

## **CHAPTER 4**

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## **CHAPTER 4**

### **CURRENT DISPOSAL RATE AND ASSESSMENT OF DISPOSAL CAPACITY NEEDS**

#### **4.1 PURPOSE**

The purpose of this Chapter is to quantify the current disposal rate in Los Angeles County (County) and to address the disposal capacity needs of the 88 cities in the County and the County unincorporated communities for a 15-year planning period pursuant to California Code of Regulations (CCR), Title 14, Section 18755.3(b). The base year for the planning period of this Chapter is 2010.

The specific requirements for the content of this chapter are drawn from CCR, Title 14, Division 7, Chapter 9, Article 6.5, Sections 18755 and 18755.3, and discussed in Section 4.3 of this Chapter.

#### **4.2 DEFINITIONS**

Below are the definitions of key terms used in this Chapter. For a more complete listing of definitions and acronyms, please refer to the Glossary of Terms and List of Acronyms at the beginning of this document.

##### **4.2.1 Adjustment Method**

Refers to a formula for annually estimating jurisdiction solid waste tons generated. Chapter 1292, Statutes of 1992 (Sher, AB 2494) required the California Department of Resources Recycling and Recovery (CalRecycle) to develop a standard methodology so that jurisdictions would have a cost-effective way to estimate how much waste they generate. (See Public Resources Code (PRC) Section 41780.1.) CCR, Title 14, Chapter 9, Article 9.1, requires that population, employment, taxable sales, and Consumer Price Index be used in the adjustment method formula.

##### **4.2.2 Alternative Technology**

Refers to a technology capable of processing residual municipal solid waste (MSW), such as conversion/recovery technology, transformation, or other emerging technologies, in lieu of land disposal.

##### **4.2.3 Available Out-of-County Disposal Capacity**

Refers to the amount of solid waste generated in Los Angeles County that can be accepted by the out-of-County Class III landfills potentially available for out-of-County disposal of solid waste from Los Angeles County.

#### **4.2.4 Base-Year Generation**

Refers to the amount of waste generated by a jurisdiction during the calendar year used for a jurisdiction's solid waste generation study. The waste generated by a jurisdiction includes all solid waste disposed or diverted. Base-year generation is the base for CalRecycle's projections and estimates of jurisdiction's future waste generation and diversion rates for the subsequent years.

#### **4.2.5 Biomass Processing**

Refers to the controlled combustion, when separated from other solid waste and used for producing electricity or heat, of the following materials: (1) agricultural crop residues; (2) lawn, yard, and grass clippings; (3) bark, leaves, silvicultural residue, and tree and brush pruning; (4) wood, wood chips, and wood waste; and/or (5) residual pulp or paper materials. Biomass processing does not include the controlled combustion of recyclable pulp or recyclable paper materials, or materials which contain sewage sludge, industrial sludge, medical waste, hazardous waste, or either high-level or low-level radioactive waste.

#### **4.2.6 Class III Landfill Disposal Demand**

Refers to the difference between the total disposal need (excluding inert waste landfills) and the available disposal capacity of the transformation facilities and alternative technology facilities.

#### **4.2.7 Conversion/Recovery Technology**

Refers to a wide array of technologies capable of converting post-recycled or residual solid waste into useful products, green fuels, and renewable energy through non-combustion thermal, chemical, or biological processes. Conversion/recovery technologies may include mechanical processes, but only when combined with a secondary conversion process.

#### **4.2.8 Daily Disposal Capacity Reserve**

Refers to the daily amount of solid waste in excess of available in-County and out-of-County disposal capacity.

#### **4.2.9 Daily Disposal Capacity Shortfall**

Refers to the daily amount of solid waste in need of disposal in excess of available in-County and out-of-County disposal capacity.



#### **4.2.10 Daily Disposal Demand**

Refers to the amount of solid waste generated less the amount diverted by means of reuse, recycling, or composting based on a six-day-per-week operation at permitted solid waste disposal facilities.

#### **4.2.11 Disposal**

Defined in PRC, Section 40192 as: "(a) Except as provided in subdivisions (b) and (c), 'solid waste disposal' 'disposal,' or 'dispose' means the final deposition of solid waste onto land, into the atmosphere, or into the waters of the state. (b) Except as provided in Part 2 (commencing with Section 40900), for the purposes of Part 2 (commencing with Section 40900), 'solid waste disposal,' 'dispose,' or 'disposal' means the management of solid waste through landfill disposal or transformation at a permitted solid waste facility. (c) For the purposes of Chapter 16 (commencing with Section 42800) and 19 (commencing with Section 45000), Part 6 (commencing with Section 45030), and Chapter 2 (commencing with Section 47900) of Part 7, 'solid waste disposal,' 'dispose,' or 'disposal' means the final deposition of solid wastes onto the land. Also defined in CCR, Title 14, Section 18720 (17) as "the management of solid waste through landfilling or transformation at permitted solid waste facility."

#### **4.2.12 Disposal Capacity**

Defined in CCR, Title 14, Section 18720 (18) as "the capacity, expressed in either weight in tons or its volumetric equivalent in cubic yards, which is either currently available at a permitted solid waste landfill, or will be needed for the disposal of solid waste generated within the jurisdiction over a specified period of time."

#### **4.2.13 Disposal Facility**

Defined in PRC Section 40121 as "any facility or location where disposal of solid waste occurs."

#### **4.2.14 Disposal Site**

Defined in PRC, Section 40122 as "the place, location, tract of land, area, or premises in use, intended to be used, or which has been used, for the landfill disposal of solid wastes." "Disposal Site" includes solid waste landfills, as defined in PRC, Section 40195.1.

#### **4.2.15 Export Need or Out-of-County Disposal Need**

Refers to the difference between the amount of solid waste generated within (and/or imported into) Los Angeles County that needs to be disposed after waste diversion and alternative technology (e.g., conversion/recovery technology) processes have been utilized, and available disposal capacity of permitted in-County landfills and transformation facilities.

#### **4.2.16 In-Place Solid Waste Density or Compaction Rate**

Refers to the density in pounds per cubic yard of solid waste (excluding cover materials used) deposited in a landfill after it has been compacted. Throughout the CSE, the compaction rate listed has been provided by the landfill operator. When a site-specific density is not available, an in-place solid waste density/compaction rate of 1,200 pounds per cubic yard is assumed for Class III landfills, 3,000 pounds per cubic yard for inert waste landfills, and 900 pounds per cubic yard for material recovery facilities and transfer stations.

#### **4.2.17 Inert Debris Engineered Fill Operations (IDEFO)**

Refers to a disposal activity exceeding one year in duration in which only the following inert debris may be used: fully cured asphalt, uncontaminated concrete (including steel reinforcing rods embedded in the concrete), crushed glass, brick, ceramics, clay, and clay products, which may be mixed with rock and soil. These materials are spread on land in lifts and compacted under controlled conditions to achieve a uniform and dense mass which is capable of supporting structural loading, as necessary, or supporting other uses such as recreation, agriculture, and open space. (See CCR, Title 14, Section 17388.)

#### **4.2.18 Inert Waste Landfill**

Refers to landfills that accept inert waste. CCR, Title 14, Section 18720 (32) defines inert waste as "a non-liquid solid waste including, but not limited to, soil and concrete, that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives established by a regional water quality board pursuant to division 7 (commencing with section 13000) of the California Water Code and does not contain significant quantities of decomposable solid waste."

#### **4.2.19 Planning Period**

Refers to the 15-year planning period defined to begin with the year in which the CSE is prepared or revised. For the purpose of the CSE, "Planning Period" refers to the period beginning in the year 2010 and ending in the year 2025.

#### **4.2.20 Permitted Capacity**

Refers to the total quantity of solid waste (in cubic yards and/or tons) which a permitted landfill or permitted transformation facility is allowed to receive in accordance with the terms, conditions, and limitations of the facility's current Solid Waste Facility Permit (SWFP), Land/Conditional Use Permit (LUP/CUP), Waste Discharge Requirements (WDR), and Permit to Operate issued by the local Air Quality Management/Air Quality Control District, whichever is more restrictive.

#### **4.2.21 Permitted Solid Waste Landfill or Permitted Landfill**

Defined in CCR, Title 14, Section 18720 (50) as "a solid waste landfill for which there exists a current [SWFP] issued by the Local Enforcement Agency [LEA] and concurred in by [CalRecycle], or which is permitted under the regulatory scheme of another state."

For the purpose of the CSE and in concert with the requirements of CCR, Title 14, Section 18720, refers to a solid waste landfill facility for which there exists: (1) a current SWFP issued by the LEA and concurred in by CalRecycle, (2) a LUP/CUP issued by the local jurisdiction's land use authority, (3) Waste Discharge Requirements issued by the appropriate California Regional Water Quality Control Board, and if applicable (4) a Permit to Operate issued by local Air Quality Management/Air Pollution Control District.

#### **4.2.22 Solid Waste Disposal**

Refers to the final deposition of solid waste onto land, into the atmosphere, or into the waters of the state, as defined in PRC, Section 40192; or the management of solid waste through landfilling or transformation at a permitted solid waste facility, as defined in CCR, Title 14, Section 18720 (17).

#### **4.2.23 Solid Waste Disposal Capacity**

"Refers to the capacity, expressed in either weight in tons (or its volumetric equivalent in cubic yards), which is either currently available at a permitted solid waste landfill, or will be needed for the disposal of solid waste generated within a jurisdiction over a specified period of time.

#### **4.2.24 Transformation (Waste-to-Energy) Facility**

Refers to a facility whose principal function is to convert, combust, or otherwise process solid waste by incineration, pyrolysis, destructive distillation, or gasification, or to chemically or biologically process solid wastes, for the purpose of volume reduction, synthetic fuel production, or energy recovery.

Transformation facility does not include a composting facility, as defined in CCR, Title 14, Section 18720 (77).

#### **4.2.25 Waste-to-Energy Facility**

Refers to a transformation facility that engages in the cogeneration of electricity through incineration of residual solid waste, such as the Commerce Refuse-to-Energy Facility located in the City of Commerce and the Southeast Resource Recovery Facility located in the City of Long Beach for the purpose of the CSE.

### **4.3 SPECIFIC REQUIREMENTS**

CCR, Title 14, Section 18755.3, requires the following:

- a) Each county and regional agency, with assistance from the local task force, shall include documentation in the countywide siting element providing the following information:
  - (1) The January 1, 1990, permitted disposal capacity in tons and cubic yards established pursuant to CCR, Title 14 Section 18777(b).
  - (2) The existing permitted disposal capacity in tons and cubic yards in the year the Siting Element is prepared; and
  - (3) The disposal capacity in cubic yards and in tons in any year the Siting Element is revised.
- b) The anticipated disposal capacity needs shall be described in tons and cubic yards, on an annual basis and aggregated for a minimum 15-year period, beginning with the year in which the Siting Element is prepared and in any year the Siting Element is revised.
- c) Area(s) shall be selected where solid waste disposal facilities are envisioned to be expanded or sited and constructed for the purpose of meeting a required minimum of 15 years of combined permitted disposal capacity. Each county shall consider the following in determining the areas where solid waste disposal facilities are planned to be expanded or sited and constructed:
  - (1) The total amount of solid waste generated, expressed in tons and cubic yards for volumetric capacity for the required 15-year period.
  - (2) The existing remainder of combined permitted disposal capacity in tons and cubic yards for the required 15-year period.

- (3) An estimation of the total disposal capacity in tons and cubic yards needed to meet a minimum of 15 years of combined permitted disposal capacity.

#### **4.4 DISPOSAL QUANTITIES AND CAPACITY**

##### **4.4.1 Disposal Quantities and Capacity Methodology**

###### **4.4.1.1 1990 Disposal Quantities and Capacity Study**

In accordance with the requirements of CCR, Title 14, Section 18777, in March 1991, the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force) completed a study that quantified the amount of solid waste disposed at landfills and transformation facilities located in the County, and projected the remaining permitted combined capacity of these facilities. A summary of the study was submitted to the former California Integrated Waste Management Board ((CIWMB); currently CalRecycle) in a report dated March 28, 1991. A copy of the Report is provided in **Appendix 4-A**.

###### **4.4.1.2 Integrated Solid Waste Management Information System**

Prior to the current Disposal Reporting System (DRS), the County Department of Public Works (Public Works) established the Integrated Solid Waste Management Information System (ISWMIS), for tracking solid waste disposal quantities at landfills and transformation facilities based on the monthly Solid Waste Management Fee invoices the facility operators submitted on a quarterly basis to Public Works. These invoices were audited periodically and compared with the quantities landfill and transformation facility operators report to local enforcement agencies (LEA) and other regulatory agencies.

Solid waste facility operators submitted routing and diversion information from solid waste facilities each month, resulting in thousands of data entry points on a quarterly basis. The information was manually entered into an internal database and resulting reports were mailed to CalRecycle and over 300 governmental agencies involved in the solid waste disposal reporting process.

###### **4.4.1.3 Solid Waste Disposal Reporting System**

On October 27, 1994, CalRecycle adopted regulations for the current Solid Waste Disposal Reporting System, pursuant to CCR, Title 14, Sections 18800 through 18813, as amended, and PRC, Section 41821.5. Beginning January 1995, the regulations required all solid waste disposal facility operators/owners to provide information regarding the quantities of waste disposed at their facilities by individual jurisdictions on a quarterly basis to Public Works. Public

Works in turn reports the information regarding the amount of waste disposed at each facility during the quarter to each jurisdiction.

The data obtained from the DRS served as the basis for all jurisdictions to measure their individual waste disposal reduction goals. This data was also used in the CSE to determine the 2010 disposal quantities (see **Section 4.4.4**) and to project waste generation quantities (see **Section 4.5.4**) for the 2010-2025 planning period.

#### **4.4.1.4 Solid Waste Information Management System**

In 2006, Public Works launched a web-based Solid Waste Information Management System (SWIMS) that allows governmental agencies, the public, and private businesses to conveniently access solid waste information online (see [www.solidwastedrs.org](http://www.solidwastedrs.org)). In addition, the data gathered is used to assist each jurisdiction to better plan, develop, and monitor waste recycling and diversion programs. Public Works consulted and worked with CalRecycle to ensure the system's compatibility with CalRecycle's standards.

Every month, the operators of the current 28 landfills, two waste-to-energy (transformation) facilities, 41 materials recovery facilities (MRFs), 18 transfer stations, and 140 waste haulers, log on to SWIMS website to submit the required solid waste disposal information for their facility.

Once the solid waste disposal information is submitted, Public Works notifies the respective governmental agencies for verification, and following data verification finalizes the information for publication to approximately 300 cities and counties and to CalRecycle once the data is verified.

#### **4.4.2 1990 Disposal Quantities and Capacity**

As discussed in Section 4.4.1.1, in March 1991, the Task Force completed a study that quantified the amount of solid waste disposed at landfills and transformation facilities located in the County, and projected the remaining permitted combined capacity of these facilities. An overview of the study is provided below.

##### **4.4.2.1 1990 Disposal Quantities**

In 1990, the residents/businesses of the County disposed of approximately 15.9 million tons of solid waste at the then-existing landfills and transformation facilities within the County. Of this amount, approximately 13.5 million tons (85 percent) were disposed at 19 permitted Class III landfills; 0.3 million tons (two percent) were managed by two waste-to-energy facilities (excluding 0.15 million tons of residual ash that was landfilled); and 2.1 million tons (13 percent) were

disposed at the then “**unclassified landfills**”<sup>1</sup>. A list of the Class III landfill facilities, and disposal quantities for each facility, is provided in the March 28, 1991, report to CalRecycle (see **Appendix 4-A**).

The above quantities translated into a 1990 average disposal rate of approximately 51,000 tons per day (tpd) (six days/week)) Countywide; 43,245 tpd (85 percent) at Class III landfills; 1,000 tpd (two percent) at transformation (waste-to-energy) facilities (excluding 500 tons of ash that was landfilled); and 6,755 tpd (13 percent) at permitted inert waste landfills.

#### **4.4.2.2 1990 Remaining Permitted Disposal Capacity**

The Task Force established that the remaining permitted disposal capacity for Class III landfills as of December 31, 1990, was at approximately 99 million tons (156 million cubic yards based on the in-place solid waste density/compaction rate provided by landfill operators). The analysis was based on various data collected by Public Works from facility operators and site specific permit criteria established by local land use agencies, LEAs, California Regional Water Quality Control Boards, and CalRecycle. A summary of the data collected and various permit limitations is also shown on **Table 4-1**.

The Task Force established that the remaining permitted combined disposal capacity of Class III landfills as of January 1, 1990, was at approximately 112.15 million tons (177 million cubic yards), which was the sum of the remaining permitted capacity as of December 31, 1990, and the total quantities disposed during the 1990 calendar year.

#### **4.4.3 1990-2010 Disposal Trends**

The reported disposal quantities during this period are summarized on a yearly basis in **Figure 4-1**, and **Tables 4-2** (in tons) and **4-3** (in cubic yards). Since, the export rate for 1990, 1991, 1996, 1997, and 1998, and the import rate for 1990 through 1993 are not available, the amounts were not included in the disposal amount for determining the trends for 1990 through 1993 and 1996 through 1998.

##### **4.4.3.1 1990-1995 Disposal Trends**

The reported disposal quantities during this period are summarized on a yearly basis in **Figure 4-1**, and **Tables 4-2** (in tons) and **4-3** (in cubic yards).

A net downward trend in the quantities of solid waste disposed at in-County Class III landfills (see column A of **Tables 4-2** and **4-3**) was observed during

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<sup>1</sup> “Landfills” previously referred to as “unclassified landfills” are now referred to as “inert waste landfills.”



the period 1990 through 1995, with no reduction in quantities of solid waste managed at the two transformation facilities (see **column B** of **Tables 4-2** and **4-3**).

There is no available data from 1990 to 1991 on the amount exported by jurisdictions in the County to disposal facilities located outside the County. However, there was a net upward trend in the export amount from 1992 through 1995 (see **column C** of **Tables 4-2** and **4-3**).

Similarly, there is no available data from 1990 through 1993 on the amount imported into the County. However, another trend that developed during this period was a sharp increase in the amount of MSW waste imported from other counties for disposal at Los Angeles County disposal facilities from 1994 (305,000 tons) to 1995 (774,000 tons) (see **column D** of **Tables 4-2** and **4-3**) that originated from neighboring counties such as Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. This trend was attributed to steep increases in disposal costs experienced in those counties and/or the difficulties in permitting new disposal capacity.

Furthermore, the amount disposed by jurisdictions in the County (i.e., the total amount disposed at Class III landfills and transformation facilities including exports and excluding imports) showed a decreasing trend from 1990 to 1995 (see **column G** in **Tables 4-2** and **4-3**). While aggressive waste diversion programs being implemented by jurisdictions throughout the County contributed in substantial measure to the drop in disposal quantities during the period of 1990 through 1995, much of the reduction occurred as a result of the recession experienced in the region between 1990 and 1995.

#### 4.4.3.2 1996-2000 Disposal Trends

The reported disposal quantities during this period are summarized on a yearly basis in **Figure 4-1**, and **Tables 4-2** (in tons) and **4-3** (in cubic yards).

Based on the disposal information from the DRS and SWIMS, a cyclical but net downward trend in the quantities of solid waste disposed was observed at in-County Class III landfills (see **column A** of **Tables 4-2** and **4-3**). However, there was a relatively stable trend in the quantities of solid waste managed at the two transformation facilities.

There is no available data from 1996 to 1998 on the amount exported by jurisdictions in the County to disposal facilities located outside the County. However, the amount exported remained relatively the same from 1999 (732,323 tpd) to 2000 (794,910 tpd).



Also, there was a sharp decline in the amount of MSW imported from other counties that originated from neighboring counties such as Orange, Riverside, San Bernardino, San Diego, and Ventura Counties for disposal at Los Angeles County disposal facilities during this period. For example, approximately 801,308 tons (2,568 tpd) of solid waste that originated from outside Los Angeles County were disposed at in-County facilities in 1996, compared to approximately 229,320 tons (735 tpd) in 2000.

Furthermore, the amount disposed by jurisdictions in the County, (i.e., the total amount disposed at Class III landfills and transformation facilities including exports and excluding imports) showed a decreasing trend from 1996 through 2000 (see **column G** in **Tables 4-2** and **4-3**).

#### 4.4.3.3 2001-2005 Disposal Trends

The reported disposal quantities during this period are summarized on a yearly basis in **Figure 4-1**, and **Tables 4-2** (in tons) and **4-3** (in cubic yards).

A cyclical but net downward trend in the quantities of solid waste disposed at in-County Class III landfill was observed during the period of 2001 through 2005, with a relatively stable trend in the quantities of solid waste managed at the two transformation facilities.

Conversely, there was a significant net upward trend in the amount of MSW exported for disposal outside the County. Based on available data, approximately 1,095,711 tons (3,512 tpd) was exported out of the County in 2001 and approximately 2,177,097 tons (6,978 tpd) was exported in 2005.

Also, there was a relatively stable amount of MSW imported from other counties that originated from neighboring counties such as Orange, Riverside, San Bernardino, San Diego, and Ventura Counties for disposal at Los Angeles County disposal facilities during 2001 through 2004. However, a significant increase in the amount imported from other counties was observed for 2005. Based on available data, approximately 182,832 tons (586 tpd) of solid waste that originated from outside the County were disposed at in-County facilities in 2001 and approximately 235,872 tons (756 tpd) were disposed at in-County facilities in 2005.

Furthermore, the amount disposed by jurisdictions in the County (i.e., the total amount disposed at Class III landfills and transformation facilities including exports and excluding imports), showed an increasing trend from 2001 through 2005 (see **column G** in **Tables 4-2** and **4-3**).

#### 4.4.3.4 2006-2010 Disposal Trends

The reported disposal quantities during this period are summarized on a yearly basis in **Figure 4-1**, and **Tables 4-2** (in tons) and **4-3** (in cubic yards).

A net downward trend in the quantities of solid waste disposed at in-County Class III landfills was observed during the period 2006 through 2010, with a relatively stable trend in the quantities of solid waste managed at the two transformation facilities.

Conversely, there was a cyclical but net upward trend in the amount of MSW exported for disposal at landfills located outside the County. Based on available data, approximately 1,782,609 tons (5,713 tpd) was exported out of the County in 2006 and approximately 1,917,993 tons (6,147 tpd) was exported in 2010.

Also, there was a significant decrease in the amount of MSW imported from other counties which originated from neighboring counties such as Orange, Riverside, San Bernardino, San Diego, and Ventura Counties for disposal at Los Angeles County disposal facilities during the period 2006 to 2010. For example, approximately 266,448 tons (854 tpd) of solid waste that originated from outside Los Angeles County were disposed at in-County facilities in 2006, compared to approximately 210,521 tons (675 tpd) in 2010.

Furthermore, the amount disposed by jurisdictions in the County (i.e., the total amount disposed at Class III landfills and transformation facilities including exports and excluding imports), showed a decreasing trend from 2006 through 2010 (see **column G** in **Tables 4-2** and **4-3**).

