which required the two agencies to prepare and submit a report describing the regulatory programs and activities of both Boards, as well as those of the Regional Water Quality Control Boards and the Local Enforcement Agencies, relating to solid waste disposal sites. The report identified areas of regulatory overlap and duplication and make recommendations to the Governor and the Legislature for change. The Joint Report was based on the findings of the Department of Finance report described in the previous section, and on testimony and comments on those findings received from disposal site operators, local governments, environmental and public interest groups, and state and local agencies with regulatory responsibilities relating to solid waste disposal sites. The Joint Report made several

recommendations for delineating the responsibility between the CIWMB and the SWRCB for permitting and oversight of solid waste disposal sites:

- There should be a clear and concise division of authority between the CIWMB and the SWRCB to remove all areas of overlap, duplication, and conflict: the SWRCB should be the sole State agency concerned with any and all water issues surrounding solid waste disposal facilities, and the CIWMB should be responsible for all other regulatory issues within its statutory authority.

- The two Boards' regulations for solid waste disposal facilities should be combined into one title with distinct chapters to be implemented by the SWRCB and the RWQCBs, and by the CIWMB and the LEAs. Furthermore, there should be one unified permit with one consolidated permit application and one required technical reporting document.

- There should be a concurrent timeline for development and review of Waste Discharge Requirements (WDR's) and the Solid Waste Facilities Permit.

- Annual inspections of solid waste disposal facilities should, to the greatest extent possible, be conducted as multi-media inspections, with representatives of the CIWMB, RWQCB, LEA, and any other interested agency, such as the Air Quality Management District, State Fish and Game, Army Corps of Engineers, USEPA, etc.

- Closure/post closure regulations and plans should be consolidated.

- There should be a clear and concise division of authority between the CIWMB and the LEAs, with the CIWMB providing technical assistance and support to the LEAs, as well as training, certifying, and decertifying LEAs. The CIWMB should continue to review and concur in issuance of SWFPs. The LEAs should be responsible for inspection of facilities, and for preparation and submission for concurrence of SWFPs.

The Joint Report identified several issues outside the scope of the report for future consideration. Two issues identified relate to the permitting process:

- There is a need for a study of the roles and responsibilities of other State agencies to identify areas of overlap and duplication and make further recommendations for consolidation.

- There is a need for a study on development of a conflict resolution process to resolve disputes between the SWRCB and CIWMB on issues of overlap, duplication, and conflict between the two agencies.

## SIGNIFICANT RELATED LEGISLATION

AB 1200, SOLID WASTE DISPOSAL REGULATORY REFORM ACT OF 1993 (EASTIN, October 1993)

AB 1220 was passed as an urgency statute by the legislature in the fall of 1993. The main objectives of AB 1220 are to:

1) remove overlap duplication and conflict between the CIWMB and SWRCB in the regulation of non-hazardous solid waste disposal facilities without reducing current environmental standards;

2) consolidate regulations for these facilities;

3) streamline the process for obtaining a full solid waste facilities permit;

4) clarify and remove overlap in the roles of the LEA and CIWMB; and

5) study the feasibility of combining financial assurance mechanisms for operating liability and corrective action.

CIWMB and SWRCB staff are currently involved in drafting regulations to address the above requirements as well as clean up and streamline CIWMB's existing regulations. Proposed modifications to CIWMB's regulations cover the following subjects: consolidate definitions, state minimum standards, closure/postclosure standards, permitting, closure/postclosure plans, and financial assurances. At the time of this printing, many issues still remain unresolved, yet CIWMB staff are confident these issues will be resolved and draft regulations will be noticed for review by year's end.

# APPENDIX D. LANDFILL INITIAL STUDY REPORT

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Alameda County** | | | | |
| Altamont Sanitary Landfill [1,2] | 1989 | 11150 | 32,100,000 | 2019 |
| Tri-Cities Recycling & Disp. [2] | 1992 | 2134 | 9,930,800 | 2013 |
| Vasco Road Sanitary Landfill [1,2] | 1989 | 2329 | 21,000,000 | 2008 |
| COUNTY TOTAL | | | 63,030,800 | |
| **Amador County** | | | | |
| Amador County Sanitary Landfil [1,2] | 1993 | 810 | 1,511,000 | 2006 |
| COUNTY TOTAL | | | 1,511,000 | |
| **Butte County** | | | | |
| Louisiana Pacific Landfill [2] | 1978 | 80 | 236,000 | 2034 |
| Neal Road Landfill [1,2] | 1979 | 750 | 9,000,000 | 2017 |
| COUNTY TOTAL | | | 9,236,000 | |
| **Calaveras County** | | | | |
| Rock Creek Landfill [1] | 1989 | 500 | 7,400,000 | 2030 |
| COUNTY TOTAL | | | 7,400,000 | |
| **Colusa County** | | | | |
| Evans Road Landfill [3] | 1978 | 415 | 3,490,010 | 1998 |
| COUNTY TOTAL | | | 3,490,010 | |
| **Contra Costa County** | | | | |
| Acme Landfill [2,3] | 1984 | 1300 | 147,096 | 1991 |
| C and H Sugar Disposal Site [1,2,5,6] | 0 | 0 | 60,000 | 2000 |
| Keller Canyon Landfill [1,2] | 1992 | 2750 | 76,538,160 | 2037 |
| West Contra Costa Landfill [2] | 1978 | 2500 | 1,530,000 | 1997 |
| COUNTY TOTAL | | | 78,275,256 | |
| **Del Norte County** | | | | |
| Del Norte County Sanitary Landfill [1] | 1978 | 43 | 198,000 | 1998 |
| COUNTY TOTAL | | | 198,000 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes 6. Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **El Dorado County** | | | | |
| Union Mine Disposal Site [1] | 1978 | 400 | 1,442,612 | 2012 |
| COUNTY TOTAL | | | 1,442,612 | |
| **Fresno County** | | | | |
| American Avenue Disposal Site [1,2] | 1987 | 1200 | 31,466,487 | 2028 |
| Chateau Fresno Landfill [1,2] | 1978 | 1800 | 800,000 | 1994 |
| City of Clovis Landfill [1,2] | 1978 | 51 | 2,300,000 | 2038 |
| Coalinga Disposal Site [1,2] | 1978 | 30 | 2,459,743 | 2034 |
| Orange Avenue Disposal, Inc. [2] | 1978 | 400 | 287,500 | 2008 |
| COUNTY TOTAL | | | 37,313,730 | |
| **Glenn County** | | | | |
| Glenn County Landfill Site [2] | 1978 | 63 | 1,328,000 | 2021 |
| COUNTY TOTAL | | | 1,328,000 | |
| **Humboldt County** | | | | |
| City Garbage Company Landfill [2] | 1978 | 300 | 1,444,000 | 2002 |
| Hely Creek Wood Waste Disposal [1,2] | 1980 | 15 | 483,750 | 2022 |
| Mozzetti II Woodwaste Disposal [5] | 1986 | 40 | 78,400 | 2002 |
| Samoa Landfill Site [2,3,7] | 1978 | 50 | 385,968 | 2005 |
| Simpson Fairhaven Disposal Site [1,2] | 1993 | 155 | 147,490 | 2015 |
| Simpson Wood Waste Disposal Site [2,5] | 1978 | 400 | 120,000 | 1997 |
| Tank Gulch [5] | 1992 | 111 | 584,000 | 2010 |
| COUNTY TOTAL | | | 3,243,608 | |
| **Imperial County** | | | | |
| Brawley Disposal Site [1] | 1979 | 68 | 1,379,000 | 2006 |
| Calexico Solid Waste Disposal [1] | 1979 | 70 | 2,846,000 | 2006 |
| Desert Valley Company [1] | 1992 | 150 | 463,111 | 2001 |
| Gold Fields Operating Company [3,6,8] | 0 | 1 | 0 | 2005 |
| Holtville Disposal Site [1] | 1979 | 19 | 415,000 | 2004 |
| Hot Spa Cut and Fill Site [1] | 1958 | 4 | 470,000 | 2086 |
| Mals Properties, dba: Imperial [1] | 1978 | 250 | 5,100,000 | 2030 |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Imperial County (cont.)** | | | | |
| Niland Cut and Fill Site [1] | 1985 | 5 | 1,208,000 | 2037 |
| Ocotillo Cut and Fill [1] | 1980 | 1 | 492,000 | 2053 |
| Palo Verde Cut and Fill Site [1] | 1980 | 1 | 469,000 | 2044 |
| Picacho Cut and Fill Site [1] | 1980 | 20 | 1,136,000 | 2025 |
| Salton City Cut and Fill Site [1] | 1980 | 5 | 2,545,000 | 2087 |
| Worthington Cut and Fill Site [1] | 1979 | 28 | 1,672,000 | 2025 |
| COUNTY TOTAL | | | 18,195,111 | |
| **Inyo County** | | | | |
| Bishop Sunland [1,2] | 1978 | 30 | 1,310,894 | 2015 |
| Furnace Creek [2] | 1978 | 8 | 13,200 | 1998 |
| Independence Disposal Site [1,2] | 1979 | 7 | 297,833 | 2012 |
| Lone Pine Disposal Site [1,2] | 1979 | 9 | 244,000 | 2022 |
| Shoshone Disposal Site [1,2] | 1978 | 1 | 290,170 | 2093 |
| Tecopa Disposal Site [1,2] | 1978 | 1 | 391,521 | 2289 |
| COUNTY TOTAL | | | 2,547,618 | |
| **Kern County** | | | | |
| Arvin Sanitary Landfill [3,4] | 1985 | 1032 | 2,060,579 | 1999 |
| Bakersfield Metropolitan SLF - [1,2] | 1991 | 1764 | 5,210,913 | 2057 |
| Boron Sanitary Landfill [1,2] | 1979 | 20 | 148,623 | 1998 |
| Buttonwillow Sanitary Landfill [1,2] | 1979 | 20 | 11,450 | 1996 |
| Edwards AFB - Main Base Landfill [2] | 1979 | 147 | 1,390,000 | 1995 |
| Kern Valley Landfill [2] | 1979 | 23 | 212,658 | 1996 |
| Lost Hills Sanitary Landfill [1,2] | 1979 | 10 | 87,594 | 2020 |
| Mojave-Rosamond Sanitary Landfill [1,2] | 1986 | 42 | 350,624 | 2002 |
| Ridgecrest-Inyokern Sanitary Landfill [1,2] | 1986 | 110 | 1,198,825 | 2010 |
| Shafter-Wasco Sanitary Landfill [1,2] | 1986 | 714 | 7,840,311 | 2017 |
| Taft Sanitary Landfill [1,2] | 1978 | 53 | 4,793,329 | 2034 |
| Tehachapi Sanitary Landfill [1,2] | 1978 | 32 | 652,878 | 1998 |
| Valley Tree & Construction Dis [2,3] | 1979 | 750 | 186,966 | 2002 |
| COUNTY TOTAL | | | 24,144,750 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Kings County** | | | | |