#### 4.4.4 2010 Disposal Quantities and Capacity

##### 4.4.4.1 2010 Disposal Quantities

The 2010 disposal quantities are based on SWIMS data for the period of January 1 through December 31, 2010. In 2010, the residents and businesses in the County disposed of approximately 8.6 million tons of solid waste at existing permitted land disposal and transformation facilities located in and out of the County. The disposal quantity distribution among the various types of disposal facilities is as follows (see **Figure 4-2**):

- In-County Class III Landfills
  - Seven major landfills 6,197,328 tons
  - Four minor landfills 115,935 tons

- In-County Transformation facilities 539,129 tons
- In-County Permitted inert waste landfills 54,964 tons
- Exports to out-of-County Class III landfills 1,917,993 tons
- **Total amount disposed** **8,825,349 tons**

The above disposal quantities for solid waste generated in the County translate into a 2010 average disposal rate of approximately 27,784 tpd (six days/week) Countywide (i.e., 20,235 tpd at Class III landfills; 1,728 tpd at waste-to-energy facilities; 176 tpd at permitted inert waste landfills; and 6,147tpd exported to out-of-County Class III landfills). **Table 4-8** lists existing permitted landfills and transformation facilities, and the quantities of solid waste disposed of originating in the County. In addition, approximately 675 tpd (six days/week) were imported to the County for disposal at Class III landfills, permitted inert waste landfills, and transformation facilities. Please note that the quantities listed in **Tables 4-2** and **4-8** may differ slightly from the above quantities due to the rounding of numbers.

#### 4.4.4.2 Remaining Permitted Disposal Capacity as of December 31, 2010

As part of the preparation for the revised CSE, Public Works conducted a new study to determine (among other things) the remaining combined permitted disposal capacity, as of December 31, 2010. The study consisted of a written survey of all permitted solid waste disposal facilities in the County, as well as review of site specific permit criteria established by local land use agencies, LEAs local enforcement agencies, California Regional Water Quality Control Boards, and the South Coast Air Quality Management District. A summary of the data collected and existing permit limitations is provided in Chapter 3, and shown in **Tables 4-4** and **4-8**.

Based on the data provided in **Table 4-8**, as of December 31, 2010, the remaining permitted combined disposal capacity for Class III landfills and transformation facilities located in the County is estimated as follows:

- Remaining permitted Class III landfill capacity = 123.85 million tons (approximately 179.61 million cubic yards).
- Remaining permitted inert waste landfill capacity = 50.84 million tons (42.72 million cubic yards).
- Remaining permitted average daily transformation facility capacity = 2,069 tons per day.

The above permitted average daily transformation facility capacity is a 6-day/week average based on the SWFP limit of 2,800 tons per week for the Commerce Refuse-to-Energy Facility (CREF) and a United States Environmental Protection Agency (USEPA) limit of 500,000 tons per year for the Southeast Resource Recovery Facility (SERRF). It should be noted that the ash residuals generated by CREF and 99.8 percent of the ash residual generated by SERRF are currently being diverted for beneficial use. The remaining 0.20 percent of ash residual generated by SERRF is landfilled.

#### **4.5 ADEQUACY OF EXISTING REMAINING PERMITTED IN-COUNTY DISPOSAL CAPACITY (AS OF DECEMBER 31, 2010)**

##### **4.5.1 Class III Landfills**

As a part of the preparation of the CSE and the 2010 Los Angeles County Countywide Integrated Waste Management Plan Annual Report (Annual Report), Public Works conducted a survey of landfills in the County to update its estimate of remaining combined permitted disposal capacity. Based on the results of the survey and considering permit restrictions and other factors, the remaining permitted Class III landfill capacity in the County as of December 31, 2010, is estimated at 123.85 million tons (179.61 million cubic yards) (see **Table 4-8**). As shown in **Table 4-7**, the cumulative permitted Class III landfill disposal capacity needs (approximately 113.54 million tons) will exceed this existing remaining permitted Class III landfill capacity of 123.85 million tons (with Puente Hills Landfill (PHL)) by the year 2021.

However, as discussed below, this simple comparison does not accurately predict when a shortfall in daily permitted disposal capacity may be experienced. Rather, it is necessary to compare the maximum permitted daily capacity available with the County's daily disposal needs, with full consideration of the facilities' constraints to determine when the shortfall in permitted daily capacity will occur.

Additionally, waste generation and disposal quantities must be adjusted to account for waste imported from adjacent counties, waste exports to out-of-County facilities, and waste generated as a result of natural disasters together with the time necessary to develop additional permitted daily capacity and permitted landfill capacity to enable jurisdictions to project when a disposal capacity need may occur.

##### **4.5.2 Inert Waste Landfills**

As of December 31, 2010, there were 12 inert waste landfills in the County (see **Table 4-4**). The total inert waste (including imports) disposed in the inert waste

landfills in 2010 is 1.86 million tons. Pursuant to the Construction and Demolition Waste and Inert Debris Disposal Phase II Tiered Regulation<sup>2</sup>, only inert waste landfills falling under the Full and Registration permit tiers (of the Solid Waste Facility Permit tier) are considered “permitted” disposal facilities.

### **Permitted Inert Waste Landfills**

Azusa Land Reclamation is the only permitted inert waste landfill in the County that falls under the Full or Registration tiers. The remaining disposal capacity for the permitted inert waste landfill is estimated at 50.84 million tons (42.72 million cubic yards) as shown in **Table 4-8**. In the 2010 average rate of disposal of 176 tpd (0.05 million tons per year), this total permitted inert waste landfill capacity would be exhausted in 926 years. Accordingly, the County has adequate permitted inert waste landfill capacity at this time.

### **Inert Debris Engineered Filled Operations**

There are 13 inert debris engineered fill operations (IDEFO)<sup>3</sup> in the County, namely: Atkinson Brick Company, Chandler’s Palos Verdes Sand and Gravel, Hanson Aggregates (Livingston-Graham), Lower Azusa Reclamation Project, Manning’s Pit, Montebello Land and Water Company, Nu-Way Arrow Reclamation, Nu-Way Live Oak Reclamation, Peck Road Gravel Pit, Reliance Pit #2 (CalMat/Vulcan), Sun Valley (CalMat/Vulcan), Strathern Landfill, and United Rock Products. These operations handled approximately 1.73 million tons of inert waste in the County in 2010 (see **Table 4-4**).

## **4.5.3 Transformation (Waste-to-Energy) Facilities**

Currently, two transformation (waste-to-energy) facilities operate in the County (Commerce Refuse-to-Energy Facility (CREF) and Southeast Resources Recovery Facility (SERRF)) and have a combined maximum permitted daily capacity of 3,240 tons (six days/week average, based on a maximum permitted annual capacity). It is expected that these two facilities will operate at their current permitted daily capacity during the planning period (2010 through 2025). The owners/operators of these facilities have indicated that there are currently no plans for increasing the permitted daily capacity of these facilities.

The disposal capacity need analysis (see **Section 4.10**) assumes the average permitted daily capacity of 2,069<sup>4</sup> tpd as the estimated permitted remaining

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<sup>2</sup> The current classification of inert waste landfills is primarily governed by the State’s Construction and Demolition Waste and Inert Debris Disposal Phase II Tiered Regulation (CCR, Title 14, Sections 17387 through 17390). These regulations placed inert waste landfills into four regulatory tiers, namely, Full Solid Waste Facility Permit, Registration Permit, Enforcement Agency Notification, and Excluded Operations.

<sup>3</sup> Inert debris engineered fill operations are inert waste landfills under the Enforcement Agency (EA) Notification Tier, and are excluded from the disposal capacity analysis as a result of changes in State law.

<sup>4</sup> Based on the SWFP limit of 2,800 tons per week (expressed as a daily average, six days/week) for the CREF, and a USEPA limit of 500,000 tons per year (expressed as a daily average, six days/week) for SERRF.

capacity for the two existing transformation facilities (i.e., their combined maximum permitted daily capacity, equivalent to approximately 645,528 tons per year), toward satisfying the daily disposal needs of the jurisdictions in the County through the 15-year planning period. The remaining daily disposal needs must be handled by the in-County Class III landfills, out-of-County landfills, and utilizing other strategies.

#### **4.5.4 Conversion/Recovery Technology Facilities**

Currently, there are no conversion/recovery technology facilities in the County. However, in order to encourage their development, the LACDPW is working with the Alternative Technology Advisory Subcommittee (ATAS) of the Task Force to investigate feasibility of and promote conversion/recovery technologies, including actively pursuing the development of one or more demonstration facilities in Southern California.

This process began with Phase I, in which the County and ATAS conducted a preliminary evaluation, screening, and ranking of conversion/recovery technology companies and identification of material recovery facilities and transfer stations (MRF/TS) that could potentially host a conversion/recovery technology facility. The findings resulted in the development of the "Conversion Technology Evaluation Report for the County of Los Angeles Department of Public Works and the Los Angeles Solid Waste Management Committee/Integrated Waste Management Task Force's Alternative Technology Advisory Subcommittee", (also known as the "Phase I Report"), adopted by the Task Force in 2005.

Phase II consisted of a detailed evaluation of selected technology and MRF/TS sites. The Task Force also adopted the "Los Angeles County Conversion Technology Report for the County of Los Angeles Department of Public Works and the Los Angeles Solid Waste Management Committee/Integrated Waste Management Task Force's Alternative Technology Advisory Subcommittee: Phase II Assessment" in 2007, which identifies four viable conversion/recovery technology suppliers and four suitable locations for potential development of a demonstration project. Following Phase II, Public Works issued a Request for Offers in 2008 to the recommended companies and sites, which resulted in the establishment of three public-private project development teams that connected a conversion/recovery technology company with a local MRF operator and site owner.

On April 20, 2010, the County Board of Supervisors unanimously approved three Memoranda of Understanding (MOU) for three conversion/recovery technology demonstration projects and awarded a contract for consultant services for Phase III and Phase IV of the Southern California Conversion Technology Demonstration Project to develop solid waste alternatives to



landfills within the County. At that time, the County Board of Supervisors also instructed the Director of Public Works, in coordination with appropriate stakeholders, to: assess the feasibility of developing a conversion/recovery technology facility at one or more County landfills, identify other potentially suitable sites within the County, and report back Public Works' findings to the County Board of Supervisors in six months.

Sixteen potential host sites for a conversion/recovery technology facility were submitted to the County. These sites are discussed in the "Los Angeles County Conversion Technology Project, Preliminary Siting Assessment," which was submitted to the County Board of Supervisors on October 20, 2010. In subsequent updates to the County Board of Supervisors, additional sites were added to that list.

During Phase IV, the County will work with various key stakeholders that include cities, solid waste facility owners and operators, and conversion/recovery technology companies, to encourage the development of mutually beneficial projects within the County. Similar to the Phase III demonstration projects, the County would support for the Phase IV project by providing technical assistance of a consultant contract and assistance with permitting grant, and loan procurement, while maximizing private-sector investment.

Concurrently, the City of Los Angeles is also conducting its own evaluation with the goal of developing conversion/recovery or other alternative technology facilities to manage the City of Los Angeles' waste stream. The City of Los Angeles' effort is highlighted by the adoption of a Resource Management Blueprint called RENEW LA (which stands "Recovering Energy Natural Resources and Economic Benefits from Waste for Los Angeles"), which promotes alternative technologies. In 2011, the City of Los Angeles Board of Public Works authorized the City of Los Angeles Bureau of Sanitation to enter into contract negotiations with a waste-to-energy company with the purpose of developing the first Alternative Technology facility in the City of Los Angeles. The proposed project would be a waste-to-energy facility in the City of Los Angeles that can manage up to 1,100 tpd. The facility would include an upfront preprocessing system (recovery of recyclables) followed by a waste to-energy system (a second generation waste-to-energy). Negotiations are underway.

Furthermore, in addition to the projects led by the County and City of Los Angeles, the County Board of Supervisors approved a CUP in 2008 for development of a \$30 million dollar cellulosic waste-to-ethanol plant adjacent to the Lancaster Landfill, in the unincorporated County area near the City of Lancaster. The proposed project, spearheaded by California-based BlueFire Renewables, Inc. (BlueFire), would consist of a commercial scale plant that would convert grass cuttings, wood chips, and other source-separated waste

into ethanol. The plant would be capable of converting 170 tpd of source-separated cellulosic materials such as green waste and wood waste, into approximately three million gallons of ethanol per year, using an acid hydrolysis and fermentation conversion/recovery technology process. The project is currently on hold; however, BlueFire is developing a similar project in Mississippi, which is funded by a \$40 million grant from the United States Department of Energy,

It should be noted that at this time, the regulatory status of conversion/recovery technologies is still uncertain due to lack of legislative support on whether conversion/recovery technologies should be categorized as solid waste disposal facilities, or need to be included and listed in a CSE.

A detailed discussion of conversion/recovery technologies is included in **Chapter 5** ("Alternative Technologies") and **Chapter 7** ("Proposed In-County Facility Locations and Descriptions") of the CSE.

#### **4.5.5 Biomass Processing Facilities**

There are no existing or proposed new biomass processing facilities in the County.

### **4.6 OUT-OF-COUNTY DISPOSAL**

#### **4.6.1 Introduction**

While the goal of jurisdictions in the County is to provide in-County disposal capacity to serve the needs of their residents, past and current experience in expansions of existing landfills underscores the magnitude of the challenge facing the County. Since no new Class III landfills are expected to be sited in the County in the foreseeable future, and since more than 15 years advance planning is required to maintain appropriate disposal capacity in the County, all available disposal options must be maximized in the event that planned capacity does not materialize.

One of these options is the disposal of County-generated waste at out-of-County facilities through rail and/or truck transport. Jurisdictions throughout the County have recognized the need for out-of-County disposal capacity to complement and extend the life of in-County disposal capacity in the present as well as in the future, even if most of the potential disposal capacity identified in the CSE is permitted.



#### 4.6.2 Available Out-of-County Disposal Capacity

Based on the disposal information from DRS reports in SWIMS, from 2000 to 2010<sup>5</sup>, on the average, approximately 80 percent of the residual solid waste generated in the County (that is destined for disposal) was disposed in the County. The remaining 20 percent was exported for disposal at out-of-County Class III landfills. The majority of the 20 percent average waste export was to surrounding counties. For example, Orange, Riverside, and Ventura Counties, respectively, received eight, eight, and two percent of the 20 percent waste exports. The remaining two percent of the exports was sent to landfills in Alameda, Fresno, Kern, Kings, San Bernardino, San Diego, Solano, and Stanislaus Counties combined.

A list of the out-of-County landfills (in the respective counties) currently receiving waste exported from the County is shown in **Chapter 9, Table 9-4**. Additionally, a list of all the out-of-County landfills that are potentially viable for exporting the County waste during the 15-year planning period is provided in **Chapter 9, Table 9-1**.

##### **Avenal Regional Landfill**

Avenal Regional Landfill is located in Kings County, owned by the City of Avenal, and operated by Madera Disposal System. The Landfill is permitted to accept 6,000 tpd with a remaining capacity of 16 million tons as of December 31, 2010. This Landfill received an average of 2,150 tpd in 2010, of which about 119 tpd were imported from Los Angeles County.

##### **Eagle Mountain Landfill, Riverside County**

Eagle Mountain Landfill is located in Riverside County, owned by Kaiser Eagle Mountain, LLC, and operated by Mine Reclamation Corporation. The Landfill is permitted to accept 10,000 tpd for the first 10 years with the option of increasing the daily limit to 20,000 tpd after a review of environmental performance. Its permitted capacity of 460 million tons and total capacity of 708 million tons would give the Landfill an approximate lifespan of 100 years as well. Due in part to pending Federal litigation and a bankruptcy filing by the landfill developer, the County Sanitation Districts of Los Angeles County (CSD) has not closed escrow on the purchase of the Landfill. Therefore, its capacity is not included in this Chapter's analysis of the disposal capacity need during the planning period.

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<sup>5</sup> In 2010, approximately 1,761,293 tons (5,645 tpd) of solid waste were exported to out-of-County facilities for disposal.

### **El Sobrante Landfill, Riverside County**

The El Sobrante Landfill in Riverside County has a remaining capacity of 114 million tons<sup>6</sup>; is permitted to receive 70,000 tons per week (with 16,054 tpd limits of waste for disposal); and has a permit expected to expire in 2045. This Landfill received an average of 6,491 tpd in 2010, of which about 3,000 tpd were imported from the County. Optimistically, the Landfill could receive up to 4,000 tpd from the County through the 15-year planning period.

### **Frank R. Bowerman Sanitary Landfill, Olinda Alpha Sanitary Landfill, and Prima Deshecha Sanitary Landfill, Orange County**

Collectively, these Landfills received 2,000 tpd from Los Angeles County in 2010. Orange County currently has waste importation agreements with various entities in Los Angeles County that are expected to expire in 2015. It is assumed that these Landfills could receive up to 4,500 tpd from Los Angeles County through Orange County's waste importation agreements with various entities in Los Angeles County.

### **Mesquite Regional Landfill, Imperial County**

Mesquite Regional Landfill is Class III landfill located in Imperial County with a maximum permitted capacity of 20,000 tpd. The CSD closed escrow on the fully permitted Landfill in December 2002. Since then, the CSD has completed long-term site planning, followed by design and construction of all the infrastructure needed for site operations. The Landfill has been capable of receiving refuse since the end of 2008. By the end of 2011, the rail yard and spur were completed and capable of receiving refuse by rail.

Mesquite Regional Landfill has a disposal capacity of 1.1 billion cubic yards (660 million tons) and an approximate lifespan of 100 years at the 20,000 tpd daily rate. Southern California communities can transport 20,000 tpd to the Landfill by a combination of rail or truck (as described below), with up to 1,000 tpd of that capacity reserved for use by Imperial County jurisdictions.

In 2011, CUP #1036-91 was amended to allow 4,000 tpd of out of county waste to be trucked to the Landfill. Additionally, the Landfill can receive 600 tpd of non-hazardous incinerator ash from Los Angeles County. Rail operations are most efficient when unit trains are loaded with 4,000 tons of refuse. The amendment to allow waste delivery by truck avoids inefficient and costly rail operations transporting fragments of a unit train. See **Tables 9-1 and 9-2, Fact Sheet 9-2** and **Figure 9-2** for more detailed information on the Landfill.

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<sup>6</sup> Remaining capacity of 114 million tons for El Sobrante Landfill is based on 2010 Annual Report.

### **Simi Valley Landfill and Recycling Center, Ventura County**

The Simi Valley Landfill and Recycling Center in Ventura County, has a combined permitted capacity of 9,250 tpd for all incoming materials, which may include both MSW and recyclables with a remaining capacity of 72 million tons. More specifically, the Landfill is limited to 6,000 tpd of MSW and 3,250 tpd of recyclables. Currently, Simi Valley Landfill and Recycling Center receives an average of 850 tpd from Los Angeles County.

### **Other Out-of-County Landfills**

Additionally, other existing and proposed new out-of-County landfills located in California that could accept solid waste from the County also exist (see **Chapter 9, Table 9-1**).

Based on the analysis in the Scenario **Tables 4-10 to 4-18**, the current and future available disposal capacity provided by the out-of-County landfills (listed in **Table 9-1** of **Chapter 9**), will provide adequate out-of-County disposal capacity to cover the Class III landfill export need and permitted daily capacity need during the 15-year planning period. However, this conclusion takes into consideration the following assumptions:

- a) The amount of export capacity (i.e., out-of-County disposal capacity) available for the County would continue to be available as indicated in **Chapter 9, Tables 9-1 and 9-4**.
- b) The amount of current exports will steadily increase in concert with closure of in-County landfills as anticipated.
- c) In-County alternative technology (e.g., conversion/recovery technology) facilities will be developed and sited.

## **4.7 IN-COUNTY TRANSFER AND PROCESSING FACILITIES' CAPACITY**

Currently, there are approximately 47 materials recovery facilities (MRFs); 19 transfer stations (TS); and 6 construction, demolition, and inert (CDI) debris processing facilities<sup>7</sup> operating in the County that transport MSW inside and outside the County. The permitted capacity for the 47 MRFs, 19 TSs, and 6 CDI debris processing facilities is approximately 64,000 tpd, 3,000 tpd, and 6,000 tpd, respectively. The total combined permitted capacity for the 47 MRFs, 19 TSs, and 6 CDI debris processing facilities is 73,000 tpd. The average daily intake for the 47 MRFs, 19 TSs, and 6 CDI debris processing facilities is approximately 14,000 tpd, 200 tpd, and 800 tpd, respectively. The total

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<sup>7</sup> The CDI debris processing facility's capacity discussed in this Chapter does not include recycling centers (per CalRecycle 3-part test) and source separated C&D Waste Recycling facilities.

combined average daily intake is approximately 15,000 tpd. In the status-quo scenario (see **Table 4-10**), the daily export need based on available daily disposal capacity is approximately 24,000 tpd.

For the major MRFs, TSs, and CDI debris processing facilities only, currently there are approximately 26 MRFs, 2 TSs, and 4 CDI debris processing facilities operating in the County that transport MSW inside and outside the County. The permitted capacity for the 26 MRFs, 2 TSs, and 4 CDI debris processing facilities is approximately 62,000 tpd, 300 tpd, and 3,000 tpd, respectively. The total combined permitted capacity for the 41 MRFs, 18 TSs, and 6 CDI debris processing facilities is 65,300 tpd. The average daily intake for the 26 MRFs, 2 TSs, and 4 CDI debris processing facilities is approximately 26,000 tpd, 300 tpd, and 1,500 tpd, respectively. The total combined average daily intake is approximately 27,800 tpd.

In the status quo scenario based on the disposal capacity need analysis (see **Table 4-10**), the total maximum daily disposal need for the entire County (for both in-County and out-of-County disposal) during the planning period (2010 – 2025) is approximately 38,000 tpd, and the maximum export need for out-of-County disposal is 24,000 tpd, both of which occur in 2025.

Assuming, conservatively, that the total permitted capacity in the County will be provided mostly by the major MRFs, TSs, and CDI debris processing facilities is 65,300 tpd. Since the total combined permitted transfer and processing capacity of the MRFs, TSs, and CDI debris processing facilities located in the County is greater than the maximum amount (39,000 tpd) of waste generated in the entire County during the planning period that needs to be disposed, by default, there is adequate in-County transfer and processing capacity to handle any amount of waste (e.g., 18,000 tpd) that needs to be exported to out-of-County landfills.

It should be noted that even though the amount of permitted transfer or processing capacity of the MRFs, TSs, and CDI debris processing facilities in the County is adequate, the distribution of these facilities countywide is not adequate because the vast majority of the MRFs, TSs, and CDI debris processing facilities are located in the South Bay area of the County with only two facilities located in the northern part of the County (Antelope Valley and Santa Clarita Valley areas). To maximize the recycling of waste generated in the county, more MRF's, TSs, and CDI debris processing facilities are needed countywide.

However, as local waste disposal capacity options diminish within the County and with the anticipated development of Puente Hills Intermodal Facility by CSD, MRF operators may also elect to utilize rail transport to ship waste to out-of-County landfills for disposal (see **Chapter 9, Table 9-6**).

Waste-by-truck remains a viable and economical option to transport waste to other out-of-County and remote landfills, particularly for distances less than 200 miles. Other proposals for transporting waste out of the County by sea or combination of various transportation modes are discussed in detail in Chapter 9 of the CSE (see **Chapter 9, Section 9.5**).

## **4.8 DISPOSAL CAPACITY NEED ANALYSIS**

### **4.8.1 Disposal Capacity Need Analysis**

The disposal capacity need analysis allows a comparison of the projected date when a shortfall in the daily permitted disposal capacity is expected to occur for the various scenarios. To accurately predict when a shortfall in total disposal capacity will be experienced, it is necessary to compare the maximum permitted daily capacity available with the County's daily disposal requirements, with full consideration of the facilities' restrictions/constraints.

The disposal capacity need analysis is presented in nine scenarios described in **Section 4.10** and analyzed in **4-10** through **4-18**, and summarized in **Sections 4.11, Table 4-9, and Figures 4-4** through **4-13**. The analysis considers factors listed and discussed in this Chapter, the disposal capacity needs for the County as a whole, and the total disposal capacity at all disposal facilities countywide. Also, as previously indicated, the two transformation facilities in the County are expected to continue operating through the 15-year planning period, and there is currently adequate inert debris/waste landfill capacity in the County. Therefore, the disposal capacity need analysis primarily evaluates the need for additional Class III landfill capacity.

### **4.8.2 Disposal Capacity Need Analysis Methodology**

The disposal capacity need analysis methodology involves multiple steps and various factors. The major steps and factors are as follows:

- **Base year:** Determine the base year (2010) based on the best available data and information (e.g., SWIMS, latest available landfill survey, and 2010 Annual Report data).
- **Planning period:** Determine the planning period (2010-2025) based on the best available data and information (e.g., SWIMS, latest available landfill survey, and 2010 Annual Report data). For the purpose of the CSE, the planning period begins in the year 2010 and ends in the year 2025.
- **Base year waste disposal:** Determine the amount of solid waste generated within the County that is: (1) disposed at in-County Class III

landfills and transformation facilities (excluding disposal at inert waste landfills), and (2) disposed at out-of-County disposal facilities during the base year (2010). (See **Section 4.5.1, Tables 4-5 and 4-8.**)

- **Base year solid waste generation:** Determine the amount of solid waste generated in the County in the base year (i.e., 62,467 tpd in 2010) using the actual base year disposal rate (excluding disposal at inert waste landfills), assuming 55 percent diversion rate, and excluding imports. (See **Table 4-5.**) Based on the latest CalRecycle-approved per capita waste generation rate of 15 tpd (for unincorporated areas only), and 2010 population of 9,836,100, the base year solid waste generation rate is 62,467 tpd. There is no approved countywide per capita generation rate; therefore, for the purposes of the CSE, the solid waste generation rate of 62,467 tpd is being used.
- **Solid waste generation projection factors:** Determine the solid waste projection generation factors based on the latest University of California, Los Angeles (UCLA) Anderson Long-Term Forecast for Los Angeles County (dated July 2011) for population, employment, and taxable sales; or other approved indices and forecasts. (See **Section 4.5.3, Table 4-6 and Figure 4-3.**)
- **Solid waste generation projection:** Determine the amount of solid waste that would be generated for each year during the planning period using the CalRecycle-approved Adjustment Methodology. (See **Sections 4.5.2 and 4.5.4 and Table 4-6.**)
- **Solid waste disposal capacity requirement:** Determine the Class III landfill cumulative annual disposal capacity requirements (see **Table 4-7**) during the planning period, and the year the remaining permitted combined disposal capacity of existing solid waste disposal facilities in the County would be exhausted, assuming 55 percent diversion rate, in-place density/conversion factor of 1,200 pounds per cubic yard, and subtracting the available transformation facility capacity. (See **Section 4.6 and Table 4-8.**)
- **Daily solid waste generation rate:** Determine the daily solid waste generation rate for each year during the planning period, based on the annual waste generation tonnage, and assuming 312 operating days per year (i.e., 6-day per week average). (See **Tables 4-6 and 4-7.**)
- **Disposal capacity need analysis scenarios:** Determine the various disposal capacity analysis scenarios. (See **Section 4.10, Scenario Nos. 1 to 9, Tables 4-10 through 4-18.**)



- **Total daily disposal demand:** For each scenario, determine the total daily disposal demand based on the daily solid waste generation rate and the assumed diversion rates for the scenario.
- **Class III landfill daily disposal demand:** For each scenario, determine the Class III landfill remaining daily disposal capacity demand from the total daily disposal need by: (1) adding daily waste import rate, (2) subtracting the maximum daily transformation facility capacity, and (3) subtracting the maximum available daily alternative technology capacity.
- **Total available capacity from Class III landfills:** For each scenario, determine the total available capacity from existing Class III landfills in the County by: (1) adding the daily disposal rate for all the existing landfills (using average disposal rate for landfills with wasteshed and maximum permitted daily disposal rate for the rest of the landfills), (2) assuming 312 operating days per year (i.e., 6-day per week average), and (3) taking into consideration all landfill expansions and closures. (See **columns 1 to 11 of Tables 4-10 to 4-18.**)
- **Remaining capacity at year's end:** For each scenario, determine the remaining capacity in each year during the planning period for the existing Class III landfills in the County by: (1) adding the remaining permitted landfill capacity for the existing Class III landfills in the County, and (2) taking into consideration all landfill expansions and closures (see **columns 1-11 of Tables 4-10 to 4-18**). The total expected remaining permitted landfill capacity for the subsequent years is determined by using the maximum permitted daily disposal rate and assuming 312 operating days per year (i.e., 6-day per week average). (See **Figure 4-13.**)
- **Daily export need:** For each scenario, determine the daily export need by subtracting the total expected daily disposal capacity from the Class III landfill disposal need. (See **Tables 4-10 to 4-18 and Figure 4-14.**)
- **Exports to available out-of-County disposal facilities:** Determine the current and future available out-of-County disposal capacity (i.e., export capacity) by summing up all the current and projected future export rates to the current out-of-County Class III landfills located in California that are potentially available to accept waste from jurisdictions within the County during the planning period. (See **Chapter 9, Table 9-6.**)
- **Class III landfill daily disposal capacity shortfall (reserve):** For each scenario, determine the daily disposal capacity shortfall (reserve) by subtracting the export need from the available out-of-County disposal capacity. (See **Tables 4-10 to 4-18 and Figure 4-15.**)

### 4.8.3 Class III Landfill Restrictions

Factors that severely hinder the accessibility of available Class III landfill permitted disposal capacity include: expiration of the LUP, WDR Permit, SWFP, and Air Quality Permits; restrictions on the acceptance of waste generated outside jurisdictional and/or watershed boundaries; permit restrictions on the amount of waste that can be accepted daily and/or weekly; geographic barriers; and/or limitations on the amount of waste that can be handled by a facility on a daily basis due to the lack of manpower and equipment.

One of the critical limiting factors is the watershed restrictions, including restriction on origin of waste by the host jurisdiction. For example, as discussed in Chapter 3 and further summarized in **Table 4-8**, Savage Canyon Landfill can only receive solid waste generated within the City of Whittier; Burbank Landfill only accepts waste generated within the City of Burbank, which is collected by City of Burbank crews; Puente Hills Landfill is prohibited from receiving any waste originating from the City of Los Angeles and Orange County. Moreover, Calabasas and Scholl Canyon Landfills only accept solid waste generated within their defined watersheds, and San Clemente Landfill is not open to the public.

Other critical factors that greatly impact a landfill operation include the daily quantity of solid waste that a landfill facility can accept (permitted daily capacity), and permitted disposal capacity as established by local jurisdictions/regulatory agencies. Under these circumstances, if no expansions of existing facilities occur or alternative technology facilities are developed, and waste disposal continues to increase, the County will experience shortfalls in permitted daily disposal capacity.

### 4.8.4 California Senate Bill 1016 (SB 1016)

With the implementation of California Senate Bill 1016 (SB 1016), CalRecycle no longer calculates diversion rate based on actual disposal and estimated annual generation using its Adjustment Methodology. Instead, per capita disposal equivalent is calculated using an approved jurisdiction-specific average of per capita generation rates of years 2003 to 2006 (see **Table 4-19**). Jurisdictions are given individual targets and reviewed case by case (see Tables 4-20 and 4-21). Based on current projections of population, employment, and real taxable sales, it is estimated that in order to meet the per capita disposal requirements, jurisdictions in the County would need to continue their diversion programs and other disposal strategies so that the diversion rate remains at 55 percent through 2025, as shown in **Table 4-20** and presented in **Figure 4-9**).



#### 4.9 DISPOSAL NEED PROJECTIONS FOR THE PLANNING PERIOD (2010 – 2025)

CCR, Title 14, Section 18755.3 (b) requires a description of the anticipated disposal capacity needs for the 15-year planning period beginning with the year the CSE is prepared, and in any year the CSE is revised.

##### 4.9.1 Base Year Waste Generation and Disposal

The year 2010 is used as the base year for projecting future waste generation quantities because it is the year for which the most current and complete disposal data is available.

In 2010 the approximate total disposal quantity distribution (of solid waste originating within the County) among the various types of disposal facilities were as follows (see **Figure 4-16**):

In-County Class III landfills	6,313,263	tons
In-County Transformation facilities	539,129	tons
In-County Permitted Inert Waste landfills	54,964	tons
Exports to out-of-County Class III landfills	1,917,993	tons
<b>Total Disposed</b>	<b>8,825,349</b>	<b>tons</b>

In summary, jurisdictions within the County disposed of approximately 8,770,385 tons of solid waste at Class III landfills and transformation facilities located in and out of the County (excluding inert waste disposed at permitted inert waste landfills). **Table 4-5** shows the 2010 disposal quantities for solid waste disposed at Class III in-County landfills and in-County transformation facilities. Out-of-County exports to Class III landfills are also taken into consideration. The 2010 solid waste generation of 19,141,522 tons (the basis of the solid waste generation projections) was calculated assuming a diversion rate of 55 percent. This estimate of waste generation excludes disposal at the inert waste landfills that do not have Full or Registration tier SWFPs.

The above disposal quantities for solid waste generated in the County translate into a 2010 average disposal rate of approximately 28,110 tpd (six days per week) Countywide (i.e., 20,235 tpd at Class III landfills, 1,728 tpd at transformation facilities, and 6,147 tpd exported to out-of-County Class III landfills). The disposal quantities at permitted inert waste landfills, translate to approximately 176 tpd. **Table 4-8** lists existing permitted landfills and transformation facilities, and the quantities of solid waste disposed that originated within the County.

In addition, approximately 675 tpd (6 days per week) were imported for disposal at in-County Class III landfills, permitted inert waste landfills, and transformation facilities.

In order to determine the 2010 solid waste generation quantities, a diversion rate must be either quantified or assumed. Since there is currently no accurate method of measuring waste diversion, the total diversion amount was assumed as a percentage of total waste generated.

The latest (i.e., 2006) CalRecycle–approved diversion rate for the entire County was 58 percent. However, for the purposes of the disposal capacity need analysis in this Chapter, various scenarios are analyzed including: (1) a conservative 55 percent diversion rate; (2) a medium 65 percent diversion rate; and (3) an optimistic 75 percent diversion rate for the planning period (2010 to 2025).

#### **4.9.2 Waste Generation Projection Methodology**

A number of alternatives were considered for use in projecting Countywide waste generation for the 2010 - 2025 planning period. These include use of the waste generation growth factors from each jurisdiction's Source Reduction and Recycling Element (SRRE), an adaptation of CalRecycle's Adjustment Methodology, and waste generation growth rates based on population growth projections.

The use of growth factors from each jurisdiction's SRRE was not selected because of the complexity involved in projecting waste generation for 88 individual jurisdictions. In many instances, the jurisdiction's projections were based on jurisdiction-specific population and economic growth projections that are either difficult to emulate or that may now be outdated.

Other methodologies, such as the projection of per capita waste generation in conjunction with population trends, were not used because they fail to consider the impact that changes in economic conditions has on waste generation. As discussed later in this Section, nearly three-fifths of all solid waste generated in the County can be attributed to economic activity (i.e., about 73 percent of all waste generated in the County was generated by commercial/industrial sources). Major changes in economic activity would have a significant impact on waste generation; however, population-based methods do not consider this important factor. For example, linearly projecting the per capita waste generation data for 2006 through 2010 (a recessionary period) and using the projected per capita waste generation figures to project total waste generation, incorrectly assumes that the recession of the late 2000s would continue into the future without any economic recovery.

The use of growth rates based on population growth projections was considered since population projections are available from the California Department of Finance through the year 2025. However, projections based on population growth fail to account for economic downturns or a resumption of strong economic growth, which may have a significant effect on solid waste generation. Therefore, this alternative was not selected.

The projection methodology selected for use in the CSE consists of projecting solid waste generation using CalRecycle's Adjustment Methodology, which is described below.

#### 4.9.2.1 Description of the Adjustment Methodology

PRC, Section 41780.1(c), mandates that before measuring compliance with the solid waste diversion goal of 50 percent for the years 1995 and 2000, respectively, each jurisdiction must use a CalRecycle-approved standard Adjustment Methodology when calculating their maximum allowable disposal quantity for the year.

The CalRecycle-approved Adjustment Methodology measures how increases or decreases in population, employment, inflation-adjustable taxes sales, and special events (such as natural disasters) affect waste generation amounts. The Adjustment Methodology provides jurisdictions with a tool to measure their progress in reducing solid waste disposal and to estimate future disposal quantities.

The Adjustment Methodology formula uses a combination of ratios of base year to target year population, employment, and taxable sales to calculate target year solid waste generation, and maximum allowable disposal amounts based on established diversion goals. Since population, employment, and taxable sales influence residential waste generation rates differently than waste generated by non-residential sectors (i.e., commercial, industrial, etc.), the formula also provides correction factors to address these variances. As such, residential waste quantities are calculated separately from non-residential solid waste and then combined.

The Adjustment Methodology formula as adopted by CalRecycle is expressed as follows:

**Estimated Solid Waste Generation for the Reporting Year =**

$$= [(B-Y \text{ RWG}) (RAF)] + [(B-Y \text{ NWG}) (NAF)]^8$$

Where:

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<sup>8</sup> The Estimated Solid Waste Generation for the Reporting Year formula and the variables in the formula are similar and consistent with the CalRecycle Adjustment Method Formula.

**B-Y RWG** = Base-Year Residential Waste Generation

**B-Y NWG** = Base-Year Non-residential Waste Generation

**RAF** = Residential Adjustment Factor =

$\{(PR/PB) + [ER/EB + (CB/CR * TR/TB)]/2\}/2$

**NAF** = Non-residential Adjustment Factor =  $[ER/EB + (CB/CR * TR/TB)]/2$

**PR** = Population in the Reporting Year

**PB** = Population in the Base Year

**ER** = Employment in the Reporting Year

**EB** = Employment in the Base Year

**CR** = Consumer Price Index in the Reporting Year

**CB** = Consumer Price Index in the Base Year

**TR** = Taxable Sales in the Reporting Year

**TB** = Taxable Sales in the Base Year

Also note:

- Population is based on Countywide Population Projection<sup>9</sup>;
- Employment is based on Countywide Employment Projection (which only accounts for non-farm employment)<sup>10</sup>;
- Consumer Price Index ratio for the purpose of the CSE is considered as 1.0<sup>11</sup>; and
- Taxable Sales is based on Countywide Real Taxable Sales (which is considered the real dollar value)<sup>12</sup>.

It can be seen that the Adjustment Methodology predicts that increases/decreases in employment and taxable sales would have an impact on non-residential waste generation and, to a lesser extent, residential waste generation. Also, it can be seen that increases in population would have a direct impact on residential waste generation only. This does not mean, however, that changes in population would have no effect on non-residential waste generation, since employment and taxable sales are intrinsically related to population.

It should be noted that when jurisdiction-specific data is not available, or when state-supplied data is not considered to be truly representative of a jurisdiction's situation, the Adjustment Methodology allows the jurisdiction to develop and

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<sup>9</sup> Source: UCLA Anderson Long-Term Forecast of Los Angeles County, July 2011.

<sup>10</sup> See Footnote 14.

<sup>11</sup> Source: 2010 Annual Report, October 2011.

<sup>12</sup> See Footnote 14.

use locally-developed alternative data, countywide data, or other data that the jurisdiction deems representative of its situation.

#### 4.9.3 Waste Generation Projection Factors

Projections of solid waste generation for the 15-year planning period were calculated using CalReCycle's Adjustment Methodology. The Adjustment Methodology was adopted for projecting waste generation by utilizing projections of future population, employment, and taxable sales. The graph in **Figure 4-3** shows the resulting projections for population, employment, and taxable sales.

The use of the Adjustment Methodology requires knowledge of the distribution of waste generation by sector (residential and non-residential). The use of the Adjustment Methodology to project waste generation requires projections of the above factors through the year 2025. The following discusses the best available data and how it was applied using the Adjustment Methodology.

##### 4.9.3.1 Distribution of Waste Generation by Sector

No data is available on the distribution of waste generation by sector for 2006 and future years. However, the proposed new generation-based study year (2005) data provided in each jurisdiction's SRRE for the base year (2005) is used to determine the 2005 countywide waste generation distribution by sector. The distribution is as follows:

- 2009 Residential Waste Generation = 27 percent<sup>13</sup> of total waste generation
- 2009 Non-Residential Waste Generation = 73 percent<sup>14</sup> of total waste generation

The proposed generation-based study represents the current efforts by both the public and private sectors to divert generated materials from landfill disposal. The proposed diversion rate more accurately reflects the diversion taking place as a result of the countywide implementation of new and enhanced waste diversion, recycling, and education programs that has enhanced the waste diversion capabilities of the County.

##### 4.9.3.2 Population Projections

The population projections for the County are available from the California

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<sup>13</sup> Residential percentage means that portion of a jurisdiction's waste stream created by single- and multi-family residences. The percentage of residential versus non-residential waste to the total waste generation used herein, is the same percentage used in the 2010 Annual Report; however, all data and percentages are subject to change as new information becomes available.

<sup>14</sup> See Footnote 7.

Department of Transportation (CDT) and UCLA for each year during the planning period. The UCLA Anderson Long-Term Forecast of Los Angeles County, which indicates an approximate increase in population of 10.7 percent toward the end of the 15-year planning period, was used to yield slightly more conservative projections. The graph in **Figure 4-3** shows the resulting projections for population, employment, and taxable sales.

#### **4.9.3.3 Employment**

The employment projections are available from the CDT and UCLA for each year during the planning period. However, the CDT projections and UCLA projections are nearly identical, with UCLA projecting an employment increase of approximately 26 percent by the end of the 15-year planning period. UCLA projections were used because the data has been recently updated, when compared to the data from the CDT. The graph in **Figure 4-3** shows the resulting projections for population, employment, and taxable sales.

#### **4.9.3.4 Taxable Sales**

Countywide taxable sales projections are available from the UCLA Anderson Long-Term Forecast for Los Angeles County, for each year during the planning period. The figures were available in constant dollars and do not need to be further adjusted for inflation. The graph in **Figure 4-3** shows the resulting projections for population, employment, and taxable sales.

#### **4.9.4 Waste Generation Projections for the Planning Period (2010-2025)**

The resulting projections in waste generation, diversion, and disposal for each year of the 15-year planning period are shown in **Table 4-6**. This table also shows the needed Class III landfill disposal capacity for each year of the planning period. The analysis assumes that the County will be responsible for management of solid waste generated in the County. As such, the analysis does not take credit for that portion of solid waste that is exported out-of-County and neither does it consider any capacity for imported solid waste to the County.

#### **4.10 DISPOSAL CAPACITY NEED ANALYSIS SCENARIOS**

The disposal capacity need analysis presented below considers ten scenarios (see **Tables 4-10 to 4-18**), which are briefly described and summarized in **Tables 4-9** and graphed in **Figures 4-4** through **4-15**.

The following major assumptions are made in all nine scenarios:

- The base year is 2010.

- The planning period is 2010-2025.
- The disposal need analysis period is 2010-2025.
- The existing Class III landfill capacity is based on the permitted capacity as determined in the permit (e.g., SWFP, CUP/LUP, WDR, and AQMD).
- Termination of landfill capacity is based on the most restrictive of the following factors: (1) exhaustion of permitted capacity, (2) completion of approved fill design, (3) expiration of permit (e.g., CUP/LUP, SWFP, WDR, and AQMD), and (4) the closure date. Both the closure date due to exhaustion of capacity (CC) and closure date due to permit expiration (CP) are shown in the disposal capacity need analysis table for all scenarios. (See **Tables 4-10** through **4-18**.)
- Inert waste landfills under the Inert Debris Engineered Fill Operations tier are not included in the disposal capacity need analysis.
- No new Class III landfill within the County during the planning period.
- Full implementation of California Assembly Bill 939 (AB 939) waste diversion programs and the achievement of the waste diversion mandate of 50 percent during the planning period. However, based on the recent countywide diversion rate, a 55 percent diversion rate is assumed.
- The 2010 average daily import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period in 2025.
- Transformation facilities are assumed to operate at their average permitted daily capacity and their combined total capacity is shown in the scenario analysis tables.
- Expected daily tonnage rates for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine Landfills are based on permitted daily disposal capacity; and for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) Landfills are based on the average daily disposal tonnages for the period of January 1, 2010 to December 31, 2010.
- Export need is considered part of the Class III landfill disposal need.
- The Class III landfill remaining capacity at year's end is determined based on the expected average daily tonnage during the planning period.



Comparison of the total Class III landfill remaining capacity for all scenarios is presented in **Figure 4-6**.

- The 2010 remaining permitted capacity for each of the Class III landfill are based on data presented in **Table 4-8**.
- The daily export need and the daily disposal capacity shortfall (reserve) are determined based on maximum permitted daily disposal capacity. However, for the purpose of the analysis, the average daily disposal capacity is used as the maximum permitted daily disposal capacity for landfills with wasteshed restrictions. The summary of export need (see **Figures 4-7**) and Class III landfill daily disposal capacity shortfall (reserve) (see **Figure 4-8**) is shown for comparison.
- The solid waste exports from the County will continue during the planning period regardless of the adequacy of in-County disposal capacity.
- The tons per day are assumed as the average daily tonnage, operating six days per week.

The portions of the disposal capacity need analysis scenario tables (see **Tables 4-10 to 4-18**) dealing with (1) in-County Class III landfills' maximum permitted, average daily, and remaining capacity; (2) total available capacity from Class III landfills; (3) export need; (4) available out-of-County disposal capacity; and (5) Class III landfill daily disposal capacity shortfall (reserve), are organized as follows:

- **Columns 1 through 11**, under the "in-County Class III landfills", list the daily permitted capacity, average daily rate, and remaining daily capacity projected for each existing in-County Class III landfill for each year during the planning period.
- **Column 12** shows the total permitted daily capacity at the end of each year of the planning period for all in-County Class III landfills. The total permitted daily capacity is calculated based on the maximum permitted daily capacity (for landfills without restrictions) and the average daily rate (for landfills with restrictions).
- **Column 13** shows the export need at the end of each year of the planning period. The export need analysis is calculated based on the maximum permitted daily capacity (for landfills without restrictions) and the average daily rate (for landfills with restrictions). The export need is shown as a positive "(+)" value when there is a need for export, and a negative "(-)" value when there is no need for export.