| Avenal Landfill [1] | 1986 | 30 | 44,000 | 1996 |
| Hanford Landfill [1] | 1978 | 500 | 1,000,000 | 1997 |
| COUNTY TOTAL | | | 1,044,000 | |
| **Lake County** | | | | |
| Eastlake Sanitary Landfill [1] | 1978 | 150 | 566,379 | 2020 |
| COUNTY TOTAL | | | 566,379 | |
| **Lassen County** | | | | |
| Bass Hill Landfill [2] | 1989 | 30 | 377,675 | 1998 |
| Herlong Disposal Facility [2] | 1979 | 3 | 413,902 | 2009 |
| Madeline Disposal Facility [2] | 1978 | 1 | 61,333 | 1995 |
| Ravendale Disposal [2] | 1979 | 1 | 16,054 | 1995 |
| Sierra Army Depot [2] | 1978 | 3 | 738,033 | 2062 |
| Westwood Disposal Facility [2] | 1979 | 6 | 680,377 | 2006 |
| COUNTY TOTAL | | | 2,287,374 | |
| **Los Angeles County** [8] | | | | |
| Antelope Valley Public Landfill [1,8] | 1979 | 750 | 3,830,000 | 1998 |
| Azusa Land Reclamation Co., In [1,8] | 1989 | 6500 | 22,700,000 | 2010 |
| BKK Sanitary Landfill [1,8] | 1978 | 12000 | 5,670,000 | 2006 |
| Bradley Landfill and Recycling [1,8] | 1987 | 7000 | 12,720,000 | 1999 |
| Brand Park Landfill [1,8] | 1987 | 102 | 1,000,000 | 2020 |
| Burbank Landfill Site #3 [1,8] | 1988 | 240 | 10,700,000 | 2077 |
| Calabasas Landfill #5 [1,8] | 1990 | 3500 | 25,200,000 | 2018 |
| Chandler's Palos Verdes Sand & [1] | 1968 | 0 | 7,867,000 | 2005 |
| Chiqiuta Canyon Sanitary Landfill [3,8] | 1987 | 5000 | 3,430,000 | 1998 |
| City of Whittier-Savage CNY LF [3,8] | 1979 | 350 | 4,580,000 | 2040 |
| Lopez Canyon Sanitary Landfill [1,8] | 1993 | 4000 | 1,820,000 | 1996 |
| Nu-Way Industries, Inc. [1] | 1990 | 4000 | 600,000 | 1993 |
| Pebbly Beach (Avalon) Disposal [3,8] | 1985 | 33 | 71,000 | 2009 |
| Peck Road Gravel Pit [8,5] | 1988 | 1210 | 6,790,000 | 2014 |
| Puente Hills Landfill #6 [1,8] | 1991 | 13200 | 70,200,000 | 1995 |
| Reliance Pit #2 [8,5] | 0 | 6000 | 11,330,000 | 0 |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Los Angeles County [8] (cont.)** | | | | |
| Scholl Canyon Sanitary Landfil [1,8] | 1989 | 3400 | 23,900,000 | 2014 |
| Spadra Sanitary Landfill #2 [1,8] | 1991 | 3700 | 6,640,000 | 1999 |
| Sunshine Canyon [8] | 1979 | 6600 | 23,720,000 | 1991 |
| Two Harbors Landfill Site [1,8] | 1987 | 3 | 800 | 2008 |
| US Navy Landfill [3,8] | 1992 | 1 | 390,000 | 2017 |
| Waste Management of Lancaster [3,8] | 1992 | 1000 | 970,000 | 1999 |
| COUNTY TOTAL | | | 244,128,800 | |
| **Madera County** | | | | |
| Fairmead Solid Waste Disposal [3] | 1986 | 395 | 570,063 | 1998 |
| COUNTY TOTAL | | | 570,063 | |
| **Marin County** | | | | |
| Redwood Landfill Inc. [1] | 1978 | 800 | 2,000,000 | 2039 |
| West Marin Sanitary Landfill [1] | 1978 | 54 | 1,598,047 | 2038 |
| COUNTY TOTAL | | | 3,598,047 | |
| **Mariposa County** | | | | |
| Mariposa County Sanitary Landfill [1] | 1991 | 50 | 2,310,000 | 2029 |
| COUNTY TOTAL | | | 2,310,000 | |
| **Mendocino County** | | | | |
| City of Ukiah Solid Waste Disposal [1] | 1979 | 50 | 600,000 | 2004 |
| City of Willits Disposal Site [1] | 1992 | 200 | 132,000 | 1998 |
| COUNTY TOTAL | | | 732,000 | |
| **Merced County** | | | | |
| Billy Wright Landfill [1] | 1978 | 125 | 400,000 | 1997 |
| City of Los Banos Class Three [1] | 1990 | 2 | 12,480 | 2039 |
| Highway 59 Landfill [1] | 1985 | 600 | 2,711,440 | 2000 |
| COUNTY TOTAL | | | 3,123,920 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Modoc County** | | | | |
| Alturas Sanitary Landfill [2] | 1978 | 10 | 132,678 | 1994 |
| COUNTY TOTAL | | | 132,678 | |
| **Mono County** | | | | |
| Benton Crossing Sanitary Landfill [3] | 1978 | 18 | 832,197 | 2009 |
| Bridgeport Sanitary Landfill [3] | 1978 | 5 | 397,096 | 2049 |
| Pumice Valley Landfill [3] | 1978 | 4 | 365,160 | 2033 |
| COUNTY TOTAL | | | 1,594,453 | |
| **Monterey County** | | | | |
| Crazy Horse Sanitary Landfill [2] | 1987 | 375 | 760,000 | 2001 |
| Johnson Canyon Sanitary Landfill [1,2] | 1978 | 97 | 1,620,889 | 2018 |
| Jolon Road Sanitary Landfill [2] | 1983 | 35 | 385,753 | 2002 |
| Lewis Road Sanitary Landfill [1,2] | 1978 | 60 | 258,423 | 2018 |
| Marina/Monterey Peninsula Sanitary [1,2] | 1992 | 1200 | 39,310,000 | 2092 |
| COUNTY TOTAL | | | 42,335,065 | |
| **Napa County** | | | | |
| American Canyon Sanitary Landfill [2] | 1993 | 1350 | 545,900 | 1995 |
| Clover Flat Landfill [2] | 1992 | 126 | 3,800,000 | 2026 |
| COUNTY TOTAL | | | 4,345,900 | |
| **Orange County** | | | | |
| Frank R. Bowerman Sanitary Landfill [1,2] | 1989 | 6432 | 130,000,000 | 2025 |
| Olinda Alpha Sanitary Landfill [1,2] | 1993 | 8000 | 13,600,000 | 2013 |
| Olinda Sanitary Landfill [1,2] | 1989 | 2400 | 3,500,000 | 2013 |
| Prima Desheca Sanitary Landfill [1,2] | 1979 | 753 | 89,800,000 | 2038 |
| Santiago Canyon Sanitary Landfill [1,2] | 1992 | 4900 | 2,800,000 | 1998 |
| COUNTY TOTAL | | | 239,700,000 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Placer County** | | | | |
| Eastern Regional Landfill [3,4] | 1988 | 250 | 1,525,000 | 2008 |
| Western Regional Sanitary Landfill [1] | 1983 | 900 | 9,780,000 | 2012 |
| COUNTY TOTAL | | | 11,305,000 | |
| **Plumas County** | | | | |
| Chester Sanitary Landfill [2,5] | 1978 | 20 | 132,000 | 2003 |
| Gopher Hill Sanitary Landfill [2,5] | 1987 | 26 | 45,000 | 1994 |
| Portola Landfill [2] | 1987 | 5 | 40,000 | 1998 |
| COUNTY TOTAL | | | 217,000 | |
| **Riverside County** | | | | |
| Anza Sanitary Landfill [1,2] | 1993 | 40 | 68,916 | 2000 |
| Badlands Disposal Site [1,2] | 1992 | 1400 | 12,523,791 | 2006 |
| Blythe Sanitary Landfill [1,2] | 1977 | 62 | 2,963,984 | 2031 |
| Coachella Valley Disposal Site [1,2] | 1992 | 2000 | 654,962 | 1995 |
| Desert Center SLF - Eagle Mt. [1,2] | 1991 | 9 | 42,932 | 2000 |
| Double Butte Disposal Site [1,2] | 1992 | 600 | 85,992 | 1994 |
| Edom Hill Disposal Site [1,2] | 1989 | 1200 | 14,134,660 | 2020 |
| El Sobrante Sanitary Landfill [2] | 1990 | 1152 | 7,200,000 | 2002 |
| Highgrove Sanitary Landfill [1,2] | 1992 | 2700 | 1,840,730 | 1997 |
| Lamb Canyon Disposal Site [1,2] | 1992 | 1900 | 15,006,032 | 2005 |
| Mead Valley Disposal Site [1,2] | 1977 | 1100 | 1,100,840 | 1998 |
| Mecca Landfill II [1,2] | 1992 | 50 | 98,054 | 1996 |
| Oasis Disposal Site [1,2] | 1993 | 41 | 342,486 | 2012 |
| COUNTY TOTAL | | | 56,063,379 | |
| **Sacramento County** | | | | |
| Dixon Pit Landfill [3] | 1978 | 51 | 199,026 | 2000 |
| L & D Landfill Co. [3] | 1982 | 822 | 4,302,826 | 2010 |
| Sacramento City Landfill [3] | 1984 | 945 | 375,160 | 1991 |
| Keifer Road Landfill [1] | 1978 | 0 | 125,372,400 | 2046 |
| Sacramento Wastewater Plant [1] | 1990 | 4 | 750,000 | 2040 |
| COUNTY TOTAL | | | 130,999,412 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **San Benito County** | | | | |
| John Smith Road Class III Land [1] | 1993 | 250 | 3,028,695 | 2013 |
| COUNTY TOTAL | | | 3,028,695 | |
| **San Bernardino County** | | | | |
| Agua Mansa Landfill [2] | 1978 | 400 | 5,200,000 | 2040 |
| Apple Valley Disposal Site [1,2] | 1979 | 40 | 1,403,213 | 2004 |
| Argus Ash Disposal Site [2] | | 1 | 210,000 | 0 |
| Baker Refuse Disposal Site [1,2] | 1979 | 1 | 259,000 | 2086 |
| Barstow Refuse Disposal Site [1,2] | 1979 | 32 | 1,062,450 | 2011 |
| Big Bear Refuse Disposal Site [1,2] | 1979 | 28 | 220,000 | 2003 |
| California Street Landfill [1,2] | 1978 | 90 | 912,000 | 1998 |
| City of Rialto Disposal Site [1,2] | 1993 | 17 | 111,000 | 2090 |
| Colton Refuse Disposal Site [1,2] | 1979 | 180 | 3,607,000 | 1998 |
| Hesperia Refuse Disposal Site [1,2] | 1979 | 17 | 1,085,900 | 2001 |
| Holliday Sanitary Landfill [1,2,7] | 1978 | 0 | 2,000,000 | 0 |
| Landers Disposal Site [1,2] | 1990 | 14 | 1,120,125 | 2008 |
| Lenwood-Hinkley Refuse Disposal [1,2] | 1979 | 12 | 2,795,200 | 2235 |
| Metro Water District - Iron Mt [1,2] | 1978 | 2 | 8,400 | 2020 |
| Mid-Valley Refuse Disposal Site [1,2] | 1978 | 280 | 4,560,600 | 1997 |
| Milliken Sanitary Landfill [1,2] | 1979 | 1200 | 1,245,200 | 1995 |
| Mitsubishi Cement Corporation [2] | 1979 | 2 | 230,000 | 2029 |
| Morongo Valley Disposal Site [1,2] | 1979 | 11 | 67,725 | 1998 |
| Needles Solid Waste Disposal Site [1,2,3] | 1979 | 0 | 665,929 | 2000 |
| Oro Grande Kiln Waste Dust Dum [2,5] | 1979 | 287 | 44,000,000 | 2125 |
| Phelan Refuse Disposal Site [1,2] | 1979 | 12 | 1,139,400 | 2017 |
| San Timoteo Solid Waste Disposal [1,2] | 1980 | 1000 | 6,600,000 | 2012 |
| Trona-Argus Refuse Disposal Site [1,2] | 1979 | 19 | 402,200 | 2003 |
| Twentynine Palms Disposal Site [1,2] | 1979 | 18 | 2,700,000 | 2012 |
| USMC - 29 Palms Disposal Site [2] | 1979 | 30 | 480,000 | 2004 |
| Victorville Refuse Disposal Site [1,2] | 1979 | 22 | 1,375,100 | 1998 |
| Yermo Disposal Site [1] | 1979 | 7 | 21,900 | 1995 |
| COUNTY TOTAL | | | 83,482,342 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **San Diego County** | | | | |
| Borrego Springs Landfill [1] | 1992 | 30 | 465,500 | 2014 |
| Las Pulgas Landfill [1] | 1981 | 162 | 2,040,000 | 2010 |
| Miramar Sanitary Landfill [1] | 1987 | 4200 | 55,500,000 | 2003 |
| Otay Annex Landfill [1] | 1987 | 2400 | 17,513,143 | 2007 |
| Ramona Landfill [1] | 1978 | 35 | 266,000 | 1996 |
| San Marcos Landfill [1] | 1993 | 6200 | 7,600,000 | 2001 |
| San Onofre [3] | 1981 | 10 | 355,218 | 2010 |
| Sycamore Sanitary Landfill [1] | 1993 | 2500 | 30,300,000 | 2015 |
| COUNTY TOTAL | | | 114,039,861 | |
| **San Joaquin County** | | | | |
| Austin Road Landfill [2] | 1993 | 1200 | 954,846 | 1997 |
| Corral Hollow Landfill [1,2] | 1983 | 331 | 303,000 | 1995 |
| Foothill Sanitary Landfill [1,2] | 1992 | 720 | 65,000,000 | 2060 |
| Forward, Inc. [2] | 1990 | 4180 | 11,909,000 | 2006 |
| French Camp Landfill Site [2] | 1983 | 330 | 1,120,000 | 2011 |
| North County Landfill [1,2] | 1991 | 825 | 15,600,000 | 2035 |
| COUNTY TOTAL | | | 94,886,846 | |
| **San Luis Obispo County** | | | | |
| California Valley Landfill [3] | 1988 | 2 | 10,000 | 2031 |
| Chicago Grade Landfill [3] | 1986 | 81 | 607,769 | 2017 |
| City of Paso Robles Landfill [3] | 1986 | 200 | 1,544,661 | 2034 |
| Cold Canyon Landfill [1] | 1979 | 461 | 5,250,000 | 2017 |
| Sante Fe Energy Resources, Inc. [1] | 1988 | 3 | 46,918 | 2151 |
| COUNTY TOTAL | | | 7,459,348 | |
| **San Mateo County** | | | | |
| Hillside Solid Waste Disposal [1] | 1988 | 400 | 1,225,000 | 2006 |