- **Column 14** shows the available out-of-County disposal capacity. This amount is based on current and projected future available out-of-County disposal capacity (i.e., export capacity) to the current out-of-County Class III landfills located in California that are potentially available to accept waste from jurisdictions within the County during the planning period.
- **Column 15** shows the projected Class III landfill daily disposal capacity shortfall (reserve). The Class III landfill daily disposal capacity shortfall (reserve) analysis is calculated based on the maximum permitted daily capacity (for landfills without restrictions) and the average daily rate (for landfills with restrictions). The projected Class III landfill daily disposal capacity shortfall is shown as a positive “(+)” value when there is a shortfall in the remaining daily disposal capacity, and a negative “(-)” value when there is a reserve (excess) in the remaining daily disposal capacity.

#### 4.10.1 Scenario No. 1 - Status Quo Scenario

Scenario No. 1 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of currently available out-of-County landfill disposal capacity; (3) no new and/or proposed expansions of existing Class III landfills and/or transformation facilities will become operational within the County; (4) no increase in diversion rate beyond 55 percent; and (5) no capacity through alternative technologies (e.g., conversion/recovery technologies). The analysis for Scenario No. 1 is presented in **Table 4-10**, **Figures 4-4** and **4-5**, and summarized in **Tables 4-9** and **4-19** through **4-21**.

##### **Solid Waste Diversion Rate**

Scenario No. 1 also assumes the following with respect to solid waste diversion rate:

- AB 939 Mandate

The analysis assumes achievement of the AB 939 waste diversion mandate of 50 percent throughout the planning period. However, based on the recent Countywide diversion rate, a 55 percent diversion rate is assumed throughout the planning period.

##### **Solid Waste Imports**

Scenario No. 1 also assumes the following with respect to solid waste imports:

- The current import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period.

### **Daily Export Need**

The daily export need is listed in the 13th column of **Table 4-10** and presented in **Figure 4-7**.

The export need analysis shows that there would be no export need from 2010 through 2013. However, there would be export need from 2014 through 2025, with the most export need in 2025 (24,014 tpd).

### **Available Out-of-County Disposal Capacity**

Scenario No. 1 also assumes the following with respect to solid waste exports:

- Currently Available Out-of-County Disposal Capacity

The currently available out-of-County disposal capacity (i.e., export capacity) is 6,147 tpd. The available out-of-County disposal capacity for subsequent years is assumed at 6,200 tpd<sup>15</sup> through the end of the planning period (2025).

### **Daily Disposal Capacity Shortfall (Reserve)**

The daily disposal capacity shortfall (reserve) is listed in the last column of **Table 4-10** and presented in **Figure 4-8**.

The analysis shows that there would be no shortfall from 2010 through 2013. However, there would be shortfalls from 2014 through 2025, with the most shortfall in 2025 (17,814 tpd).

Therefore, additional disposal capacity (either in-County or out-of-County) would be necessary in some years during the planning period to provide for the solid waste disposal needs of the 88 cities in the County and the County unincorporated areas.

#### **4.10.2 Scenario No. 2 - Increase in Diversion Rate (up to 65% by 2025)**

Scenario No. 2 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of currently available out-of-County landfill disposal facilities; (3) no new and/or proposed expansions of existing Class III landfills within the County; (4) increase in diversion rate (up to 65 percent by 2025), and (5) no capacity through alternative technology (e.g., conversion/recovery

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<sup>15</sup> The available out-of-County disposal capacity (i.e., export capacity) for subsequent years (2011-2025) is not reduced by the amount lost due to the expiration of the export agreements with Orange County landfills because the loss is made up by increased export to other out-of-County landfills.

technology). The analysis for Scenario No. 2 is presented in **Table 4-11** and **Figures 4-4** and **4-5**, and summarized in **Tables 4-9** and **4-19** through **4-21**.

### **Solid Waste Diversion Rate**

Scenario No. 2 also assumes the following with respect to solid waste diversion rate:

- AB 939 Mandate

The analysis assumes the achievement of the AB 939 waste diversion mandate of 50 percent throughout the planning period.

- Increase in Diversion Rate

This scenario demonstrates the effect an increase in diversion rate would have on the County's disposal needs. Starting from 2016, the diversion rate is assumed to increase to 56 percent and subsequently increase by one percent each year, reaching 65 percent by 2025. An increase in diversion rate could be a tool the County may use to address the disposal capacity needs. This increase in diversion rate represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. As a result, future programs geared toward diversion are expected to take on greater significance during the planning period.

### **Solid Waste Imports**

Scenario No. 2 also assumes the following with respect to solid waste imports:

- The current import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period.

### **Daily Export Need**

The daily export need is listed in the 13th column of **Table 4-11** and presented in **Figure 4-7**.

The export need analysis shows that there would be no export need from 2010 through 2013. However, there would be export need from 2014 through 2025, with the most export need in 2019 (15,988 tpd).

### **Available Out-of-County Disposal Capacity**

Scenario No. 2 also assumes the following with respect to solid waste exports:

- Currently Available Out-of-County Disposal Capacity

The currently available out-of-County disposal capacity (i.e., export capacity) is 6,147 tpd. The available out-of-County disposal capacity for subsequent years is assumed at 6,200 tpd<sup>16</sup> through the end of the planning period.

#### **Daily Disposal Capacity Shortfall (Reserve)**

The daily disposal capacity shortfall (reserve) is listed in the last column of **Table 4-11** and presented in **Figure 4-8**.

The analysis shows that there would be no shortfall from 2010 through 2013. However, there would be shortfalls from 2014 through 2025, with the most shortfalls in 2019 (9,788 tpd).

Therefore, additional disposal capacity (either in-County or out-of-County), would be necessary in some years during the planning period in order to adequately provide for the solid waste disposal needs of the 88 cities in the County and the County unincorporated areas.

#### **4.10.3 Scenario No.3 – Utilization of Alternative Technology Facility Capacity (up to 2,300 tpd by 2025)**

Scenario No. 3 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of currently available out-of-County landfill disposal capacity; (3) no new and/or proposed expansion of existing Class III landfills and/or transformation facilities will become operational within the County; (4) increase in diversion rate (up to 65 percent by 2025); and (5) utilization of alternative technology (e.g. conversion/recovery technology) facility capacity (up to 2,300 tpd by 2025). The analysis for Scenario No. 3 is presented in **Table 4-12** and **Figures 4-4** and **4-5**, and summarized in **Tables 4-9** and **4-19** through **4-21**.

#### **Solid Waste Diversion Rate**

Scenario No. 3 also assumes the following with respect to solid waste diversion rate:

- AB 939 Mandate

The analysis assumes the achievement of the AB 939 waste diversion mandate of 50 percent throughout the planning period.

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<sup>16</sup> See Footnote 16.

- Increase in Diversion Rate

This scenario demonstrates the effect an increase in diversion rate would have on the County's disposal needs. Starting from 2016, the diversion rate is assumed to increase to 56 percent and subsequently increase by one percent each year, reaching 65 percent by 2025. An increase in diversion could be a tool the County may use to address the disposal capacity needs. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. As a result, future programs geared toward diversion are expected to take on greater significance during the planning period.

### **Solid Waste Imports**

Scenario No. 3 also assumes the following with respect to solid waste imports:

- The current import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period.

### **Alternative Technology Facility Capacity**

Scenario No. 3 also assumes the following with respect to alternative technology capacity:

- The scenario assumes that conversion/recovery and other alternative technology facilities will be used to manage about 1,300 tpd starting in 2017 and up to 2,300 tpd by 2025.

### **Daily Export Need**

The daily export need is listed in the 13th column of **Table 4-12** and presented in **Figure 4-7**.

The export need analysis shows that there would be no export need from 2010 to 2013. However, there would be export need from 2014 through 2025, with the most export need in 2019 (14,780 tpd).

### **Available Out-of-County Disposal Capacity**

Scenario No. 3 also assumes the following with respect to solid waste exports:

- Currently Available Out-of-County Disposal Capacity

The currently available out-of-County disposal capacity (i.e., export capacity) is 6,147 tpd. The export quantities for the subsequent years are assumed at 6,200 tpd<sup>17</sup> through the end of the planning period.

#### **Daily Disposal Capacity Shortfall (Reserve)**

The daily disposal capacity shortfall (reserve) is listed in the last column of **Table 4-12** and presented in **Figure 4-8**.

The analysis shows that there would be no shortfall from 2010 through 2013. However, there would be shortfalls from 2014 through 2025, with the most shortfalls in 2019 (8,580 tpd).

Therefore, additional disposal capacity (either in-County or out-of-County) would be necessary in some years during the planning period in order to adequately provide for the solid waste disposal needs of the 88 cities in the County and the County unincorporated areas.

#### **4.10.4 Scenario No. 4 - In-County Class III Landfill Expansions**

Scenario No. 4 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of currently available out-of-County landfill disposal capacity; (3) no new Class III landfills within the County; (4) increase in diversion rate (up to 65 percent by 2025); (5) utilization of alternative technology (e.g., conversion/recovery technology) facility capacity (up to 2,300 tpd by 2025); and (6) development of all proposed in-County Class III landfill expansions. The analysis for Scenario No. 4 is presented in **Table 4-13**, **Figures 4-4** and **4-5**, and summarized in **Tables 4-9** and **4-19** through **4-21**.

#### **Solid Waste Diversion Rate**

Scenario No. 4 also assumes the following with respect to solid waste diversion rate:

- AB 939 Mandate

The analysis assumes the achievement of the AB 939 waste diversion mandate of 50 percent throughout the planning period.

- Realistic Increase in Diversion Rate

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<sup>17</sup> See Footnote 16.

This scenario demonstrates the effect an increase in diversion rate would have on the County's disposal needs. Starting from 2016, the diversion rate is assumed to increase to 56 percent and subsequently increase by one percent each year, reaching 65 percent by 2025. An increase in diversion could be a tool the County may use to address the disposal capacity needs. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. As a result, future programs geared toward diversion are expected to take on greater significance during the planning period.

### **Solid Waste Imports**

Scenario No. 4 also assumes the following with respect to solid waste imports:

- The current import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period.

### **Alternative Technology Facility Capacity**

Scenario No. 4 also assumes the following with respect to alternative technology facility capacity:

- The scenario assumes that conversion/recovery and other alternative technology facilities will be used to manage about 1,300 tpd starting in 2017 and up to 2,300 tpd by 2025.

### **In-County Class III Landfill Expansion**

Scenario No. 4 also assumes the following with respect to in-County Class III landfill expansion:

- The scenario assumes that all proposed expansions of existing in-County Class III landfills as identified in Chapter 7 (see **Section 7.5.2** and **Table 7-3**) will be successfully permitted and developed to their full capacity, as proposed.

### **Daily Export Need**

The daily export need is listed in the 13th column of **Table 4-13** and presented in **Figure 4-7**.

The export need analysis shows that there would be no export need from 2010



through 2013 and 2017 through 2025. However, there would be export need from 2014 through 2016, with the most export need in 2015 (7,688 tpd).

### **Available Out-of-County Disposal Capacity**

Scenario No. 4 also assumes the following with respect to solid waste exports:

- Currently Available Out-of-County Disposal Capacity

The currently available out-of-County disposal capacity (i.e., export capacity) is 6,147 tpd. The export quantities for the subsequent years are assumed at 6,200 tpd<sup>18</sup> throughout the planning period.

### **Daily Disposal Capacity Shortfall (Reserve)**

The daily disposal capacity shortfall (reserve) is listed in the last column of **Table 4-13** and presented in **Figure 4-8**.

The analysis shows that there would be no shortfall from 2010 through 2013 and 2016 through 2025. However, there would be shortfalls from 2014 through 2015, with the most shortfalls in 2015 (1,488 tpd).

Therefore, additional disposal capacity (either in-County or out-of-County) would be necessary in some years during the planning period to provide for the solid waste disposal needs of the 88 cities in the County and the County unincorporated areas.

#### **4.10.5 Scenario No. 5 - Increase in Exports to Available Out-of-County Disposal Facilities (up to 12,000 tpd by 2025)**

Scenario No. 5 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of currently available out-of-County landfill disposal capacity; (3) no new Class III landfills within the County; (4) increase in diversion rate (up to 65 percent by 2025); (5) utilization of alternative technology (e.g., conversion/recovery technology) facility capacity (up to 2,300 tpd by 2025); (6) development of all proposed in-County Class III landfill expansions; and (7) increase in exports to available out-of-County disposal facilities (up to 12,000 tpd by 2025). The analysis for Scenario No. 5 is presented in **Table 4-14** and **Figures 4-4** and **4-5**, and summarized in **Tables 4-9** and **4-19** through **4-21**.

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<sup>18</sup> See Footnote 16.

### **Solid Waste Diversion Rate**

Scenario No. 5 assumes the following with respect to solid waste diversion rate:

- AB 939 Mandate

The analysis assumes the achievement of the AB 939 waste diversion mandate of 50 percent throughout the planning period.

- Realistic Increase in Diversion Rate

This scenario demonstrates the effect an increase in diversion rate would have on the County's disposal needs. Starting from 2016, the diversion rate is assumed to increase to 56 percent and subsequently increase by one percent each year, reaching 65 percent by 2025. An increase in diversion could be a tool the County may use to address the disposal capacity needs. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. As a result, future programs geared toward diversion are expected to take on greater significance during the planning area.

### **Solid Waste Imports**

Scenario No. 5 assumes the following with respect to solid waste imports:

- The current import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period.

### **Alternative Technology Facility Capacity**

Scenario No. 5 also assumes the following with respect to alternative technology capacity:

- This scenario assumes that conversion/recovery and other alternative technology facilities will be used to manage about 1,300 tpd starting in 2017 and up to 2,300 tpd by 2025.

### **In-County Class III landfill expansion**

Scenario No. 5 also assumes the following with respect to in-County Class III landfill expansions:

- The scenario assumes that all proposed expansions of existing in-County Class III landfills as identified in Chapter 7 (see **Section 7.5.2** and **Table 7-3**) will be successfully permitted and developed to their full capacity, as proposed.

### **Daily Export Need**

The daily export need is listed in the 13th column of **Table 4-14** and presented in and **Figure 4-7**.

- The export need analysis shows that there would be no export need from 2010 through 2013 and 2017 through 2025. However, there would be export need from 2014 through 2016, with the most export need in 2015 (7,688 tpd).

### **Available Out-of-County Disposal Capacity**

Scenario No. 5 assumes the following with respect to solid waste exports:

- Currently Available Out-of-County Disposal Capacity

The currently available out-of-County disposal capacity (i.e., export capacity) is 6,147 tpd.

- Increase in Available Out-of-County Disposal Capacity

The increase in available out-of-County disposal capacity (i.e., export capacity) is assumed to include an additional of: (1) up to 4,000 tpd in export capacity via the CSD's waste-by-rail and waste-by-truck system to Mesquite Regional Landfill, and (2) up to 3,800 tpd of export capacity to other sources (e.g., Avenal, El Sobrante, Mid Valley, and Simi Valley Landfills) by the end of the planning period.

### **Daily Disposal Capacity Shortfall (Reserve)**

The daily disposal capacity shortfall (reserve) is listed in the last column of **Table 4-14** and presented in **Figure 4-8**.

- The analysis shows that there would be no shortfall throughout the planning period.

Therefore, additional disposal capacity (either in-County or out-of-County) would not be necessary in order to adequately provide for the solid waste disposal needs of the 88 cities in the County and the County unincorporated areas throughout the 15-year planning period.

#### 4.10.6 Scenario No. 6 - Maximizing Diversion Rate (up to 75% by 2025 (complies with AB 341 Goal))

Scenario No. 6 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of currently available out-of-County landfill disposal capacity; (3) no new Class III landfills within the County; (4) maximizing diversion rate (up to 75 percent by 2025); (5) development of alternative technology (e.g., conversion/recovery technology) facility capacity (up to 2,300 tpd by 2025); (6) development of all proposed in-County Class III landfill expansions; and (7) increase in available out-of-County disposal facility capacity (up to 12,000 tpd by 2025). The analysis for Scenario No. 6 is presented in **Table 4-15**, **Figures 4-4** and **4-5**, and summarized in **Tables 4-9** and **4-19** through **4-21**.

##### **Solid Waste Diversion Rate**

Scenario No. 6 assumes the following with respect to solid waste diversion rate:

- AB 939 Mandate

The analysis assumes the achievement of the AB 939 waste diversion mandate of 50 percent throughout the planning period.

- Maximizing Diversion Rate

This scenario demonstrates the effect of maximizing diversion rate (in compliance with the AB 341 goal) would have on the County's disposal needs. AB 341 made a legislative declaration that it is California's policy goal that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020. Therefore, beginning in 2011, the diversion rate is assumed to increase by two percent each year, reach 75 percent by 2020, and remain at that level through the end of the planning period. An increase in diversion could be a tool the County may use to address the disposal capacity needs. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. As a result, future programs geared toward diversion are expected to take on greater significance during the planning period.

##### **Solid Waste Imports**

Scenario No. 6 assumes the following with respect to solid waste imports:

- The current import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period.

### **Alternative Technology Facility Capacity**

Scenario No. 6 also assumes the following with respect to alternative technology facility capacity:

- This scenario assumes that conversion/recovery and other alternative technology facilities will be used to manage about 1,300 tpd starting in 2017 and up to 2,300 tpd by 2025.

### **In-County Class III Landfill Expansion**

Scenario No. 6 also assumes the following with respect to in-County Class III landfill expansions:

- The scenario assumes that all proposed expansions of existing in-County Class III landfills as identified in Chapter 7 (see **Section 7.5.2 and Table 7-3**) will be successfully permitted and developed to their full capacity, as proposed.

### **Daily Export Need**

The daily export need is listed in the 13th column of **Table 4-15** and presented in **Figure 4-7**.

- The export need analysis shows that there would be no export need from 2010 through 2013 and 2016 through 2025. However, there would be export need in 2014 and 2015, with the most export need in 2014 (1,578 tpd).

### **Exports to Out-of-County Disposal Facilities**

Scenario No. 6 assumes the following with respect to solid waste exports:

- Current Exports to Out-of-County Disposal Facilities

The 2010 average daily exports to out-of-County disposal facilities are 6,147 tpd.

- Increase in Exports to Out-of-County Disposal Facilities

The increase in exports to out-of-County disposal facilities is assumed to include an additional of: (1) up to 4,000 tpd in export capacity via the CSD's

waste-by-rail and waste-by-truck system to Mesquite Regional Landfill, and (2) up to 3,800 tpd of exports to other sources (e.g., Avenal, El Sobrante, and Simi Valley Landfills) by the end of the planning period.

#### **Daily Disposal Capacity Shortfall (Reserve)**

The daily disposal capacity shortfall (reserve) is listed in the last column of **Table 4-15** and presented in **Figure 4-21**.

The analysis shows that there would be no shortfall throughout the planning period.

Therefore, additional disposal capacity (either in-County or out-of-County) would not be necessary in order to adequately provide for the solid waste disposal needs of the 88 cities in the County and the County unincorporated areas throughout the 15-year planning period.

#### **4.10.7 Scenario No. 7 – Increase Utilization of Alternative Technology Facility Capacity (up to 3,500 tpd by 2025)**

Scenario No. 7 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of current exports to out-of-County landfill disposal facilities; (3) no new Class III landfills within the County; (4) increase in diversion rate (up to 65 percent by 2025); (5) increase in utilization of alternative technology (e.g., conversion/recovery technology) facility capacity (up to 3,500 tpd by 2025); (6) development of all proposed in-County Class III landfill expansions; and (7) increase in exports to out-of-County disposal facilities (up to 12,000 tpd by 2025). The analysis for Scenario No. 7 is presented in **Table 4-16**, **Figures 4-4** and **4-5**, and summarized in **Tables 4-9** and **4-19** through **4-21**.

#### **Solid Waste Diversion Rate**

Scenario No. 7 assumes the following with respect to the solid waste diversion rate:

- AB 939 Mandate

The analysis assumes the achievement of the AB 939 waste diversion mandate of 50 percent throughout the planning period.

- Increase in Diversion Rate

This scenario demonstrates the effect an increase in diversion rate would

have on the County's disposal needs. Starting from 2016, the diversion rate is assumed to increase to 56 percent and subsequently increase by one percent each year, reaching 65 percent by 2025. An increase in diversion could be a tool the County may use to address the disposal capacity needs. Also, the increase in diversion rate represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. As a result, future programs geared toward diversion are expected to take on greater significance during the planning period.

### **Solid Waste Imports**

Scenario No. 7 assumes the following with respect to solid waste imports:

- The 2010 average daily import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period in 2025.

### **Alternative Technology Facility Capacity**

- Increase Utilization of Alternative Technology Facility Capacity

In addition to the alternative technology facility capacity discussed in Scenario 3 (see **Section 4.10.3**), this scenario demonstrates the effect of an increase in the development of alternative technology facility capacity during the planning period and the impact it would have on the County's disposal needs. Scenario No. 7 also assumes the following with respect to alternative technology facility capacity:

- This scenario assumes that conversion/recovery and other alternative technology facilities will be used to manage about 1,800 tpd starting in 2017 and up to 3,500 tpd by 2025, and makes the assumption in a manner to minimize the amount of export to out-of-County disposal facilities and maximize the potentially available alternative technology facility capacity.

### **In-County Class III Landfill Expansion**

Scenario No. 7 also assumes the following with respect to in-County Class III landfill expansions:

- The scenario assumes that all proposed expansions of existing in-County Class III landfills as identified in Chapter 7 (see **Section 7.5.2** and **Table 7-3**) will be successfully permitted and developed to their full capacity, as proposed.



### **Daily Export Need**

The daily export need is listed in the 13th column of **Table 4-16** and presented in **Figure 4-7**.

- The export need analysis shows that there would be export need from 2010 through 2013 and 2017 through 2025. Also, there would be export need from 2014 through 2016, with the most export need in 2015 (7,688 tpd).

### **Exports to Out-of-County Disposal Facilities**

Scenario No. 7 assumes the following with respect to solid waste exports:

- Current Exports to Out-of-County Disposal Facilities

The 2010 average daily exports to out-of-County disposal facility are 6,147 tpd.

- Increase in Exports to Out-of-County Disposal Facilities

The increase in exports to out-of-County disposal facilities is assumed to include utilization of an additional: (1) up to 4,000 tpd in export capacity via the CSD's waste-by-rail and waste-by-truck system to Mesquite Regional Landfill, and (2) up to 3,800 tpd of exports to other sources (e.g., Avenal, El Sobrante, and Simi Valley Landfills) by the end of the planning period.

### **Daily Disposal Capacity Shortfall (Reserve)**

The daily disposal capacity shortfall (reserve) is listed in the last column of **Table 4-16** and presented in **Figure 4-8**.

The analysis shows that there would be no shortfall throughout the planning period.

Therefore, additional disposal capacity (either in-County or out-of-County) would not be necessary in order to adequately provide for the solid waste disposal needs of the 88 cities in the County and the County unincorporated areas throughout the 15-year planning period.