| Ox Mountain Sanitary Landfill [1] | 1987 | 3598 | 28,455,500 | 2018 |
| COUNTY TOTAL | | | 29,680,500 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Santa Barbara County** | | | | |
| City of Lompoc Sanitary Landfill [1,2] | 1987 | 500 | 3,333,000 | 2047 |
| City of Santa Maria Refuse Disposal [1,2] | 1978 | 200 | 10,000,000 | 2002 |
| Foxen Canyon Sanitary Landfill [1,2] | 1978 | 80 | 42,900 | 1997 |
| New Cuyama Sanitary Landfill [2] | 1978 | 3 | 32,000 | 1995 |
| Tajiguas Sanitary Landfill [1,2] | 1978 | 1200 | 8,300,000 | 2005 |
| Vandenberg AFB Landfill [1,2] | 1978 | 75 | 2,280,176 | 2041 |
| Ventucopa Sanitary Landfill [2] | 1978 | 1 | 19,000 | 1995 |
| COUNTY TOTAL | | | 24,007,076 | |
| **Santa Clara County** | | | | |
| All Purpose Landfill [3] | 1986 | 497 | 1,417,408 | 1993 |
| City of Palo Alto Refuse Disposal [1] | 1977 | 250 | 1,976,225 | 2002 |
| City of Sunnyvale Landfill [1] | 1988 | 500 | 307,692 | 1993 |
| Guadalupe Sanitary Landfil [1] | 1991 | 3245 | 13,745,000 | 2010 |
| Kirby Canyon Sanitary Landfill [3] | 1984 | 2600 | 37,777,874 | 2022 |
| Newby Island Sanitary Landfill [1] | 1989 | 3260 | 23,270,596 | 2016 |
| Owens Fiberglass Co. [1,5] | 1990 | 0 | 623,500 | 2024 |
| Pacheco Pass Sanitary Landfill [3] | 1985 | 278 | 444,536 | 2020 |
| Shoreline Reg Park San Landfill [3] | 1978 | 1200 | 10,000 | 1993 |
| Zanker Road (Nine Par) Sanitary [3] | 1989 | 730 | 210,056 | 1996 |
| COUNTY TOTAL | | | 79,782,887 | |
| **Santa Cruz County** | | | | |
| Ben Lomond Solid Waste Disp Site [3] | | 0 | 120,000 | 0 |
| Buena Vista Disposal Site [1,2] | 1985 | 450 | 5,300,000 | 2020 |
| Santa Cruz City Sanitary Landfill [1,2] | 1990 | 400 | 4,600,000 | 2000 |
| Watsonville City Solid Waste Disposal [1,2] | 1978 | 56 | 622,000 | 2006 |
| COUNTY TOTAL | | | 10,642,000 | |
| **Shasta County** | | | | |
| Anderson Solid Waste Disposal [3] | 1987 | 600 | 1,035,880 | 2007 |
| Intermountain Landfill, Inc. [1] | 1991 | 240 | 581,669 | 2005 |
| Twin Bridges Landfill [1] | 1990 | 2 | 912,750 | 2020 |
| West Central Landfill [1] | 1992 | 700 | 6,828,000 | 2025 |
| COUNTY TOTAL | | | 9,358,299 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Sierra County** | | | | |
| Loyalton Landfill [2] | 1978 | 13 | 650,000 | 2032 |
| COUNTY TOTAL | | | 650,000 | |
| **Siskiyou County** | | | | |
| Black Butte Solid Waste Disposal [1,2] | 1979 | 27 | 132,950 | 1999 |
| Lava Beds Disposal Site [1,2] | 1979 | 0 | 21,550 | 2030 |
| McCloud Community Services Disposal [2] | 1979 | 0 | 484,000 | 2276 |
| Tulelake Solid Waste Landfill [1,2] | 1979 | 7 | 115,000 | 2004 |
| Weed Solid Waste Disposal Site [2] | 1979 | 7 | 91,989 | 1999 |
| Yreka Solid Waste Landfill [1,2] | 1979 | 50 | 1,674,533 | 2039 |
| COUNTY TOTAL | | | 2,520,022 | |
| **Solano County** | | | | |
| B & J Landfill [2] | 1992 | 350 | 5,158,900 | 2014 |
| Potrero Hills Landfill [1,2] | 1989 | 850 | 16,400,000 | 2020 |
| COUNTY TOTAL | | | 21,558,900 | |
| **Sonoma County** | | | | |
| Annapolis Landfill [1,2] | 1986 | 65 | 16,600 | 1995 |
| Central Landfill [1,2] | 1991 | 2500 | 10,500,000 | 2004 |
| Korbel Maintenance Disposal Site [2,6,7] | 0 | 1 | 250,000 | 0 |
| COUNTY TOTAL | | | 10,766,600 | |
| **Stanislaus County** | | | | |
| Bonzi Sanitary Landfill [2,4,5] | 1984 | 200 | 538,000 | 2017 |
| Fink Road Landfill [1,2,4] | 1988 | 2400 | 13,250,000 | 2010 |
| COUNTY TOTAL | | | 13,788,000 | |
| **Tehama County** | | | | |
| Louisiana Pacific Disposal Site [2] | 1978 | 45 | 300,000 | 2004 |
| Red Bluff Sanitary Landfill [2] | 1989 | 100 | 550,000 | 2012 |
| COUNTY TOTAL | | | 850,000 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Trinity County** | | | | |
| Weaverville Landfill Disposal [1,2] | 1982 | 70 | 594,500 | 2025 |
| COUNTY TOTAL | | | 594,500 | |
| **Tulare County** | | | | |
| Balance Rock Disposal Site [1,2] | 1979 | 1 | 19,196 | 2035 |
| Earlimart Disposal Site [1,2] | 1979 | 23 | 90,070 | 1998 |
| Exeter Disposal Site [1,2,7] | 1979 | 118 | 49,150 | 0 |
| Kennedy Meadows Disposal Site [1,2] | 1979 | 1 | 9,570 | 2041 |
| Teapot Dome Disposal Site [1,2] | 1979 | 180 | 1,677,829 | 2012 |
| Visalia Disposal Site [1,2] | 1979 | 385 | 2,544,297 | 2002 |
| Woodville Disposal Site [1,2] | 1979 | 114 | 12,526,988 | 2021 |
| COUNTY TOTAL | | | 16,917,100 | |
| **Tuolumne County** | | | | |
| Big Oak Flat Landfill [1,2] | 1983 | 0 | 40,000 | 2001 |
| Tuolumne County Central Sanitary [1,2] | 1983 | 92 | 347,000 | 1994 |
| COUNTY TOTAL | | | 387,000 | |
| **Ventura County** | | | | |
| Bailard Landfill [3] | 1982 | 2000 | 2,784,754 | 1993 |
| Simi Valley Landfill [3] | 1990 | 3000 | 11,299,021 | 2011 |
| Toland Road Sanitary Landfill [1,3] | 1992 | 135 | 4,286,604 | 2040 |
| COUNTY TOTAL | | | 18,370,379 | |
| **Yolo County** | | | | |
| University of California, Davis [3] | 1987 | 500 | 194,614 | 2050 |
| Yolo County Central Landfill [3] | 1993 | 1800 | 32,440,849 | 2021 |
| COUNTY TOTAL | | | 32,635,463 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Additional Inquiry
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year
[8] 1/1/95 Data - from County Siting Element in progress

LANDFILL INITIAL DATA REPORT (ALL LANDFILLS, ALL REGIONS) (Continued)

| Facility Name | Most Recent Permitted Year | TPD Limit | January 1, 1993 Capacity (cy) | Closing Year |
|---|---|---|---|---|
| **Yuba County** | | | | |
| Linda Sand and Gravel [2,6,7] | 0 | 20 | 20,000 | 0 |
| Quinco Corp. Disposal Site [2,6] | 0 | 30 | 100,000 | 2005 |
| Yuba-Sutter Disposal Area [2] | 1978 | 27 | 420,000 | 2007 |
| Yuba-Sutter Disposal, Inc. [2] | 1980 | 1000 | 813,793 | 1997 |
| COUNTY TOTAL | | | 1,353,793 | |
| ALL REGIONS SUBTOTAL | | | 1,573,169,576 | |
| Adjustment of Los Angeles County to 1/1/93 Capacity Data . Using BOE Disposal Data. | | | + 38,928,300 | |
| ALL REGIONS TOTAL | | | 1,612,097,876 | |

**Landfill Capacity Information Sources:**
[1] Landfill Survey [2] LEA Survey [3] CIWMB Files [4] Other
[5] Mainly Inerts or Industrial Process Wastes [6] Unpermitted or Exempt [7] No estimated closing year

# APPENDIX E. SURVEY MATERIALS

STATE OF CALIFORNIA

Pete Wilson, Governor

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD
8800 Cal Center Drive
Sacramento, California 95826

Dear Owner/Operator:

The California Integrated Waste Management Board (Board) is distributing the enclosed survey to all landfill owner/operators within California in an attempt to update and expand our knowledge on remaining landfill capacity in the state. This information will be compiled and ultimately used to assist local governments in providing adequate landfill disposal capacity as required by the Integrated Waste Management Act (Public Resources Code Section 41460).

This survey is part of the Integrated Waste Management Planning Study - Landfill Disposal Capacity Project. Other aspects of this study involve developing strategies to site and/or further extend existing capacity, and developing methodologies to assist landfill owner/operators in determining remaining capacity. Please note, information collected for this survey will be used for data analysis only, and not for enforcement purposes.

It is essential that we receive this data to compile an accurate updated statewide database. Efforts were made to lessen the amount of time it may take for you to complete the survey. Existing data from a variety of sources, including our Solid Waste Information System (SWIS) files, was incorporated and printed in the form for ease of completion. Please take a moment to verify this information and make corrections as necessary. Two sections are completely lacking data. Sections E. Method Used to Determine Remaining Landfill Capacity and F. Waste Stream Data were intentionally left blank as no complete information was available. The purpose of these sections is to gain a better understanding of the waste flow within the state, and the current methodologies employed by the operators to ascertain remaining capacity.

When you have completed the survey to the best of your ability, please return it in the provided self-addressed stamped envelope to Environmental Science Associates (ESA), the contractor commissioned by the Board to assist with collecting and compiling this information. If you wish to provide more information then the survey space allows, please feel free to attach additional sheets.