#### **4.10.8 Scenario No. 8 – Full Utilization of Out-of-County Disposal Facilities (up to 19,000 tpd by 2025)**

Scenario No. 8 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of current exports to out-of-County landfill

disposal facilities; (3) no new Class III landfills within the County; (4) increase in diversion rate (up to 65 percent by 2025); (5) utilization of alternative technology (e.g., conversion/recovery technology) facility capacity (up to 2,300 tpd by 2025); (6) development of all proposed in-County Class III landfill expansions; and (7) full utilization of available out-of-County disposal facilities (up to 19,000 tpd by 2025) and proposed expansions of the out-of-County landfills. The analysis for Scenario No. 8 is presented in **Table 4-17** and **Figures 4-4** and **4-5**, and summarized in **Tables 4-9** and **4-19** through **4-21**.

### **Solid Waste Diversion Rate**

Scenario No. 8 assumes the following with respect to solid waste diversion rate:

- AB 939 Mandate

The analysis assumes the achievement of the AB 939 waste diversion mandate of 50 percent throughout the planning period.

- Increase in Diversion Rate

This scenario demonstrates the effect an increase in diversion rate would have on the County's disposal needs. Starting from 2016, the diversion rate is assumed to increase to 56 percent and subsequently increase by one percent each year, reaching 65 percent by 2025. An increase in diversion could be a tool the County may use to address the disposal capacity needs. Also, the increase in diversion rate represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. As a result, future programs geared toward diversion are expected to take on greater significance during the planning period.

### **Solid Waste Imports**

Scenario No. 8 assumes the following with respect to solid waste imports:

- The 2010 average daily import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period in 2025.

### **Alternative Technology Facility Capacity**

Scenario No. 8 also assumes the following with respect to alternative technology capacity:

- The scenario assumes that conversion/recovery and other alternative

technology facilities will be used to manage about 1,300 tpd starting in 2017 and up to 2,300 tpd by 2025.

### **In-County Class III Landfill Expansion**

Scenario No. 8 also assumes the following with respect to in-County Class III landfill expansions:

- The scenario assumes that all proposed expansions of existing in-County Class III landfills as identified in Chapter 7 (see **Section 7.5.2** and **Table 7-3**) will be successfully permitted and developed to their full capacity, as proposed.

### **Daily Export Need**

The daily export need is listed in the 13th column of **Table 4-17** and presented in **Figure 4-7**.

The export need analysis shows that there would be no export need from 2010 through 2013 and 2017 through 2025. However, there would be export need from 2014 through 2016, with the most export need in 2015 (7,688 tpd).

### **Exports to Out-of-County Disposal Facilities**

Scenario No. 8 assumes the following with respect to solid waste exports:

- Current Exports to Out-of-County Disposal Facilities

The 2010 average daily exports to out-of-County disposal facilities are 6,147 tpd.

- Full Utilization of Out-of-County Disposal Capacity

Full utilization of out-of-County disposal capacity is assumed to include: (1) an additional of up to 6,000 tpd in export capacity via the CSD's waste-by-rail and waste-by-truck system to Mesquite Regional Landfill, (2) an additional of up to 8,800 tpd of exports to other sources (e.g., Avenal, El Sobrante, and Simi Valley Landfills) by the end of the planning period, and (3) development of proposed expansions of existing out-of-County Class III landfills (i.e., landfills located in California that are currently accepting solid waste from the County based on the 2010 Annual Report) for expansions that will become operational during the 15-year planning period

### **Daily Disposal Capacity Shortfall (Reserve)**

The daily disposal capacity shortfall (reserve) is listed in the last column of **Table 4-17** and presented in **Figure 4-8**.

The analysis shows that there would be no shortfall throughout the planning period.

Therefore, additional disposal capacity (either in-County or out-of-County) would not be necessary in order to adequately provide for the solid waste disposal needs of the 88 cities in the County and the County unincorporated areas throughout the 15-year planning period.

#### **4.10.9 Scenario No. 9 – Best Case (All Solid Waste Management Options Considered Become Available)**

Scenario No. 9 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of current exports to out-of-County landfill disposal facilities; (3) no new Class III landfills within the County; (4) maximizing diversion rate (up to 75 percent by 2025); (5) utilization of alternative technology (e.g., conversion/recovery technology) facility capacity (up to 3,000 tpd by 2025); (6) development of all proposed in-County Class III landfill expansions; and (7) full utilization of out-of-County disposal facility capacity (up to 16,000 tpd by 2025) and proposed expansions of the out-of-County landfills. The analysis for Scenario No. 9 is presented in **Table 4-18** and **Figures 4-4** and **4-5**, and summarized in **Tables 4-9** and **4-19** through **4-21**.

### **Solid Waste Diversion Rate**

Scenario No. 9 assumes the following with respect to the solid waste diversion rate:

- **AB 939 Mandate**

The analysis assumes the achievement of the AB 939 waste diversion mandate of 50 percent throughout the planning period.

- **Increase in Diversion Rate**

This scenario demonstrates the effect of maximizing the diversion rate (in compliance with the AB 341 goal) would have on the County's disposal needs. AB 341 made a legislative declaration that it is California's policy goal that not less than 75% of solid waste generated be source reduced, recycled, or

composted by the year 2020, Therefore, beginning in 2011, the diversion rate is assumed to increase to 57 percent and subsequently increase by two percent each year, reach 75 percent by 2020, and remain at that level through the end of the planning period. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. As a result, future programs geared toward diversion are expected to take on greater significance during the planning period.

### **Solid Waste Imports**

Scenario No. 9 assumes the following with respect to solid waste imports:

- The 2010 average daily import rate is approximately 675 tpd. The import quantities for subsequent years are assumed at 700 tpd through the end of the planning period in 2025.

### **Utilization of Alternative Technology Facility Capacity**

- This scenario assumes that conversion/recovery and other alternative technology facilities capacity will be used to manage about 600 tpd starting 2018 and up to 3,000 tpd by 2025 and makes the assumption in a manner to minimize the amount of export to out-of-County disposal facilities and maximize the potentially available alternative technology capacity.

### **In-County Class III Landfill Expansion**

Scenario No. 9 also assumes the following with respect to in-County Class III landfill expansions:

- The scenario assumes that all proposed expansions of existing in-County Class III landfills as identified in Chapter 7 (see **Section 7.5.2** and **Table 7-3**) will be successfully permitted and developed to their full capacity, as proposed.

### **Daily Export Need**

The daily export need is listed in the 13th column of **Table 4-18** and presented in **Figure 4-7**.

The export need analysis shows that there would be no export need from 2010 through 2013 and 2016 through 2025. However, there would be export need in 2014 and 2015, with the most export need in 2014 (1,578 tpd).

### **Exports to Out-of-County Disposal Facilities**

Scenario No. 9 assumes the following with respect to solid waste exports:

- **Current Out-of-County Disposal Facilities**

The 2010 average daily exports to out-of-County disposal facilities are 6,147 tpd.

- **Full Utilization of Future Available Out-of-County Disposal Capacity**

The full utilization of future available out-of-County disposal capacity (i.e., export capacity) is also assumed to include: (1) an additional of up to 6,000 tpd in export capacity via the CSD's waste-by-rail and waste-by-truck system to Mesquite Regional Landfill ; (2) an additional of up to 5,800 tpd of exports to other sources (e.g., Avenal, El Sobrante, and Simi Valley Landfills) by the end of the planning period, and (2) additional disposal capacity from development of proposed expansions of existing out-of-County Class III landfills (i.e., landfills located in California that are currently accepting solid waste from the County based on the 2010 Annual Report) for expansions that will become operational during the 15-year planning period.

### **Daily Disposal Capacity Shortfall (Reserve)**

The daily disposal capacity shortfall (reserve) is listed in the last column of **Table 4-18** and presented in **Figure 4-8**.

The analysis shows that there would be no shortfall throughout the planning period.

Therefore, additional disposal capacity (either in-County or out-of-County) would not be necessary to adequately provide for the solid waste disposal needs of the 88 cities in the County and the County unincorporated areas throughout the 15-year planning period.

#### **4.10.10 Impact of Closure of Puente Hills Landfill's Green Waste Alternative Daily Cover Program on the Disposal Capacity Need Analysis**

Upon closure of Puente Hills Landfill (PHL) in 2013, the green waste that is diverted (e.g., 296,305 tons in 2010) under the PHL's Alternative and Intermediate Daily Cover (ADC) Program may have to re-enter into the waste stream and count as disposal tonnage, unless an alternative diversion program is developed to handle the green waste. Consequently, the in-County disposal need and daily disposal capacity shortfall (reserve) may increase by a

proportional amount.

Based on the historical data of green waste intake at PHL for ADC and other beneficial use since 1990, the current intake of 296,305 tons per year in 2010 is projected to increase to 419,442 tons per year by 2025.

Similarly, a comparison of the projected daily disposal capacity shortfall (reserve) in the status quo scenario of 17,814 tpd or 5.6 million tons per year by 2025, establishes that in the status quo scenario, the closure of PHL's ADC program would increase the disposal shortfall in the County by an average of seven percent.

Therefore, the impact of termination of PHL's ADC program on the overall in-County daily disposal capacity shortfall (reserve) and the County's disposal strategy would not be significant. As such, no Disposal Capacity Shortfall Analysis Scenario is devoted to this impact in this Chapter.

As closure of PHL<sup>19</sup> in 2013 draws near, jurisdictions that currently depend on the diversion credit derived from using green materials as ADC in PHL must come up with other solutions to meet their diversion goals. As a result, affected jurisdictions would have to devise alternative means of recycling the green waste, such as by supporting the development and use of conversion/recovery and other alternative technology facilities within the region.

However ironic, the effect of losing PHL may result in stimulating the development of organics diversion facilities including, but not limited to, enhancing the chipping and grinding and compost industry, for the green materials that will soon have no place to go. It may also provide the impetus for jurisdictions to take a more proactive approach to finding alternative ways of managing green waste materials.

#### 4.11 SUMMARY OF SCENARIO ANALYSES

The preceding section analyzed the County's disposal need under nine scenarios. This Section summarizes the analyses and their findings:

The description of the variables in each scenario is summarized in **Tables 4-9** and **4-10** through **4-18**. The export need under each scenario is presented in **Figure 4-7**. The daily disposal capacity shortfall (reserve) under each scenario is presented in **Figure 4-8**.

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<sup>19</sup> Puente Hills Landfill claimed nearly half of the green material ADC in the County in 2010. Of the 484,568 tons of greenwaste ADC used in in-County landfills, Puente Hills Landfill alone claims 61 percent, or 296,305 tons, which is equivalent to an average of 950 tpd. (Source: 2010 Annual Report, Los Angeles County Countywide Integrated Waste Management Plan.)



In all the scenarios, solid waste exports are considered part of the out-of-County disposal regardless of whether the export occurred during a period of adequate or inadequate in-County disposal capacity. As a result, (1) “export need” represents the estimated amount of solid waste that could not be managed at in-County Class III landfills, transformation facilities, and alternative technology facilities due to lack of in-County Class disposal capacity; (2) “exports to out-of-County disposal facilities” represents the projected amount of exports to out-of-County Class III landfill facilities ; and (3) the daily disposal capacity shortfall (reserve) represents the amount of solid waste that cannot be managed both in-County and out-of-County.

This daily disposal capacity shortfall (reserve) would have to be managed by a combination of various means such as increasing use of out-of-County disposal capacity, increasing the diversion rate, using alternative (e.g., conversion/recovery) technology facilities to meet the CSE requirement of providing 15-years of adequate disposal capacity.

Under Scenario Nos. 1, 2, and 3, the solid waste disposal capacity needs of all 88 cities in the County and the County unincorporated areas could not be met in-County (or out-of-County) during the 15-year planning period (see **Tables 4-10** through **4-12**). Under Scenario Nos. 4, 5, 6, 7, 8, and 9 the solid waste disposal capacity needs of all 88 cities in the County and the County unincorporated areas could be met with in-County capacity throughout the 15-year planning period (see **Tables 4-13** through **4-18**).

A realistic but gradual increase in the Countywide diversion rate of up to 65 percent (Scenario No. 2) and the development of conversion/recovery technology facilities within the County (Scenario No. 3) would not be enough to address the disposal capacity needs during the 15-year planning period.

However, Scenario Nos. 4, 5, 6, 7, 8 and 9 demonstrate that the County would be able to meet its disposal needs through the 15-year planning period by: (1) the development of all proposed in-County Class III landfill expansions (Scenario No. 4); (2) the increase in exports to out-of-County disposal facilities (Scenario No. 5); (3) maximizing diversion rate up to 75 percent by 2025 (Scenario No. 6); (4) increasing the development of alternative technology facility capacity of up to 3,500 tpd by 2025 (Scenario No. 7); (5) full utilization of out-of-County disposal capacity up to 19,000 tpd by 2025 (Scenario No. 8); and (6) all solid waste management options becoming available (Scenario No. 9) during the 15-year planning period.

### **Analysis of Exports to Out-of-County Disposal Facilities**

Out-of-County landfills (see **Chapter 9, Table 9-1**) that have been identified could provide the capacity needed to meet these needs. However, it remains

uncertain whether such capacity will be fully accessible to waste originating in the County (see **Chapter 9, Table 9-3** and **9-6**). Moreover, adequate transportation infrastructure (e.g., a waste-by-rail and waste-by-truck system capable of handling up to 19,000 tpd or more) must be developed in order to access the capacity. Also, these out-of-County landfills may receive waste from other cities and counties with whom the County jurisdictions would be competing for their capacity.

CSD completed acquisition of the Mesquite Regional Landfill in Imperial County, as indicated in **Chapter 9, Table 9-2** and **Fact Sheets 9-2** and **Figure 9-2**. The Mesquite Regional Landfill has a permitted daily capacity of 20,000 tpd (out of which 19,000 tons could be received from out-of-County sources such as the County) and with an expected 100-year lifespan. In addition, CSD is in the process of planning, designing, and developing a waste-by-rail system that could transport up to 8,000 tpd to Mesquite Regional Landfill and about 4,000 tpd of the County solid waste by truck to Mesquite Regional Landfill for disposal.

Projecting future shortfalls or reserves (excess) disposal capacity is an estimate at best. It is a very difficult undertaking due to various factors; for example, the dynamic nature of the solid waste management system in the County that is heavily impacted by the decisions of 88 jurisdictions and their waste management service providers, and changes in regulatory requirements, disposal rates, fuel costs, and traffic congestion. Therefore, development of any type of solid waste management facility (e.g., a transfer/processing facility, composting facility, conversion/recovery technology facility, etc.) continues to become more difficult and siting a disposal facility much more complex and costly. As a result, lack of realistic and proper solid waste management planning in the County could have serious health and safety, economic, and environmental consequences.

## 4.12 SUMMARY OF FINDINGS

The disposal capacity need analysis (see **Section 4.9**), demonstrates the need and importance of pursuing a multi-faceted approach that incorporates:

- Continued reliance on in-County disposal.
- Continued utilization of currently available out-of-County disposal facilities' capacity.
- Continued enhancement of jurisdictions' diversion efforts (gradually increasing Countywide diversion rate from 60 to 75 percent).

- Aggressively pursuing development and use of conversion/recovery and other alternative technologies.
- Successful permitting and development of expansion of existing in-County Class III landfills.
- Use and development of out-of-County Class III landfills located in California.
- Aggressively pursuing development of the in-County infrastructure (e.g., transfer stations/materials recovery facilities, rail-access inter-modal facilities, etc.) necessary to access out-of-County landfill capacity.
- Aggressively pursuing development of new Class III landfills in the County.

#### 4.13 CONCLUSIONS

The preceding discussions demonstrated that the combination of an increase in diversion rate, development of alternative technologies, potential expansion of existing in-County Class III landfills, and use of out-of-County Class III landfills (identified in **Chapters 3, 5, 7, and 9**) would address the disposal need of all the jurisdictions in the County for the 15-year planning period (2010-2025).

However, based on past and current experiences in siting new or expanding existing solid waste management facilities, it must be recognized that many (or all) of the facilities identified may encounter strong opposition during the permitting process, and that not all of the facilities may be approved; and that even if a facility is successfully permitted, the total approved capacity and daily capacity may be substantially less than its capacity requested by the project proponent.

Based on the Disposal Capacity Need analyses and the foregoing discussion, the following can be concluded:

- The planning process must incorporate adequate reserve daily capacity to handle unanticipated disposal needs, as well as daily and seasonal variations in waste quantities.
- The planning process should include a variety of alternatives that will ensure that the provision of solid waste disposal services remain uninterrupted during the planning period and beyond. This must include increased recycling and other diversion efforts, creation/expansion of markets for the recycled materials and products with recycled content, development of alternative facilities (e.g., conversion/recovery technology and other alternative technology facilities), feasibility studies on potential development

of a new in-County landfill, out-of-County disposal facilities, and development of the in-County/out-of-County infrastructure necessary for access to out-of-County disposal facilities including MRFs, intermodal facilities, waste-by-rail systems, and other transportation modes.

- The anticipated disposal needs of the County cannot be met by pursuing a single alternative (i.e., landfill expansions, transformation technologies, out-of-County disposal, etc.). Jurisdictions in the County must work on all fronts simultaneously in order to avert the daily disposal capacity shortfall (reserve) in the short, medium, and long term. As a part of this effort, economic incentives must be formulated to promote development of conversion/recovery technologies, other viable alternatives to landfill technology industries to reuse and recycle materials recovered from waste stream into new products, and markets for those products.
- Since it takes up to 15 years or more to fully permit a new or expand an existing landfill, the planning process must begin now in order to ensure the uninterrupted availability of solid waste disposal services, at reasonable cost, to serve the disposal need of all residents and businesses in the County.

#### 4.14 TABLES AND FIGURES

This section includes tables of: (1) Remaining Permitted Combined Disposal Capacity of Existing Solid Waste Class III Landfills in Los Angeles County (**Tables 4-1 and 4-8**); (2) Summary of Yearly Solid Waste Disposal Quantities in Los Angeles County (**Tables 4-2 and 4-3**); (3) Disposal Capacity of Inert Waste Landfills located in Los Angeles County (**Table 4-4**); (4) Solid Waste Generation by Los Angeles County Jurisdictions in 2010 (**Table 4-5**); Los Angeles County Solid Waste Generation Projections (**Table 4-6**); (5) Los Angeles County Solid Waste Disposal Capacity Requirements for the Planning Period (**Table 4-7**); (6) Summary of Description of Scenarios (**Table 4-9**); (7) Disposal Capacity Need Analysis Scenarios (**Tables 4-10 through 4-18**); (11) Base Year Projections Based on SB 1016 Limit (**Table 4-19**); and (12) Comparison of Daily Disposal Demand and SB 1016 Disposal Limit for Status Quo and Maximizing Diversion Rate (**Tables 4-20 and 4-21**).

Also, this section includes figures of: (1) Graph of Los Angeles County Population and Solid Waste Disposal Trend (1990-2010) (**Figure 4-1**); (2) Los Angeles County Solid Waste Disposal Distribution in 2010 (**Figure 4-2**); (3) Graph of Population, Employment, Taxable Sales, and Solid Waste Generation Projection in Los Angeles County (**Figure 4-3**); (4) Graph of Solid Waste Disposal Capacity Projections for each Disposal Capacity Need Analysis Scenario for the Planning Period (**Figure 4-4**); (5) Graph of Projected Solid Waste Disposal in 2025 for each Disposal Capacity Need Analysis Scenario for

the Planning Period (**Figure 4-5**); (6) Graph of In-County Class III Landfills Remaining Disposal Capacity for each Disposal Capacity Need Analysis Scenario (**Figure 4-6**); (7) Graph of Solid Waste Disposal Export Need for each Disposal Capacity Need Analysis Scenario (**Figure 4-7**); (8) Graph of Class III Landfill Daily Disposal Capacity Shortfall (Reserve) for each Disposal Capacity Need Analysis Scenarios (**Figure 4-8**); and (9) Graph of Disposal Projection for Countywide Areas (**Figure 4-9**).

#### 4.15 APPENDIX

This section includes **Appendix 4-A** (Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force's Report (dated March 28, 1991) to the California Integrated Waste Management Board – on the Remaining Permitted Disposal Capacity of Solid Waste Facilities in Los Angeles County).

TABLE 4-1

**REMAINING PERMITTED COMBINED DISPOSAL CAPACITY OF EXISTING SOLID WASTE  
CLASS III LANDFILLS IN LOS ANGELES COUNTY  
(As of January 1990 and January 1991)**

Class III Landfills	SWFP No.	Days in Operation (per week)	Jan. 1991 SWFP Daily Capacity	CUP/LUP Daily Capacity	1990 Average Daily Tonnage (6 days/wk)	Quantity of Municipal Solid Waste Disposed in Year 1990	Projected Remaining Permitted Capacity (effective Jan. 1, 1991)		Estimated Remaining Permitted Capacity (effective Jan. 1, 1990)	
			Tons	Tons	Tons	Tons (Millions)	Tons (Millions)	Cubic Yards <sup>(d)</sup> (Millions)	Tons (Millions)	Cubic Yards <sup>(d)</sup> (Millions)
Antelope Valley	19-AA-0009	7	350	-	400	0.125	0.925	2.6	1.05	3
Reclamation	19-AA-0013	6	6,500	6,500	2,756	0.86	0	0	0.86	1.23
BKK	19-AF-0001	6	12,000 <sup>(a)</sup>	-	9,744	3.04	15.96	23.8	19	28.3
Bradley West	19-AR-0008	6	7,000	9,500	1,923	0.6	11.8	19.7	12.4	20.7
Brand Park	19-AA-0006	5	104	-	48	0.015	0.306	0.875	0.321	0.918
Burbank	19-AA-0040	5	240	-	196	0.061	11.44	22	11.3	22.1
Calabasas	19-AA-0056	6	3,500	-	2,724	0.85	15.155	21.6	16.005	22.8
Chiquita Canyon	19-AA-0052	7	5,000	-	1,763	0.55	1.78	2.2	2.33	2.9
Lancaster	19-AA-0050	6	450	-	295	0.092	0.15	0.5	0.24	0.8
Lopez Canyon	19-AA-0820	5	4,100 <sup>(b)</sup>	4,000	3,109	0.97	4.2	7	5.2	8.6
Pebble Beach	19-AA-0061	6	30	-	10	0.003	0.097	0.16	0.1	0.16
Pitchess Honor Rancho	19-AA-0057	5	23	-	17	0.0054	2.24	3.73	2.25	3.74
Puente Hills	19-AA-0053	6	12,000	13,200	11,859	3.7	7.5	10.7	11.2	0.16
San Clemente	19-AA-0063	5	1	-	1	0.002	0.024	0.034	0.026	0.037
Scholl Canyon	19-AA-0012	6	3,400	-	2,179	0.68	13.32	19	14	20
Spadra	19-AA-0015	6	3,000	-	2,724	0.85	6.95	9.93	7.8	11.14
Sunshine Canyon	19-AR-0002	6	7,000	6,000	3,141	0.98	0.4	1.64	1.4	5.66
Harbors	19-AA-0062	5	3.5	-	3.5	0.000088	0.0073	0.0104	0.0074	0.0105
Whittier (Savage Canyon)	19-AH-0001	6	350	-	353	0.11	6.39	10.6	6.5	10.8
<b>TOTAL</b>			<b>63,950<sup>(c)</sup></b>		<b>43,245</b>	<b>13.49</b>	<b>98.65</b>	<b>156.08</b>	<b>112.15</b>	<b>177.42</b>

**Footnotes:**

<sup>(a)</sup> Daily capacity established in June 1990; Notice and Order as amended by the City of West Covina's Local Enforcement Agency.