We greatly appreciate your completion of this survey, and we ask that you return it to the contractor by August 30th. If you have questions about this survey or the Board's Integrated Waste Management Planning Study, please call Tracey Harper of my staff at (916) 255-2666. We would like to thank you in advance for completing and returning the survey.

Sincerely,

Judith J. Friedman

Judith J. Friedman, Manager
Office of Local Assistance
Governmental and Regulatory Affairs Division

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

# LANDFILL CAPACITY SURVEY

## A. LANDFILL DATA

Landfill Name:_____

County:_____

Solid Waste Facility Permit Number: _____

Permit Date:_____

Location (street address or general description):

_____

_____

_____

Permitted Tons/Day:_____

Average Daily Amount of Waste Received (Tons):_____

Number of Days of Operation Per Year:_____

Expected Year of Closure:_____

*Check the appropriate box for each of the following questions:*

Operation Status: ☐ Active ☐ Closed

Classification: ☐ Class I ☐ Class II ☐ Class III

Type of Liner: ☐ Lined ☐ Partial Lined ☐ Unlined

## B. OPERATOR DATA

Operator Firm or Agency:_____

Name & Title of Contact Person:_____

_____

Address:_____

Telephone:_____

*Check the appropriate box for the following question:*

Operator Type: ☐ County ☐ City ☐ Private ☐ Federal

## C. LAND OWNER DATA

Owner Firm or Agency: _____

Name & Title of Contact Person: _____

_____

Address: _____

Telephone: _____

*Check the appropriate box for the following question:*

Owner Type: ☐ Federal ☐ State ☐ County ☐ City ☐ Private

## D. REMAINING LANDFILL CAPACITY DATA

Total Permitted Design Capacity: _____Tons _____Cubic Yards

Total Permitted Area: _____Acres

Remaining Capacity (as of 1/1/93): _____Tons _____Cubic Yards _____Years

Plans For Future Expansion *(briefly describe any planned or foreseen expansion plans, additional capacity provided by expansion, and anticipated year of initial operation):*

_____

_____

_____

## E. METHOD USED TO DETERMINE REMAINING LANDFILL CAPACITY

Frequency that Remaining Capacity is Determined: _____

Expected Average Compaction Rate for 1993: _____Tons/Cubic Yard

Method Used to Determine Remaining Capacity *( Note: In order to plan for the future, the California Integrated Waste Management Board is attempting to determine the amount of remaining landfill capacity within the State of California. This determination will be done largely on the numbers provided by landfill owners and operators (as provided in Section D of this survey form). Therefore, it is critical to understand how landfill owners and operators calculate remaining capacity in order to ensure consistency in the reporting. Please provide as much detail as possible.)* _____

_____

_____

_____

*(more space available on next page)*

E. METHOD USED TO DETERMINE REMAINING LANDFILL CAPACITY (continued)

_____

_____

_____

_____

_____

_____

_____

## F. WASTE STREAM DATA

Actual Quantity of Waste Received In 1992: _____Tons _____Cubic Yards

Expected Quantity of Waste For -

| | | |
|---|---|---|
| 1993: | _____Tons | _____Cubic Yards |
| 1995: | _____Tons | _____Cubic Yards |
| 2000: | _____Tons | _____Cubic Yards |

Names of Other Landfills Whose Operations Could Affect This Landfill's Waste Stream:

1._____
2._____
3._____
4._____

Names of Jurisdictions Sending Waste To This Landfill (attach listing if greater than ten):

| Name | Approximate % of Total Waste to be Received at Landfill in 1993 |
|---|---|
| 1._____ | _____% |
| 2._____ | _____% |
| 3._____ | _____% |
| 4._____ | _____% |
| 5._____ | _____% |
| 6._____ | _____% |
| 7._____ | _____% |
| 8._____ | _____% |
| 9._____ | _____% |
| 10._____ | _____% |

Completed By (Please Print Name): _____

Date:_____

# ESA MEMORANDUM

TO: LEAs

FROM: Paul Miller, Environmental Science Associates

DATE: September 19, 1994

SUBJECT: **County Data Packet Materials and Additional Guidance**

---

In assisting the CIWMB Office of Local Assistance, ESA has put together a comprehensive package of information collected to date on remaining County landfill capacity.

Specifically the package includes:

**Item 1**: Summary of the County landfills (showing the Facility name, County, Operator details, status of surveys, and reported remaining capacity)

**Response to Item 1**. Please check the Remaining Capacity presented in the far right column. Do you agree that this volume is basically the correct permitted remaining capacity at this landfill. Please provide your corrections to this number or note "ok" next to it.

**Item 2**. Summary of the County landfills with space to note if the facility still receives wastes and the waste types received and any restrictions regarding any jurisdictions.

**Response to Item 2**. The first column is the best place to indicate whether the landfill still receives waste. In columns 2-5 please note the major waste types received at the landfill. If it is only construction and demolition please mark that column. If a landfill only receives inert material, please indicate this also.

The last column is to indicate specific restrictions. It has been noted that some landfills will not accept waste from some cities. Please note major restrictions in this column.

**Item 3**. Landfill surveys that have been returned to CIWMB (these are on three-hole punched paper). These completed surveys have information on them that may help you in responding to various aspects of the summary sheets.

**Response to Item 3**. Please review these surveys and verify the data. If you believe that any of the information is inaccurate, please indicate your concerns on the surveys. If there have been major changes that you are aware of at the facility, please note that also.

**Item 4**. Landfill surveys that have not been returned to CIWMB (these are on paper with no punched holes).

**Response to Item 4.** It is important that we get the information on these surveys updated. Of critical importance to this effort is an accurate estimate of the remaining landfill capacity (CY) remaining on January 1, 1993.

**Item 5.** All the maps making up the County, from the DeLorme Mapping Company maps of California are included in the packet. On the outside of the package, there is an outline of the County showing how the maps fit together.

**Response to Item 5.** In order to properly locate the landfills in the CIWMB's Geographic Information System (GIS) we would like you to indicate where all the landfills are in the County. Please indicate the name of the landfill, the boundaries of the landfills to the degree possible and the primary access road.