<sup>(b)</sup> Daily capacity established by Report of Disposal Site Information and Courts.

<sup>(c)</sup> Average daily tonnage, Monday through Friday.

<sup>(d)</sup> Based on in-place solid waste density provided by landfill operators.

**Notes:**

1. Table 4-1 is based on a table that is included in the Task Force's March 28, 1991, report to the CIWMB, (See Appendix 4A).

2. "SWFP" means Solid Waste Facility Permit. SWFP No. is same as the Solid Waste Information System (SWIS) Number.

3. "CUP" means Conditional Use Permit.

4. "LUP" means Land Use Permit.

TABLE 4-2  
SUMMARY OF YEARLY SOLID WASTE DISPOSAL QUANTITIES<sup>1</sup> (IN TONS) FOR LOS ANGELES COUNTY  
FROM 1990 TO 2010

Year	In-County Disposal at Class III Landfills	In-County Disposal at Transformation Facilities	Exports	Imports	Disposal at in-County Permitted Inert Waste Landfills	Total Disposal at Class III Landfills and Transformation Facilities, Including Exports	Total Disposal at Class III Landfills and Transformation Facilities, Including Exports and Excluding Imports	Total Disposal at Class III Landfills, Transformation Facilities, and Inert Waste Landfills, Including Exports and Excluding Imports
	A	B	C	D	E	F = A+B+C	G = A+B+C-D	H = A+B+C+E-D
1990	13,492,000	312,000	N/A <sup>2</sup>	N/A	2,108,000	[13,804,000]	[13,804,000]	[15,912,000]
1991	12,230,000	465,000	N/A	N/A	867,000	[12,695,000]	[12,695,000]	[13,562,000]
1992	11,922,000	523,000	22,000	N/A	867,000	12,467,000	[12,467,000]	[13,334,000]
1993	11,300,000	518,000	122,000	N/A	739,000	11,940,000	[11,940,000]	[12,679,000]
1994	11,590,000 <sup>3</sup>	526,000	128,000	305,000	522,000	12,244,000	11,939,000	12,461,000
1995	11,646,000	573,000	52,000	774,000	530,000	12,271,000	11,497,000	12,027,000
1996	11,356,744	497,735	N/A	801,308	1,100,405	[11,854,479]	[12,655,787]	[13,756,192]
1997	10,389,210	439,673	N/A	374,318	869,542	[10,828,883]	[11,203,201]	[12,072,743]
1998	11,212,563	427,725	N/A	339,762	1,197,460	[11,640,288]	[11,980,050]	[13,177,510]
1999	9,950,602	455,245	738,323	210,600	1,010,000	11,144,170	10,933,570	11,943,570
2000	10,078,989	510,455	794,910	229,320	1,332,572	11,384,354	11,155,034	12,487,606
2001	9,825,357	547,466	1,095,711	182,832	1,296,425	11,468,534	11,285,702	12,582,127
2002	8,973,755	539,542	2,009,845	158,496	1,045,960	11,523,142	11,364,646	12,410,606
2003	9,152,334	539,188	2,207,873	153,504	919,600	11,899,395	11,745,891	12,665,491
2004	9,110,298	548,249	2,308,181	156,000	1,247,500	11,966,728	11,810,728	13,058,228
2005	9,574,072	535,225	2,177,097	235,872	85,678	12,286,394	12,050,522	12,136,200
2006	9,583,227	537,733	1,782,609	266,448	101,748	11,903,569	11,637,121	11,738,869
2007	8,898,527	521,620	1,980,421	238,962	151,784	11,400,568	11,161,606	11,313,390
2008	7,908,376	520,776	1,914,153	208,079	173,651	10,343,305	10,135,226	10,308,877
2009	6,778,746	537,012	1,779,290	189,956	87,390	9,095,048	8,905,092	8,992,482
2010	6,313,263	539,129	1,917,993	210,521	54,964	8,770,385	8,559,864	8,614,828

**Notes/Assumptions:**

- Column A: Total disposal at Class III landfills in Los Angeles County. Data for the period 1990-1995 includes waste imported from jurisdictions outside the County. Data for the period 1996-2010 does not include waste imported from jurisdictions outside the County.
- Column B: Column B: Total disposal at transformation facilities in the County. Data for the period 1990-1995 includes waste imported from jurisdictions outside the County. Data for the period 1996-2010 does not include waste imported from jurisdictions outside the County. 1990 excludes 500 tons/day of ash which were landfilled; for other years, ash has been diverted from disposal.
- Column C: Waste exported by jurisdictions in the County to disposal facilities located outside the County. Data for the period 1996-1998 is not available.
- Column D: Waste that originated outside the County but disposed at Class III landfills and transformation facilities located in the County which originated outside the County.
- Column E: Total inert waste disposed by jurisdictions in the County at permitted (i.e., Registration and Full Solid Waste Facility Permit tier), inert waste landfills.
- Column F: Includes disposal by jurisdictions in the County at in-County Class III landfills and transformation facilities, and the waste exported to disposal facilities located outside the County. At this time, data for the period 1996-1998 does not include waste exported to jurisdictions outside the County, and will be updated when data becomes available.
- Column G: Includes disposal by jurisdictions in the County at Class III landfills, transformation facilities, and the waste exported to disposal facilities located outside the County. For 1994 and 1995, the total excludes waste imported from jurisdictions outside the Los Angeles County. At this time, data for the period 1996-1998 does not include waste exported to jurisdictions outside the County, and will be updated when data becomes available. Data for the period 1999-2010 does not include waste imported from jurisdictions outside the County.
- Column H: Includes disposal at Class III landfills, transformation facilities, permitted inert waste landfills, and the waste exported for disposal at landfills outside the County. For 1994 and 1995, the total excludes waste imported from jurisdictions outside the County. At this time, data for the period 1996-1998 does not include waste exported to jurisdictions outside the County. Data for the period 1999-2010 does not include waste imported from jurisdictions outside the County.

“[ ]”: Disposal quantities affected by the missing data (shown as “N/A” and “TBD”) in columns C and D are shown in brackets.

<sup>1</sup> See Chapter 4, Sections 4.4 for discussion. A conversion factor of 1,200 pounds per cubic yard was assumed for converting quantities from tons to cubic yards.

<sup>2</sup> “N/A” means not available. There is no record per SWIMS.

<sup>3</sup> Excludes debris generated as a result of Northridge Earthquake.



TABLE 4-3  
SUMMARY OF YEARLY SOLID WASTE DISPOSAL QUANTITIES<sup>1</sup> (in CUBIC YARDS) FOR LOS ANGELES COUNTY  
FROM 1990 TO 2010

Year	In-County Disposal at Class III Landfills	In-County Disposal at Transformation Facilities	Exports	Imports	Disposal at in-County Permitted Inert Waste Landfills	Total Disposal at Class III Landfills and Transformation Facilities, Including Exports	Total Disposal at Class III Landfills and Transformation Facilities, Including Exports and Excluding Imports	Total Disposal at Class III Landfills, Transformation Facilities, and Inert Waste Landfills, Including Exports and Excluding Imports
	A	B	C	D	E	F = A+B+C	G = A+B+C-D	H = A+B+C+E-D
1990	22,486,667	520,000	N/A <sup>2</sup>	N/A	3,513,333	[23,006,667]	[23,006,667]	[26,520,000]
1991	20,383,333	775,000	N/A	N/A	1,445,000	[21,158,333]	[21,158,333]	[22,603,333]
1992	19,870,000	871,667	36,667	N/A	1,445,000	20,778,333	[20,778,333]	[22,223,333]
1993	18,833,333	863,333	203,333	N/A	1,231,667	19,900,000	[19,900,000]	[21,131,667]
1994	19,316,667 <sup>3</sup>	876,667	213,333	508,333	870,000	20,406,667	19,898,333	20,768,333
1995	19,410,000	955,000	86,667	1,290,000	883,333	20,451,667	19,161,667	20,045,000
1996	18,927,907	829,558	N/A	1,335,513	1,834,008	[19,757,465]	[21,092,978]	[22,926,986]
1997	17,315,350	732,788	N/A	623,863	1,449,237	[18,048,138]	[18,672,001]	[20,121,238]
1998	18,687,605	712,875	N/A	566,270	1,995,767	[19,400,480]	[19,966,750]	[21,962,517]
1999	16,584,337	758,742	1,230,538	351,000	1,683,333	18,573,617	18,222,617	19,905,950
2000	16,798,315	850,758	1,324,850	382,200	2,220,953	18,973,923	18,591,723	20,812,677
2001	16,375,595	912,443	1,826,185	304,720	2,160,708	19,114,223	18,809,503	20,970,212
2002	14,956,258	899,237	3,349,742	264,160	1,743,267	19,205,237	18,941,077	20,684,343
2003	15,253,890	898,647	3,679,788	255,840	1,532,667	19,832,325	19,576,485	21,109,152
2004	15,183,830	913,748	3,846,968	260,000	2,079,167	19,944,547	19,684,547	21,763,713
2005	15,956,787	892,042	3,628,495	393,120	142,797	20,477,323	20,084,203	20,227,000
2006	15,972,045	896,222	2,971,015	444,080	169,580	19,839,282	19,395,202	19,564,782
2007	14,830,878	869,367	3,300,702	398,270	252,973	19,000,947	18,602,677	18,855,650
2008	13,180,627	867,960	3,190,255	346,798	289,418	17,238,842	16,892,044	17,181,462
2009	11,297,910	895,020	2,965,483	316,593	145,650	15,158,413	14,841,820	14,987,470
2010	10,522,105	898,548	3,196,655	350,868	91,607	14,617,308	14,266,440	14,358,047

**Notes/Assumptions:**

Column A: Total disposal at Class III landfills in Los Angeles County. Data for the period 1990-1995 includes waste imported from jurisdictions outside the County. Data for the period 1996-2010 does not include waste imported from jurisdictions outside the County.

Column B: Column B: Total disposal at transformation facilities in the County. Data for the period 1990-1995 includes waste imported from jurisdictions outside the County. Data for the period 1996-2010 does not include waste imported from jurisdictions outside the County. 1990 excludes 500 tons/day of ash which were landfilled; for other years, ash has been diverted from disposal.

Column C: Waste exported by jurisdictions in the County to disposal facilities located outside the County. Data for the period 1996-1998 is not available.

Column D: Waste that originated outside the County but disposed at Class III landfills and transformation facilities located in the County which originated outside the County.

Column E: Total inert waste disposed by jurisdictions in the County at permitted (i.e., Registration and Full Solid Waste Facility Permit tier), inert waste landfills.

Column F: Includes disposal by jurisdictions in the County at in-County Class III landfills and transformation facilities, and the waste exported to disposal facilities located outside the County. At this time, data for the period 1996-1998 does not include waste exported to jurisdictions outside the County, and will be updated when data becomes available.

Column G: Includes disposal by jurisdictions in the County at Class III landfills, transformation facilities, and the waste exported to disposal facilities located outside the County. For 1994 and 1995, the total excludes waste imported from jurisdictions outside the Los Angeles County. At this time, data for the period 1996-1998 does not include waste exported to jurisdictions outside the County, and will be updated when data becomes available. Data for the period 1999-2010 does not include waste imported from jurisdictions outside the County.

Column H: Includes disposal at Class III landfills, transformation facilities, permitted inert waste landfills, and the waste exported for disposal at landfills outside the County. For 1994 and 1995, the total excludes waste imported from jurisdictions outside the County. At this time, data for the period 1996-1998 does not include waste exported to jurisdictions outside the County. Data for the period 1999-2010 does not include waste imported from jurisdictions outside the County.

“[ ]”: Disposal quantities affected by the missing data (shown as “N/A” and “TBD”) in columns C and D are shown in brackets.

<sup>1</sup> See Chapter 4, Sections 4.4 for discussion. A conversion factor of 1,200 pounds per cubic yard was assumed for converting quantities from tons to cubic yards.

<sup>2</sup> “N/A” means not available. There is no record per SWIMS.

<sup>3</sup> Excludes debris generated as a result of Northridge Earthquake.

TABLE 4-4  
DISPOSAL CAPACITY OF INERT WASTE LANDFILLS LOCATED IN LOS ANGELES COUNTY  
(As of December 31, 2010)

No.	Facility	Location (City)	SWFP No.	Type of Solid Waste Facility Permit	Type of Operation	Operation days/week	SWFP Maximum Daily Capacity	2009 Average Daily Disposal Rate			2010 Average Daily Disposal Rate		2010 Annual Disposal	
							(See Note 1)	(See Note 1)	(See Note 1)	(See Note 1)	(See Note 1)	(See Note 1)	(See Note 1)	(See Note 1)
							tpd-6	tpd-6	Tons (millions)	cubic yards	tpd-6	cubic yards	million tons	million cubic yards
PERMITTED INERT WASTE LANDFILLS														
1	Azusa Land Reclamation	Asuza	19-AA-0013	Full	CDI Waste Disposal Facility	6	6,500	440	0.05	352	400	320	0.13	0.10
	Subtotal						7,810	440	0.05	352	400	320	0.13	0.10
INERT DEBRIS ENGINEERED FILL OPERATION														
2	Atkinson Brick Company	Los Angeles	--	--	IDEFO	6	N/A	365	0.21	292	570	456	0.18	0.14
3	Chandler's Palos Verdes Sand	Rolling Hills Estates	19-AE-0004	EAN	IDEFO	6	1,603	127	0.08	102	170	136	0.05	0.04
4	Hanson Aggregates (Livingston-Graham)	Irwindale	19-AA-0044	EAN	IDEFO	6	1,600	0	0.27	0	0	0	0.00	0.00
5	Lower Azusa Reclamation Project	Arcadia	19-AA-0868	EAN	IDEFO	6	5,000	1,569	1.44	1,255	2,706	2,165	0.84	0.68
6	Manning's Pit	Irwindale	N/A	N/A	IDEFO	6	N/A	0	0.00	0	0	0	0.00	0.00
7	Montebello Land & Water Co.	Montebello	19-AA-0019	EAN	IDEFO	6	1	1	0.00	0.8	1	0.8	0.00	0.00
8	Nu-Way Arrow Reclamation, Inc.	Irwindale	19-AA-1074	EAN	IDEFO	6	7,500	1,829	0.72	1,463	1,932	1,546	0.60	0.48
9	Nu-Way Live Oak Reclamation, Inc.	Irwindale	19-AA-0849	EAN	IDEFO	6	7,500	0	0.03	0	0	0	0.00	0.00
10	Peck Road Gravel Pit	Monrovia	19-AA-0838	EAN	IDEFO	6	1,210	0	0.00	0	0	0	0.00	0.00
11	Reliance Pit #2 (CalMat) Vulcan	Irwindale	19-AA-0854	EAN	IDEFO	6	6,000	358	0.04	286	114	91	0.04	0.03
12	Strathern Sanitary Landfill	Los Angeles	19-AR-1016	EAN	IDEFO	6	2,700	58	0.42	46	0	0	0.00	0.00
13	Sun Valley (CalMat/Vulcan)	Los Angeles	19-AR-1160	EAN	IDEFO	6	1,823	1,879	0.69	1,503	53	42	0.02	0.01
14	United Rock Products	Irwindale	N/A	N/A	IDEFO	6	N/A	0	0.00	0	0	0	0.00	0.00
	Subtotal						34,937	6,186	3.68	4,949	5,546	4,437	1.73	1.38
GRAND TOTAL							41,537	6,626	3.73	5,301	5,946	4,757	1.86	1.48

Notes:

- 1 Disposal quantities for 2009 and 2010 are the same as 2009 and 2010 Annual Reports, respectively, based on actual tonnages reported by owners/operators for inert waste generated within Los Angeles County and imported from outside the County through the Solid Waste Management Fee invoices.
- 2 Conversion factors are based on the in-place solid waste density provided by landfill operators, otherwise, 2,500 pound per cubic yard is used.
- 3 Estimated Remaining Permitted Capacity is based on landfill owner/operators responses to a written survey conducted by the County Department of Public Works in March 2009, as well as a review of site specific permit criteria established by local land use agencies (e.g., LEAs, CRWQCBs, SCAQMD, etc.).
- 4 "N/A" means data is not available.
- 5 "TBD" means data is to be determined.
- 6 Totals do not include data indicated as "N/A" or "TBD."
- 7 "EAN" means Enforcement Agency Notification.
- 8 "IDEFO" means Inert Debris Engineered Fill Operations.
- 9 "None" means currently active but unpermitted/exempt inert waste landfill.
- 10 "SWFP" means Solid Waste Facility Permit.

Source: 2010 Annual Report on the Los Angeles County Countywide Siting Element, June 2010.

**TABLE 4-5**  
**SOLID WASTE GENERATION BY LOS ANGELES COUNTY JURISDICTIONS IN 2010**  
**BASED ON CLASS III LANDFILLS AND TRANSFORMATION FACILITIES DISPOSAL QUANTITIES**  
**(Excluding Inert Waste Landfills)**

Year	A	B	C	D	E	F
	In-County Disposal		Out-of County Class III Landfills (Exports) (TONS)	Total Disposal A+B+C* (TONS)	State Mandated Diversion Rate %	Calculated 2010 Solid Waste Generation (TONS)
	Class III Landfills	Transformation Facilities				
	(TONS)	(TONS)				
2010	6,313,263	539,129	1,917,993	8,770,385	55	19,489,744

\* Excludes disposal at inert waste landfills.

Column A : Total disposal at Class III landfills in Los Angeles County. Does not include waste imported from jurisdictions outside the County.

Column B : Total disposal at transformation facilities in the County. Does not includes waste imported from jurisdictions outside the County.

Column C : Waste exported by jurisdictions in the County to disposal facilities (Class III landfills only) located outside the County.

Column D : Columns A + B + C.

Column E : Countywide Diversion Rate of 55 percent is assumed based on 2006 estimated achieved diversion of 58 percent.

Column F : Column D ÷ Column E. This estimate is used to project the County's Class III landfill and transformation disposal needs through the year 2025. Disposal at inert waste landfills is excluded from these calculations.

Source: Los Angeles County Department of Public Works, 2010 Annual Report on the Los Angeles County Countywide Siting Element, October 2011.

Table 4-6

**LOS ANGELES COUNTY SOLID WASTE GENERATION PROJECTIONS  
FOR THE PLANNING PERIOD (2010-2025)**

YEAR	POPULATION	EMPLOYMENT	TAXABLE SALES	B-Y RWG	B-Y NWG	RAF	NAF	TOTAL GENERATION (TONS)	DAILY WASTE GENERATION RATE (TPD <sup>1</sup> )
2010	9,836,000	3,768,800	#####	5,309,006	14,180,738			19,489,744	62,467
2011	9,889,000	3,796,200	104,300,000,000	5,309,006	14,180,738	1.005474203	1.005560037	19,597,652	62,813
2012	9,951,000	3,875,000	108,900,000,000	5,309,006	14,180,738	1.024921354	1.038150963	20,163,061	64,625
2013	10,029,000	3,972,600	113,300,000,000	5,309,006	14,180,738	1.045947693	1.072273588	20,758,574	66,534
2014	10,109,000	4,072,600	119,000,000,000	5,309,006	14,180,738	1.070362908	1.112970631	21,465,309	68,799
2015	10,187,000	4,167,500	125,300,000,000	5,309,006	14,180,738	1.095781848	1.155878459	22,208,722	71,182
2016	10,259,000	4,256,900	131,600,000,000	5,309,006	14,180,738	1.120530949	1.198056611	22,938,233	73,520
2017	10,329,000	4,342,000	135,400,000,000	5,309,006	14,180,738	1.138877746	1.227633491	23,455,058	75,176
2018	10,398,000	4,417,700	140,200,000,000	5,309,006	14,180,738	1.158956328	1.260775609	24,031,635	77,024
2019	10,467,000	4,484,700	145,400,000,000	5,309,006	14,180,738	1.179420268	1.294688442	24,621,187	78,914
2020	10,536,000	4,541,700	150,200,000,000	5,309,006	14,180,738	1.198258403	1.325349664	25,155,998	80,628
2021	10,605,000	4,588,300	154,600,000,000	5,309,006	14,180,738	1.215444199	1.35270621	25,635,173	82,164
2022	10,675,000	4,629,600	159,300,000,000	5,309,006	14,180,738	1.233051106	1.380803309	26,127,086	83,741
2023	10,747,000	4,670,000	164,000,000,000	5,309,006	14,180,738	1.250699979	1.408781007	26,617,529	85,313
2024	10,819,000	4,710,700	169,100,000,000	5,309,006	14,180,738	1.269331217	1.438723433	27,141,048	86,991
2025	10,891,000	4,750,300	173,300,000,000	5,309,006	14,180,738	1.285723943	1.464188837	27,589,195	88,427

**Notes:**

**Population:** Countywide Population Projection (UCLA Anderson Long-Term Los Angeles County Forecast, July 2011).

**Employment:** Countywide Employment Projection (UCLA Anderson Long-Term Los Angeles County Forecast, July 2011).  
Employment data from UCLA only accounts for non-farm employment.

**Taxable Sales:** Countywide Taxable Sales (UCLA Anderson Long-Term Los Angeles County Forecast, July 2011).  
Taxable Sales data from UCLA considers the real dollar value.

**B-Y RWG** = Base Year Residential Waste Generation. Calculation based on 1990 or later Residential Waste Generation factor (27 percent of total waste generation).

**B-Y NWG** = Base Year Non-Residential Waste Generation. Calculation based on 1990 or later Non-residential Waste Generation factor (73 percent of total wastegeneration).

**RAF** = Residential Adjustment Factor =  $\{(PR/PB)+[ER/EB+(CB/CR*TR/TB)]/2\}/2$

**NAF** = Non-Residential Adjustment Factor =  $[ER/EB+(CB/CR*TR/TB)]/2$  or  $\{(PR/PB)+[NAF]\}/2$

\*For the purposes of the CSE, the ratio for CB/CR in the formula for RAF and NAF is considered as 1.0 based on the 2010 Annual Report.

The Adjustment Methodology Formula as adopted by the CIWMB is expressed as follows:

**Estimated Solid Waste Generation for the Reporting Year = [(B-Y RWG) (RAF)] + [(B-Y NWG)(NAF)]**

PR= Population in the Reporting Year

PB= Population in the Base Year

ER= Employment in the Reporting Year

EB= Employment in the Base Year

CR= Consumer Price Sales in the Reporting Year

CB= Consumer Price Index in the Base Year

TR= Taxable Sales in the Reporting Year

TB= Taxable Sales in the Base Year

**Footnotes:**

<sup>1</sup>"TPD" means tons per day (6-day per week average)

**TABLE 4-7**  
**LOS ANGELES COUNTY SOLID WASTE DISPOSAL CAPACITY REQUIREMENTS FOR THE PLANNING PERIOD (2010-2025)**  
**(Excluding Disposal Capacity Provided By Permitted Inert Waste Landfills)**

A	B	C	D	E	F	G	H	I	J
YEAR	TOTAL GENERATION (TONS)	PERCENT DIVERSION (ASSUMED)	TOTAL DIVERSION (TONS)	PROJECTED TRANSFORMATION & CLASS III LANDFILL DISPOSAL (TONS)	AVAILABLE TRANSFORMATION CAPACITY (TONS)	CLASS III LANDFILL DISPOSAL NEED			
						ANNUAL		CUMULATIVE (YEAR'S END)	
						TONS	CUBIC YARDS	TONS	CUBIC YARDS
2010	19,489,744	55	10,719,359	8,770,385	645,600	8,124,785	13,541,308	8,124,785	13,541,308
2011	19,597,652	55	10,778,709	8,818,944	645,600	8,173,344	13,622,239	16,298,129	27,163,548
2012	20,163,061	55	11,089,683	9,073,377	645,600	8,427,777	14,046,296	24,725,906	41,209,843
2013	20,758,574	55	11,417,216	9,341,358	645,600	8,695,758	14,492,930	33,421,664	55,702,774
2014	21,465,309	55	11,805,920	9,659,389	645,600	9,013,789	15,022,981	42,435,453	70,725,755
2015	22,208,722	55	12,214,797	9,993,925	645,600	9,348,325	15,580,542	51,783,778	86,306,297
2016	22,938,233	55	12,616,028	10,322,205	645,600	9,676,605	16,127,675	61,460,383	102,433,972
2017	23,455,058	55	12,900,282	10,554,776	645,600	9,909,176	16,515,294	71,369,559	118,949,265
2018	24,031,635	55	13,217,399	10,814,236	645,600	10,168,636	16,947,726	81,538,195	135,896,992
2019	24,621,187	55	13,541,653	11,079,534	645,600	10,433,934	17,389,891	91,972,129	153,286,882
2020	25,155,998	55	13,835,799	11,320,199	645,600	10,674,599	17,790,998	102,646,728	171,077,881
2021	25,635,173	55	14,099,345	11,535,828	645,600	10,890,228	18,150,380	113,536,956	189,228,261
2022	26,127,086	55	14,369,897	11,757,189	645,600	11,111,589	18,519,315	124,648,545	207,747,575
2023	26,617,529	55	14,639,641	11,977,888	645,600	11,332,288	18,887,146	135,980,833	226,634,722
2024	27,141,048	55	14,927,576	12,213,471	645,600	11,567,871	19,279,786	147,548,705	245,914,508
2025	27,589,195	55	15,174,057	12,415,138	645,600	11,769,538	19,615,896	159,318,242	265,530,404

**Notes:**

1. Waste generation (Column B) is calculated using CalRecycle's Adjustment Methodology, utilizing employment, population, and taxable sales projections from UCLA Anderson Long-Term Los Angeles County Forecast, July 2011.
2. Waste generation for 2010 is based on actual in-County and out-of-County transformation and Class III landfill disposal by jurisdictions in the County. A 55 percent diversion rate is assumed. These tonnages DO NOT include inert waste disposed of unclassified (Inert Waste) landfills.
3. The 2010 transformation and Class III landfill disposal quantity (first figure under Column E) is based on tonnages reported by permitted solid waste disposal facility operators in the County and export quantities reported by other counties to the County Department of Public Works as part of the 2010 Disposal Quantity Reporting data.
4. Columns H and J are based on Columns G and I, respectively, using an in-place waste density of 1,200 pounds per cubic yard (lb/cy).

Source : Los Angeles County Department of Public Works, 2010 Annual Report on the Los Angeles County Countywide Siting Element, October 2011.

TABLE 4-8  
REMAINING PERMITTED COMBINED DISPOSAL CAPACITY OF EXISTING SOLID WASTE DISPOSAL FACILITIES IN LOS ANGELES COUNTY  
(As of December 31, 2010)

Facility	Solid Waste Facility Permit Number	Location	Permitted Operation days/week	SWFP Maximum Daily Capacity	LUP/CUP Maximum Daily Capacity	2010 Average Daily Disposal tpd-6 (See Note 1)			2010 Annual Disposal (Million Tons) (See Note 1)			Projected 2011 Average Daily Disposal tpd-6 (See Note 2)			2011 Annual Disposal (Million Tons) (See Note 2)			Estimated Remaining Permitted Capacity (as of December 31, 2010) (See Note 3)		Comments and Solid Waste Flow Restrictions
		City or Unincorporated Area		Tons	Tons	In-County	Out-of-County	Total	In-County	Out-of-County	Total	In-County	Out-of-County	Total	In-County	Out-of-County	Total	Million Tons	Million (a) Cubic Yards	
MAJOR AND MINOR CLASS III LANDFILLS																				
Antelope Valley	19-AA-0009	Palmdale	7	1,400	---	462	30	492	0.144	0.009	0.154	444	9	453	0.031	0.000	0.031	6.540	12.887	The City of Palmdale approved LUP for the expansion on Antelope Valley Landfills #1 & #2 on 09/19/2011. The expansion will result in an additional capacity of about 9 million tons. See Chapter 7, Proposed In-County Facility Locations and Descriptions, Section 7.5.
	19-AA-5624	Palmdale		1,800 (b)	1,800															
Burbank	19-AA-0040	Burbank	5	240	---	121	0	121	0.038	0.000	0.038	117	0	117	0.009	0.000	0.009	2.846	5.174	Limited to the City of Burbank's use only and provided waste is collected by the City of Burbank's crews.
Calabasas	19-AA-0056	Unincorporated Area	6	3,500	---	762	50	812	0.238	0.015	0.253	794	48	842	0.070	0.003	0.074	6.031	13.493	Limited to the Calabasas Wasteshed as defined by Los Angeles County Ordinance No. 91-0003.
Chiquita Canyon	19-AA-0052	Unincorporated Area	6	6,000	6,000	3,461	31	3,493	1.080	0.010	1.090	3,688	29	3,718	0.298	0.001	0.300	6.233	8.390	Proposed expansion pending. LUP limits waste disposal to 30,000 tons per week. LUP expires 11/24/2019. New CUP pending.
Lancaster	19-AA-0050	Unincorporated Area	6	1,700	1,700	723	101	825	0.226	0.032	0.257	727	53	780	0.058	0.002	0.060	0.886	1.080	
Pebbly Beach	19-AA-0061	Unincorporated Area	7	49	49	10	0	10	0.003	0.000	0.003	10	0	10	0.001	0.000	0.001	0.058	0.065	LUP expires 07/29/2028.
Puente Hills	19-AA-0053	Unincorporated Area	6	13,200	13,200	5,825	76	5,901	1.817	0.024	1.841	5,449	74	5,523	0.422	0.006	0.428	12.516	22.756	LUP limits waste disposal to 72,000 tons per week. Does not accept waste generated from Orange County and portions of the City of Los Angeles outside the wasteshed boundary. Closure date is 10/31/2013.
San Clemente	19-AA-0063	Unincorporated Area	2	10	---	1	0	1	0.000	0.000	0.000	1	0	1	0.000	0.000	0.000	0.039	0.313	Landfill owned and operated by the U. S. Navy.
Scholl Canyon	19-AA-0012	Glendale	6	3,400	---	786	0	786	0.245	0.000	0.245	753	0	753	0.056	0.000	0.056	4.104	8.445	Limited to the Scholl Canyon Wasteshed as defined by City of Glendale Ordinance No. 4782.
Sunshine City/County	19-AA-2000	Los Angeles/ Unincorporated Area	6	12,100	12,100	7,844	1	7,845	2.447	0.000	2.448	7,577	1	7,578	0.609	0.000	0.609	80.805	101.006	The combined Sunshine Canyon City/County Landfill became effective 12/31/2008, based on a Memorandum of Understanding between the City and County of Los Angeles.
Whittier (Savage Canyon)	19-AH-0001	Whittier	6	350	350	240	0	240	0.075	0.000	0.075	245	0	245	0.018	0.000	0.018	3.788	5.997	Landfill undergoing a regrade that would yield additional 4,389,488 cubic yards. Limited to waste from the City of Whittier or waste haulers contracted with the City of Whittier.
TOTAL				43,749		20,235	290	20,525	6.313	0.091	6.404	19,805	215	20,020	1.571	0.013	1.584	123.846	179.606	
WASTE-TO-ENERGY FACILITIES																				
Commerce Refuse To-Energy Facility	19-AA-0506	Commerce	7	1,000	---	305	18	322	0.095	0.005	0.101	309	17	326	0.028	0.002	0.029	467 (c)	778	Assumed to remain operational during the 15-year planning period.
Southeast Resource Recovery Facility	19-AK-0083	Long Beach	7	2,240	---	1,423	143	1,566	0.444	0.045	0.489	1,350	133	1,483	0.082	0.007	0.089	1,602 (d)	2,670	Assumed to remain operational during the 15-year planning period.
TOTAL				3,240		1,728	161	1,889	0.539	0.050	0.589	1,659	150	1,809	0.110	0.008	0.118	2,069 (e)	3,448	
INERT WASTE LANDFILLS (PERMITTED INERT WASTE LANDFILLS ONLY)																				
Azusa Land Reclamation	19-AA-0013	Azusa	6	6,500	---	176	224	400	0.055	0.070	0.125	196	183	379	0.021	0.015	0.036	50.844	42.724	By Court order, on 10/02/1996, the California Regional Water Quality Control Board-Los Angeles Region ordered the Azusa Land Reclamation Landfill to stop accepting municipal solid waste. Permitted daily capacity of 6,500 tpd consists of 6,000 tpd of refuse and 500 tpd of inert waste. Facility currently accepts inert waste only.
TOTAL				6,500		176	224	400	0.055	0.070	0.125	196	183	379	0.021	0.015	0.036	50.844	42.724	
Out-of-County Disposal	Waste Exported in 2008 from Los Angeles County to Out-of-County Facilities = 1,917,993 tons or 6,147 tpd-6																			

Notes:  
1. Disposal quantities are based on actual tonnages reported by owners/operators of permitted solid waste disposal facilities to the Los Angeles County Department of Public Works through the State Disposal Reporting System. The 2010 disposal tonnages listed above are based on tonnage figures for the period of 01/01/2010 through 12/31/2010.  
2. Projections based on third and fourth quarters of 2010 and first and second quarters of 2011.  
3. Estimated Remaining Permitted Capacity based on landfill owner/operator responses in a written survey conducted by the County Department of Public Works in March 2010, as well as a review of site specific permit criteria established by local land use agencies, Local Enforcement Agencies, California Regional Water Quality Control Board, and the South Coast Air Quality Management District.

Abbreviations:  
LUP/CUP - Land Use Permit or Conditional Use Permit  
SWFP - Solid Waste Facility Permit

Footnotes:  
(a) Conversion factor is based on in-place solid waste density provided by landfill operators; otherwise, a conversion factor of 1,200 lb/cy was used.  
(b) Antelope Valley Landfill's daily capacity of 1,800 tons is based on the SWFP issued on 12/26/1995 for the unincorporated County landfill area (expansion capacity included).  
(c) Based on the Solid Waste Facility Permit limit of 2,800 tons per week, expressed as a daily average, six days/week.  
(d) Based on U.S. Environmental Protection Agency limit of 500,000 tons per year, expressed as a daily average, six days/week.  
(e) Tonnage expressed as a daily average, six days/week

**TABLE 4-9**  
**Summary of Description of Disposal Capacity Need Analysis Scenarios**  
**Assuming AB 939 Diversion is Fully Implemented and No New Class III Lnadfills in Los Angeles County during the Planning Period**

Scenarios/Assumptions	Scenario Table	Existing Permitted In-County Class III Landfill Capacity	Current Exports to Out-of-County Disposal Facilities	Increase in Diversion Rate (up to 65 percent by 2025)	Utilization of Alternative Technology Facility Capacity (up to 2,300 tpd by 2025)	Proposed Expansions of in-County Class III Landfills	Increase in Exports to Available Out-of-County Disposal Facilities (up to 12,000 tpd by 2025)	Maximizing Diversion Rate (up to 75 percent by 2025)	Increase Utilization of Alternative Technology Facility Capacity (up to 3,500 tpd by 2025)	Full Utilization of Available Out-of-County Disposal Capacity (up to 19,000 tpd by 2025)	Description of Disposal Capacity Need Analysis Scenarios
<b>Scenario No. 1</b> <b>(Status Quo Scenario)</b>	Table 4-10	●	●								- Use of existing in-County class III landfills and transformation facilities. - <b>Plus current diversion rate (55 percent).</b> - <b>Plus utilization of currentl exports to out-of-County disposal facilities.</b>
<b>Scenario No. 2</b> <b>Increase in Diversion Rate (up to 65% by 2025)</b>	Table 4-11	●	●	●							- Use of existing in-County class III landfills and transformation facilities. - Plus utilization of current exports to out-of-County disposal facilities. - <b>Plus increase in diversion rate (up to 65 percent by 2025).</b>
<b>Scenario No. 3</b> <b>Utilization of Alternative Technology Facility Capacity (up to 2,300 tpd by 2025)</b>	Table 4-12	●	●	●	●						- Use of existing in-County class III landfills and transformation facilities. - Plus utilization of current exports to out-of-County disposal facilities. - Plus increase in diversion rate (up to 65 percent by 2025). - <b>Plus utilization of alternative technology facility capacity (up to 2,300 tpd by 2025).</b>
<b>Scenario No. 4</b> <b>In-County Class III Landfills Expansions</b>	Table 4-13	●	●	●	●	●					- Use of existing in-County class III landfills and transformation facilities. - Plus utilization of current exports to out-of-County disposal facilities. - Plus increase in diversion rate (up to 65 percent by 2025). - Plus utilization of alternative technology facility capacity (up to 2,300 tpd by 2025). - <b>Plus development of all proposed in-County class III landfill expansions.</b>
<b>Scenario No. 5</b> <b>Increase in Exports to Available Out-of-County Disposal Facilities (up to 12,000 tpd by 2025)</b>	Table 4-14	●	●	●	●	●	●				- Use of existing in-County class III landfills and transformation facilities. - Plus utilization of current exports to out-of-County disposal facilities. - Plus increase in diversion rate (up to 65 percent by 2025). - Plus utilization of alternative technology facility capacity (up to 2,300 tpd by 2025). - Plus development of all proposed in-County class III landfill expansions. - <b>Plus increase in exports to out-of-County disposal facilities (up to 12,000 tpd by 2025).</b>
<b>Scenario No. 6</b> <b>Maximizing Diversion Rate (up to 75% by 2025 - Complies with AB 341 Goal)</b>	Table 4-15	●	●	●	●	●	●	●			- Use of existing in-County class III landfills and transformation facilities. - Plus utilization of current exports to out-of-County disposal facilities. - <b>Plus maximizing diversion rate (up to 75 percent by 2025).</b> - Plus utilization of alternative technology facility capacity (up to 2,300 tpd by 2025). - Plus development of all proposed in-County class III landfill expansions. - Plus increase in exports to out-of-County disposal facilities (up to 12,000 tpd by 2025).
<b>Scenario No. 7</b> <b>Increase Utilization of Alternative Technology Facility Capacity (up to 3,500 tpd by 2025)</b>	Table 4-16	●	●	●	●	●	●		●		- Use of existing in-County class III landfills and transformation facilities. - Plus utilization of currently available out-of-County disposal facility capacity. - Plus increase in diversion rate (up to 65 percent by 2025). - <b>Plus increase utilization of alternative technology facility capacity (up to 3,500 tpd by 2025).</b> - Plus development of all proposed in-County class III landfill expansions. - Plus increase available out-of-County disposal facility capacity (up to 12,000 tpd by 2025).
<b>Scenario No. 8</b> <b>Full Utilization of Available Out-of-County Disposal Capacity (up to 19,000 tpd by 2025)</b>	Table 4-17	●	●	●	●	●	●			●	- Use of existing in-County class III landfills and transformation facilities. - Plus utilization of current exports to out-of-County disposal facilities. - Plus increase in diversion rate (up to 65 percent by 2025). - Plus utilization of alternative technology facility capacity (up to 2,300 tpd by 2025). - Plus development of all proposed in-County class III landfill expansions. - <b>Plus full utilization of available out-of-County disposal facility capacity (up to 19,000 tpd by 2025).</b>
<b>Scenario No. 9</b> <b>(Best Case Scenario)</b> <b>All Solid Waste Management Options Considered Becomes Available</b>	Table 4-18	●	●	●	●	●	●	●	●	●	- Use of existing in-County class III landfills and transformation facilities. - Plus utilization of current exports to out-of-County disposal facilities. - <b>Plus maximizing diversion rate (up to 75 percent by 2025).</b> - <b>Plus utilization of alternative technology facility capacity (up to 3,000 tpd by 2025).</b> - <b>Plus development of all proposed in-County class III landfill expansions.</b> - <b>Plus full utilization of available out-of-County disposal facility capacity (up to 16,000 tpd by 2025).</b>



LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT  
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)

TABLE 4-10  
SCENARIO No. 1 - STATUS QUO

• Existing In-County Class III Landfills and Transformation Facilities

• Current Diversion Rate (at 55%)

• Current Exports to Available Out-of-County Disposal Facilities

Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities	Class III Landfill Daily Disposal Demand	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
							IN-COUNTY CLASS III LANDFILLS											Total Available Capacity <sup>2</sup> from Class III Landfills	Export Need	Available Out-of-County Disposal Capacity	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)
							R	R	R	R	R	R	R	R	R	R	R				
							Antelope Valley	Burbank	Calabasas	Chiquita	Lancaster	Pebbly Beach	Puente Hills	San Clemente	Scholl	Sunshine Canyon City/County	Whittier				
							Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6) Remaining Capacity at Year's End (Million Tons)											Daily Capacity (tpd-6)			
A	B	C=A(1-B)	D	E	F=C+D-E													G	H=F-G	I	J=H-I
(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)													(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
2010	62,467	55%	28,110	675	1,728	27,057	1,800 462 6.5	240 121 2.8	3,500 762 6.0	5,000 3,461 6.2	1,700 723 0.9	49 10 0.1	13,200 5,825 12.5	10 1 0.04	3,400 786 4.1	11,000 7,844 80.8	350 240 3.8	34,620	(7,563)	6,147	—
2011	62,813	55%	28,266	700	2,069	26,897	1,800 459 6.4	240 120 2.8	3,500 758 5.8	5,000 3,441 5.2	1,700 719 0.7	49 10 0.05	13,200 5,790 10.71	10 0.85 0.04	3,400 781 3.9	11,000 8,000 78.3	350 239 3.7	34,608	(7,711)	6,200	(13,911)
2012	64,625	55%	29,081	700	2,069	27,713	1,800 473 6.2	240 124 2.8	3,500 781 5.6	5,000 3,545 4.1	1,700 741 0.4 CP	49 10 0.05	13,200 5,966 8.85	10 0.88 0.04	3,400 805 3.6	11,000 8,500 75.7	350 246 3.6	34,666	(6,953)	6,200	(13,153)
2013	66,534	55%	29,940	700	2,069	28,572	1,800 488 6.1	240 128 2.7	3,500 805 5.3	5,000 3,655 2.9		49 10 0.05	13,200 6,151 6.93 CP	10 0.90 0.04	3,400 830 3.4	11,000 9,000 72.8	350 254 3.6	33,027	(4,456)	6,200	(10,656)
2014	68,799	55%	30,960	700	2,069	29,591	1,800 505 5.9	240 132 2.7	3,500 833 5.0	5,000 3,786 1.7		49 11 0.05		10 0.94 0.04	3,400 860 3.1	11,000 9,500 69.9	350 263 3.5	19,899	9,691	6,200	3,491
2015	71,182	55%	32,032	700	2,069	30,663	1,800 524 5.8	240 137 2.6	3,500 864 4.8	5,000 3,923 0.5		49 11 0.04		10 0.97 0.04	3,400 891 2.8	11,000 10,000 66.8	350 272 3.4	19,976	10,688	6,200	4,488
2016	73,520	55%	33,084	700	2,069	31,715	1,800 542 5.6	240 142 2.6	3,500 893 4.5	5,000 4,057 (0.8) CC		49 11 0.04		10 1.00 0.04	3,400 921 2.5	11,000 10,500 63.5	350 282 3.3	20,050	11,665	6,200	5,465
2017	75,176	55%	33,829	700	2,069	32,461	1,800 554 5.4	240 145 2.6	3,500 914 4.2			49 12 0.03		10 1.03 0.04	3,400 943 2.2	11,000 11,000 60.1	350 288 3.2	15,103	17,358	6,200	11,158
2018	77,024	55%	34,661	700	2,069	33,292	1,800 568 5.3	240 149 2.5	3,500 938 3.9			49 12 0.03		10 1.05 0.04	3,400 967 1.9	11,000 11,000 56.6	350 296 3.1	15,162	18,130	6,200	11,930
2019	78,914	55%	35,511	700	2,069	34,143	1,800 583 5.1	240 152 2.5	3,500 962 3.6			49 12 0.03		10 1.08 0.04	3,400 992 1.6	11,000 11,000 53.2	350 303 3.0	15,222	18,920	6,200	12,720
2020	80,628	55%	36,283	700	2,069	34,914	1,800 596 4.9	240 156 2.4	3,500 983 3.3			49 13 0.02		10 1.10 0.04	3,400 1,014 1.3	11,000 11,000 49.8	350 310 2.9	15,277	19,637	6,200	13,437
2021	82,164	55%	36,974	700	2,069	35,605	1,800 608 4.7	240 159 2.4	3,500 1,003 3.0			49 13 0.02		10 1.13 0.04	3,400 1,034 1.0	11,000 11,000 46.3	350 316 2.8	15,326	20,279	6,200	14,079
2022	83,741	55%	37,683	700	2,069	36,315	1,800 620 4.5	240 162 2.3	3,500 1,023 2.7			49 13 0.01		10 1.15 0.03	3,400 1,055 0.6	11,000 11,000 42.9	350 322 2.7	15,377	20,938	6,200	14,738
2023	85,313	55%	38,391	700	2,069	37,022	1,800 632 4.3	240 165 2.3	3,500 1,043 2.4			49 13 0.011		10 1.17 0.03	3,400 1,076 0.3	11,000 11,000 39.5	350 329 2.6	15,427	21,595	6,200	15,395
2024	86,991	55%	39,146	700	2,069	37,777	1,800 645 4.1	240 169 2.2	3,500 1,064 2.0			49 14 0.007		10 1.19 0.03	3,400 1,098 (0.04) CC	11,000 11,000 36.0	350 335 2.5	15,480	22,297	6,200	16,097
2025	88,427	55%	39,792	700	2,069	38,424	1,800 656 3.9	240 171 2.2	3,500 1,082 1.7			49 14 0.002 CC		10 1.22 0.03		11,000 11,000 32.6	350 341 2.4	14,410	24,014	6,200	17,814

ASSUMPTIONS:

- Waste Generation is estimated using the CalRecycle's Adjustment Methodology; UCLA's Anderson Long-Term Los Angeles County Forecast, July 2011 projections for population, employment (non-farm) and real taxable sales.
- Daily Available Capacity (in blue text) is based on Maximum Permitted Daily Capacity (tpd) for facilities without a restricted wasteshed or Expected Average Daily Tonnage (tpd) for facilities with a restricted wasteshed. The calculation of maximum remaining capacity (tons) is based on similar rationale.