**Schedule**

Per the letter to the LEAs from CIWMB (August 26, 1994, attached), we ask that you please return the forms in the addressed envelope to Environmental Science Associates within two weeks of receipt of your county's packet. Please let us know if more time is needed to complete the survey. The information collected from this survey will be used for data analysis only and not for enforcement purposes.

**Questions:**

Please direct any questions to:

| | | | | |
|---|---|---|---|---|
| Paul Miller | | or | Tracey Harper | |
| ESA | (415) 896-5900 | | CIWMB | (916) 255-2665 |
| | (415) 896-0332 FAX | | | (916) 255-2221 FAX |

**Return Materials to ESA**

The materials have been packages so that they can be returned to ESA (return mailing label is already attached). For convenience the address is:

CIWMB
c/o Environmental Science Associates
Attn: Paul Miller
301 Brannan Street Suite 200
San Francisco, CA 94107

STATE OF CALIFORNIA

Pete Wilson, Governor

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD
8800 Cal Center Drive
Sacramento, California 95826

TO ALL LOCAL ENFORCEMENT AGENCIES:

I would like to take a moment to inform you of an effort the California Integrated Waste Management Board's Office of Local Assistance is undertaking and to ask for your assistance in that effort.

The California Integrated Waste Management Board (CIWMB) distributed the enclosed survey to all landfill owner/operators within California last summer in an attempt to update and expand our knowledge of remaining landfill capacity in the state. This information was compiled and, with the results of the overall study, will ultimately be used to assist local governments in providing adequate landfill disposal capacity as required by the Integrated Waste Management Act (Public Resources Code Section 41460). This survey is part of the Integrated Waste Management Planning Study - Landfill Disposal Capacity Project. Other study efforts to assist local governments in ensuring adequate capacity involve developing strategies to site and/or further extend existing capacity and developing methodologies to assist landfill owner/operators in determining remaining capacity.

The survey response rate was limited and therefore we are requesting your assistance in gathering more data and reviewing the previously gathered data regarding remaining permitted landfill capacity. With your help, I am hopeful a better response rate can be achieved.

It is essential that we receive this data in order to compile and complete an updated database from which accurate planning analyses can be conducted. Efforts have been made to lessen the amount of time it may take you to complete the survey. Existing data from a variety of sources was incorporated and printed in the form for ease of completion. We are asking you to verify this information and make corrections where necessary. As you will notice, two sections are lacking data. Sections <u>E. Method Used to Determine Remaining Landfill Capacity</u> and <u>F. Waste Stream Data</u> were intentionally left blank as no previously generated information was available. The purpose of these sections is to gain a better understanding of the waste flow within the state and the current methodologies employed by the operators to ascertain remaining capacity. We had requested landfill owner/operators pay particular attention to completing these sections.

*Local Enforcement Agency Roundtable*
*Landfill Capacity Data Request*
*August 26, 1994*

At the upcoming Roundtable meeting you will receive a packet of survey forms for each active landfill in your county. For those landfills which have completed survey forms, we are requesting that you review the information which was supplied. If upon review, you determine a different remaining capacity figure we are requesting that you note the figure on the survey form and indicate what you believe the reason for the disparate figure. For those landfills which we have not yet received data, we are requesting that you complete the survey form paying particular attention to the basic information on estimated remaining permitted capacity.

When you have completed your review, we ask that you please return the forms in the addressed envelope to Environmental Science Associates (ESA) within two weeks of receipt of your county's packet... Please let us know if more time is needed to complete the survey. Information collected from this survey will be used for data analysis only and not for enforcement purposes.

Tracey Harper of my staff will be making a presentation at the Local Enforcement Agency Roundtable meetings. If you have questions about this survey or the Board's Integrated Waste Management Planning Study, you may contact her at (916) 255-2665. I would like to thank you in advance for your assistance in this effort.

Sincerely,

Judith J. Friedman

Judith J. Friedman, Manager
Office of Local Assistance & Plan Implementation Branch

Attachment

CIWMB Landfill Survey - 9/19/94

| Facility Name | SWIS # | County | Operator Firm or Agency | First | Last | Number | Sent | Recd./ Open | Recd./ Closed | Not Recd. | Remaining Capacity Cubic Yards Jan. 1, 1993 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Foothill Sanitary Landfill | 39-AA-0004 | San Joaquin | Foothill Sanitary Landfill, In | Dan | Nomellini | 209-465-5883 | 1 | 1 | | | 65,000,000 |
| Forward, Inc. | 39-AA-0015 | San Joaquin | Independent Trucking | Greg | Basso | 209-466-5192 | 1 | 1 | | ✓ | 11,909,000 ~~0~~ |
| North County Landfill | 39-AA-0022 | San Joaquin | San Joaquin Co. Dept. of Pu | Henry | Hirata | 209-468-3066 | 1 | 1 | | | 15,600,000 |
| Corral Hollow Landfill | 39-AA-0005 | San Joaquin | San Joaquin County | Henry | Hirata | 209-468-3066 | 1 | 1 | | | 303,000 |
| Austin Road Landfill | 39-AA-0001 | San Joaquin | City of Stockton•Public Wo | Stephen | Chen | 209-944-8827 | 1 | 1 | | ✓ | 954,846 ~~0~~ |
| French Camp Landfill Site | 39-AA-0002 | San Joaquin | City of Stockton•Public Wo | Stephen | Chen | 209-944-8341 | 1 | 1 | | ✓ | 1,120,000 ~~0~~ |

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CIWMB Landfill Survey - 9/19/94

| Facility Name | Does this site Still Receive Wastes? (Yes or No) | Waste Types Received: MSW | C&D | Other: Please note restrictions also | Restrictions by Origin: Are there specific cities or Counties that can't use this facility -- List them | |
|---|---|---|---|---|---|---|
| Foothill Sanitary Landfill | yes | | | As per permit | none | |
| Forward, Inc. | yes | | | | none | |
| North County Landfill | yes | | | | none | |
| Corral Hollow Landfill | yes | | | | none | |
| Austin Road Landfill | yes | | | | City of Stockton only | |
| French Camp Landfill Site | yes | | | | City of Stockton only | |