LEGEND:

- CP -Closure due to permit expiration  
CC -Closure due to exhausted capacity  
E -Expansion may become effective  
R -Restricted wasteshed

Source: Los Angeles County Department of Public Works, October 2011.

LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT  
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)

TABLE 4-11  
SCENARIO No. 2 - INCREASE IN DIVERSION RATE (UP TO 65% BY 2025)

Existing In-County Class III Landfills and Transformation Facilities							Increase in Diversion Rate (Up to 65% by 2025)										Current Exports to Available Out-of-County Disposal Facilities				
Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities	Class III Landfill Daily Disposal Demand	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
							IN-COUNTY CLASS III LANDFILLS										Total Available Capacity <sup>2</sup> from Class III Landfills	Export Need	Available Out-of-County Disposal Capacity	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)	
							R R R R R R R R R R														
							Antelope Valley	Burbank	Calabasas	Chiquita	Lancaster	Pebble Beach	Puente Hills	San Clemente	Scholl	Sunshine Canyon City/County					Whittier
							Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6) Remaining Capacity at Year's End (Million Tons)														Daily Capacity (tpd-6)  Remaining Capacity (Million Tons)
A	B	C=A(1-B)	D	E	F=C+D-E											G	H=F-G	I	J=H-I		
(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)											(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)		
2010	62,467	55%	28,110	675	1,728	27,057	1,800 462 6.5	240 121 2.8	3,500 762 6.0	5,000 3,461 6.2	1,700 723 0.9	49 10 0.06	13,200 5,825 12.5	10 1 0.04	3,400 786 4.1	11,000 7,844 80.8	350 240 3.8	34,620	(7,563)	6,147	—
2011	62,813	55%	28,266	700	2,069	26,897	1,800 459 6.4	240 120 2.8	3,500 758 5.8	5,000 3,441 5.2	1,700 719 0.7	49 10 0.05	13,200 5,790 10.71	10 0.85 0.04	3,400 781 3.9	11,000 8,000 78.3	350 239 3.7	34,608	(7,712)	6,200	(13,912)
2012	64,625	55%	29,081	700	2,069	27,713	1,800 473 14.9	240 124 2.8	3,500 781 5.6	5,000 3,545 4.1	1,700 741 0.4	49 10 0.05	13,200 5,966 8.85	10 0.88 0.04	3,400 805 3.6	11,000 8,500 75.7	350 246 3.6	34,666	(6,953)	6,200	(13,153)
2013	66,534	55%	29,940	700	2,069	28,572	1,800 488 14.8	240 128 2.7	3,500 805 5.3	5,000 3,655 2.9	CP	49 10 0.05	13,200 6,151 6.93	10 0.90 0.04	3,400 830 3.4	11,000 9,000 72.8	350 254 3.6	33,027	(4,456)	6,200	(10,656)
2014	68,799	55%	30,960	700	2,069	29,591	1,800 505 14.6	240 132 2.7	3,500 833 5.0	5,000 3,786 1.7		49 11 0.05		10 0.94 0.04	3,400 860 3.1	11,000 9,500 69.9	350 263 3.5	19,899	9,691	6,200	3,491
2015	71,182	55%	32,032	700	2,069	30,663	1,800 524 14.5	240 137 2.6	3,500 864 4.8	5,000 3,923 0.5		49 11 0.04		10 0.97 0.04	3,400 891 2.8	11,000 10,000 66.8	350 272 3.4	19,976	10,688	6,200	4,488
2016	73,520	56%	32,349	700	2,069	30,980	1,800 529 14.3	240 138 2.6	3,500 873 4.5	5,000 3,963 (0.7)	CC	49 11 0.04		10 0.98 0.04	3,400 900 2.5	11,000 10,500 63.5	350 275 3.3	19,998	10,982	6,200	4,782
2017	75,176	57%	32,326	700	2,069	30,957	1,800 529 14.1	240 138 2.6	3,500 872 4.2			49 11 0.03		10 0.98 0.04	3,400 899 2.2	11,000 11,000 60.1	350 275 3.2	14,996	15,961	6,200	9,761
2018	77,024	58%	32,350	700	2,069	30,982	1,800 529 14.0	240 138 2.5	3,500 873 4.0			49 11 0.03		10 0.98 0.04	3,400 900 2.0	11,000 11,000 56.6	350 275 3.1	14,998	15,984	6,200	9,784
2019	78,914	59%	32,355	700	2,069	30,986	1,800 529 13.8	240 138 2.5	3,500 873 3.7			49 11 0.03		10 0.98 0.04	3,400 900 1.7	11,000 11,000 53.2	350 275 3.0	14,998	15,988	6,200	9,788
2020	80,628	60%	32,251	700	2,069	30,883	1,800 527 13.6	240 138 2.4	3,500 870 3.4			49 11 0.02		10 0.98 0.04	3,400 897 1.4	11,000 11,000 49.8	350 274 3.0	14,991	15,892	6,200	9,692
2021	82,164	61%	32,044	700	2,069	30,675	1,800 524 13.5	240 137 2.4	3,500 864 3.1			49 11 0.02		10 0.97 0.04	3,400 891 1.1	11,000 11,000 46.3	350 272 2.9	14,976	15,699	6,200	9,499
2022	83,741	62%	31,821	700	2,069	30,453	1,800 520 13.3	240 136 2.3	3,500 858 2.9			49 11 0.02		10 0.96 0.04	3,400 885 0.8	11,000 11,000 42.9	350 270 2.8	14,961	15,492	6,200	9,292
2023	85,313	63%	31,566	700	2,069	30,197	1,800 516 13.2	240 135 2.3	3,500 850 2.6			49 11 0.01		10 0.96 0.03	3,400 877 0.6	11,000 11,000 39.5	350 268 2.7	14,942	15,255	6,200	9,055
2024	86,991	64%	31,317	700	2,069	29,948	1,800 511 13.0	240 134 2.3	3,500 843 2.3			49 11 0.01		10 0.95 0.03	3,400 870 0.3	11,000 11,000 36.0	350 266 2.6	14,925	15,023	6,200	8,823
2025	88,427	65%	30,949	700	2,069	29,581	1,800 505 12.8	240 132 2.2	3,500 833 2.1			49 11 0.01		10 0.94 0.03	3,400 859 0.03	11,000 11,000 32.6	350 263 2.5	14,899	14,682	6,200	8,482

ASSUMPTIONS:

1. Waste Generation is estimated using the CalRecycle's Adjustment Methodology, UCLA's Anderson Forecast, dated August 2011 projections for population, employment (non-farm) and real taxable sales.  
2. **Daily Available Capacity** (in blue text) is based on Maximum Permitted Daily Capacity (tpd) for facilities without a restricted wasteshed or Expected Average Daily Tonnage (tpd) for facilities with a restricted wasteshed. The calculation of maximum remaining capacity (tons) is based on similar rationale.

LEGEND:

- CP -Closure due to permit expiration  
CC -Closure due to exhausted capacity  
E -Expansion may become effective  
R -Restricted Wasteshed

**LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT  
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)**

**TABLE 4-12**  
**SCENARIO No. 3 - UTILIZATION OF ALTERNATIVE TECHNOLOGY FACILITY CAPACITY (UP TO 2,300 TPD BY 2025)**

- Existing In-County Class III Landfills and Transformation Facilities
- Current Exports to Available Out-of-County Disposal Facilities
- Increase in Diversion Rate (Up to 65% by 2025)
- Utilization of Alternative Technology Facility Capacity (Up to 2,300 tpd by 2025)

Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities	Maximum Alternative Technology Capacity	Class III Landfill Daily Disposal Demand	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
								IN-COUNTY CLASS III LANDFILLS											Total Available Capacity <sup>2</sup> from Class III Landfills	Export Need	Available Out-of-County Disposal Capacity	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)	
								R R R R R R															
								Antelope Valley	Burbank	Calabasas	Chiquita	Lancaster	Pebble Beach	Puente Hills	San Clemente	Scholl	Sunshine Canyon	Whittier					
								Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6) Remaining Capacity at Year's End (Million Tons)															Daily Capacity (tpd-6)
																							Remaining Capacity (Million Tons)
A	B	C=A(1-B)	D	E	F	G =C+D-E-F												H	I=G-H	J	K=I-J		
(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)												(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	
2010	62,467	55%	28,110	675	1,728	0	27,057	1,800 462 6.5	240 121 2.8	3,500 762 6.0	5,000 3,461 6.2	1,700 723 0.9	49 10 0.06	13,200 5,825 12.5	10 1 0.04	3,400 786 4.1	11,000 7,844 80.8	350 240 3.8	34,620	(7,563)	6,147	—	
2011	62,813	55%	28,266	700	2,069	0	26,897	1,800 459 6.4	240 120 2.8	3,500 758 5.8	5,000 3,441 5.2	1,700 719 0.7	49 10 0.05	13,200 5,790 10.71	10 0.85 0.04	3,400 781 3.9	11,000 8,000 78.3	350 239 3.7	34,608	(7,711)	6,200	(13,911)	
2012	64,625	55%	29,081	700	2,069	0	27,713	1,800 473 14.9	240 124 2.8	3,500 781 5.6	5,000 3,545 4.1	1,700 741 0.4 CP	49 10 0.05	13,200 5,966 8.85	10 0.88 0.04	3,400 805 3.6	11,000 8,500 75.7	350 246 3.6	34,666	(6,953)	6,200	(13,153)	
2013	66,534	55%	29,940	700	2,069	0	28,572	1,800 488 14.8	240 128 2.7	3,500 805 5.3	5,000 3,655 2.9	CP	49 10 0.05	13,200 6,151 6.93 CP	10 0.90 0.04	3,400 830 3.4	11,000 9,000 72.8	350 254 3.6	33,027	(4,456)	6,200	(10,656)	
2014	68,799	55%	30,960	700	2,069	0	29,591	1,800 505 14.6	240 132 2.7	3,500 833 5.0	5,000 3,786 1.7	CP	49 11 0.05	13,200 5,790 10.71	10 0.94 0.04	3,400 860 3.1	11,000 9,500 69.9	350 263 3.5	19,899	9,691	6,200	3,491	
2015	71,182	55%	32,032	700	2,069	0	30,663	1,800 524 14.5	240 137 2.6	3,500 864 4.8	5,000 3,923 0.5	CP	49 11 0.04	13,200 5,966 8.85	10 0.97 0.04	3,400 891 2.8	11,000 10,000 66.8	350 272 3.4	19,976	10,688	6,200	4,488	
2016	73,520	56%	32,349	700	2,069	0	30,980	1,800 529 14.3	240 138 2.6	3,500 873 4.5	5,000 3,963 (0.7) CC	CP	49 11 0.04	13,200 5,966 8.85	10 0.98 0.04	3,400 900 2.5	11,000 10,500 63.5	350 275 3.3	19,998	10,982	6,200	4,782	
2017	75,176	57%	32,326	700	2,069	1,300	29,657	1,800 506 14.1	240 132 2.6	3,500 835 4.2	5,000	CP	49 11 0.03	13,200 5,790 10.71	10 0.94 0.04	3,400 862 2.3	11,000 11,000 60.1	350 263 3.2	14,904	14,753	6,200	8,553	
2018	77,024	58%	32,350	700	2,069	1,300	29,682	1,800 507 14.0	240 132 2.5	3,500 836 4.0	5,000	CP	49 11 0.03	13,200 5,966 8.85	10 0.94 0.04	3,400 862 2.0	11,000 11,000 56.6	350 264 3.1	14,906	14,776	6,200	8,576	
2019	78,914	59%	32,355	700	2,069	1,300	29,686	1,800 507 13.8	240 132 2.5	3,500 836 3.7	5,000	CP	49 11 0.03	13,200 5,790 10.71	10 0.94 0.04	3,400 862 1.7	11,000 11,000 53.2	350 264 3.1	14,906	14,780	6,200	8,580	
2020	80,628	60%	32,251	700	2,069	1,300	29,583	1,800 505 13.7	240 132 2.4	3,500 833 3.5	5,000	CP	49 11 0.02	13,200 5,966 8.85	10 0.94 0.04	3,400 859 1.4	11,000 11,000 49.8	350 263 3.0	14,899	14,684	6,200	8,484	
2021	82,164	61%	32,044	700	2,069	2,300	28,375	1,800 484 13.5	240 127 2.4	3,500 799 3.2	5,000	CP	49 10 0.02	13,200 5,790 10.71	10 0.90 0.04	3,400 824 1.2	11,000 11,000 46.3	350 252 2.9	14,813	13,562	6,200	7,362	
2022	83,741	62%	31,821	700	2,069	2,300	28,153	1,800 481 13.4	240 126 2.4	3,500 793 3.0	5,000	CP	49 10 0.02	13,200 5,966 8.85	10 0.89 0.04	3,400 818 0.9	11,000 11,000 42.9	350 250 2.8	14,797	13,355	6,200	7,155	
2023	85,313	63%	31,566	700	2,069	2,300	27,897	1,800 476 13.2	240 125 2.3	3,500 786 2.7	5,000	CP	49 10 0.02	13,200 5,966 8.85	10 0.88 0.04	3,400 810 0.7	11,000 11,000 39.5	350 248 2.7	14,779	13,118	6,200	6,918	
2024	86,991	64%	31,317	700	2,069	2,300	27,648	1,800 472 13.1	240 123 2.3	3,500 779 2.5	5,000	CP	49 10 0.01	13,200 5,966 8.85	10 0.87 0.03	3,400 803 0.4	11,000 11,000 36.0	350 246 2.7	14,762	12,886	6,200	6,686	
2025	88,427	65%	30,949	700	2,069	2,300	27,281	1,800 466 12.9	240 122 2.2	3,500 768 2.2	5,000	CP	49 10 0.01	13,200 5,966 8.85	10 0.86 0.03	3,400 793 0.2	11,000 11,000 32.6	350 242 2.6	14,736	12,545	6,200	6,345	

**ASSUMPTIONS:**

1. Waste Generation is estimated using the CalRecycle's Adjustment Methodology, UCLA's Anderson Forecast, dated August 2011 projections for population, employment (non-farm) and real taxable sales.
2. [Daily Available Capacity](#) (in blue text) is based on Maximum Permitted Daily Capacity (tpd) for facilities without a restricted watershed or Expected Average Daily Tonnage (tpd) for facilities with a restricted watershed. The calculation of maximum remaining capacity (tons) is based on similar rationale.

**LEGEND:**

- CP -Closure due to permit expiration  
CC -Closure due to exhausted capacity  
E -Expansion may become effective  
R -Restricted Wasteshed

Source: Los Angeles County Department of Public Works, October 2011

LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT  
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)

TABLE 4-13  
SCENARIO NO. 4 - IN-COUNTY CLASS III LANDFILLS EXPANSIONS

Existing In-County Class III Landfills &Transformation Facilities								Increase in Diversion Rate (Up to 65% by 2025)								Utilization of Alternative Technology Facility Capacity (Up to 2,300 tpd by 2025)							
Proposed Expansions of In-County Class III Landfills								Current Exports to Available Out-of-County Disposal Facilities								Current Exports to Out-of-County Disposal Facilities							
Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities	Maximum Alternative Technology Capacity	Class III Landfill Daily Disposal Demand	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
								IN-COUNTY CLASS III LANDFILLS											Total Available Capacity <sup>2</sup> from Class III Landfills	Export Need	Available Out-of County Disposal Capacity	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)	
								R	R	R	R	R	R	R	R	R	R	R					
								Antelope Valley	Burbank	Calabasas	Chiquita	Lancaster	Pebble Beach	Puente Hills	San Clemente	Scholl	Sunshine Canyon City/County	Whittier					
								Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6) Remaining Capacity at Year's End (Million Tons)											Daily Capacity (tpd-6)				Remaining Capacity (Million Tons)
	A	B	C=A(1-B)	D	E	F	G =C+D-E-F												H	I=G-H	J	K=I-J	
(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)												(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)		
2010	62,467	55%	28,110	675	1,728	0	27,057	1,800	240	3,500	5,000	1,700	49	13,200	10	3,400	11,000	350	34,620	(7,563)	6,147	—	
								462	121	762	3,461	723	10	5,825	1	786	7,844	240					
								6.5	2.8	6.0	6.2	13.1	0.06	12.5	0.04	4.1	80.8	3.8	136				
2011	62,813	55%	28,266	700	2,069	0	26,897	1,800	240	3,500	5,000	1,700	49	13,200	10	3,400	11,000	350	34,608	(7,711)	6,200	(13,911)	
								459	120	758	3,441	719	10	5,790	0.85	781	8,000	239					
								15.4	2.8	5.8	5.2	12.9	0.05	10.71	0.04	3.9	78.3	3.7	139				
2012	64,625	55%	29,081	700	2,069	0	27,713	1,800	240	3,500	5,000	1,700	49	13,200	10	3,400	11,000	350	34,666	(6,953)	6,200	(13,153)	
								473	124	781	3,545	741	10	5,966	0.88	805	8,500	246					
								15.2	2.8	5.6	4.1	12.6	0.05	8.85	0.04	3.6	75.7	3.6	132				
2013	66,534	55%	29,940	700	2,069	0	28,572	1,800	240	3,500	5,000	3,000	E	49	13,200	10	3,400	11,000	350	36,027	(7,456)	6,200	(13,656)
								488	128	805	3,655	764	10	6,151	0.90	830	9,000	254					
								15.1	2.7	5.3	2.9	12.3	0.05	6.93	CP	0.04	3.4	72.8	3.6	125			
2014	68,799	55%	30,960	700	2,069	0	29,591	1,800	240	3,500	5,000	3,000	49		10	3,400	11,000	350	22,899	6,691	6,200	491	
								600	132	833	3,786	900	11		0.94	860	9,500	263					
								14.9	2.7	5.0	1.7	12.1	0.05		0.04	3.1	69.9	6.1	E	116			
2015	71,182	55%	32,032	700	2,069	0	30,663	1,800	240	3,500	5,000	3,000	49		10	3,400	11,000	350	22,976	7,688	6,200	1,488	
								800	137	864	3,923	1,100	11		0.97	891	10,000	272					
								14.7	2.6	4.8	0.5	11.7	0.04		0.04	2.8	66.8	6.0	110				
2016	73,520	56%	32,349	700	2,069	0	30,980	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,998	982	6,200	(5,218)	
								1,000	138	873	5,000	1,300	11		0.98	900	10,500	275					
								14.3	2.6	4.5	58.4	E	11.3	0.04	0.04	2.5	63.5	5.9	163				
2017	75,176	57%	32,326	700	2,069	1,300	29,657	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,904	(247)	6,200	(6,447)	
								1,200	132	835	6,000	1,500	11		0.94	862	11,000	263					
								14.0	2.6	4.2	56.6	10.8	0.03		0.04	2.3	60.1	5.9	156				
2018	77,024	58%	32,350	700	2,069	1,300	29,682	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,906	(224)	6,200	(6,424)	
								1,400	132	836	7,000	1,700	11		0.94	862	11,000	264					
								13.5	2.5	4.0	54.4	10.3	0.03		0.04	2.0	56.6	5.8	149				
2019	78,914	59%	32,355	700	2,069	1,300	29,686	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,906	(220)	6,200	(6,420)	
								1,600	132	836	8,000	1,900	11		0.94	862	11,000	264					
								13.0	2.5	3.7	51.9	9.7	0.03		0.04	1.7	53.2	5.7	142				
2020	80,628	60%	32,251	700	2,069	1,300	29,583	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,899	(316)	6,200	(6,516)	
								1,800	132	833	9,000	2,100	11		0.94	859	11,000	263					
								12.5	2.4	3.5	49.1	9.1	0.02		0.04	7.4	E	49.8	5.6	139			
2021	82,164	61%	32,044	700	2,069	2,300	28,375	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,813	(1,438)	6,200	(7,638)	
								1,800	127	799	10,000	2,300	10		0.90	824	11,000	252					
								11.9	2.4	3.2	46.0	8.3	0.02		0.04	7.2	46.3	5.5	131				
2022	83,741	62%	31,821	700	2,069	2,300	28,153	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,797	(1,645)	6,200	(7,845)	
								1,800	126	793	11,000	2,500	10		0.89	818	11,000	250					
								11.4	2.4	3.0	42.5	7.6	0.02		0.04	6.9	42.9	5.5	122				
2023	85,313	63%	31,566	700	2,069	2,300	27,897	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,779	(1,882)	6,200	(8,082)	
								1,800	125	786	12,000	2,700	10		0.88	810	11,000	248					
								10.8	2.3	2.7	38.8	6.7	0.02		0.04	6.7	39.5	5.4	113				
2024	86,991	64%	31,317	700	2,069	2,300	27,648	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,762	(2,114)	6,200	(8,314)	
								1,800	123	779	12,000	2,900	10		0.87	803	11,000	246					
								10.2	2.3	2.5	35.0	5.8	0.01		0.03	6.43	36.0	5.3	104				
2025	88,427	65%	30,949	700	2,069	2,300	27,281	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,736	(2,455)	6,200	(8,655)	
								1,800	122	768	12,000	3,000	10		0.86	793	11,000	242					
								9.7	2.2	2.2	31.3	4.9	0.01		0.03	6.19	32.6	5.2	94				

ASSUMPTIONS:

1. Waste Generation is estimated using the CalRecycle's Adjustment Methodology, UCLA's Anderson Forecast, dated August 2011 projections for population, employment (non-farm) and real taxable sales.

2. Daily Available Capacity (in blue text) is based on Maximum Permitted Daily Capacity (tpd) for facilities without a restricted watershed or Expected Average Daily Tonnage (tpd) for facilities with a restricted watershed. The calculation of maximum remaining capacity (tons) is based on similar rationale.

LEGEND:

CP -Closure due to permit expiration

CC -Closure due to exhausted capacity

E -Expansion may become effective

R -Restricted Watershed



LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT  
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)

TABLE 4-14  
SCENARIO No. 5 - INCREASE IN EXPORTS TO AVAILABLE OUT-OF-COUNTY DISPOSAL FACILITIES (UP TO 12,000 TPD BY 2025)

- Existing In-County Class III Landfills & Transformation Facilities

Proposed Expansions of In-County Class III Landfills
- Increase in Diversion Rate (Up to 65% by 2025)

Increase in Exports to Available Out-of-County Disposal Facilities (Up to 12,000 tpd by 2025)
- Utilization of Alternative Technology Facility Capacity (Up to 2,300 tpd by 2025)

Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities	Maximum Alternative Technology Capacity	Class III Landfill Daily Disposal Demand	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
								IN-COUNTY CLASS III LANDFILLS										Total Available Capacity <sup>2</sup> from Class III Landfills	Export Need	Available Out-of-County Disposal Capacity	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)				
								R	R					R	R		R								
								Antelope Valley	Burbank	Calabasas	Chiquita	Lancaster	Pebbley Beach	Puente Hills	San Clemente	Scholl	Sunshine Canyon City/County					Whittier			
								Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6) Remaining Capacity at Year's End (Million Tons)										Daily Capacity (tpd-6)				Remaining Capacity (Million Tons)			
								A	B	C=A(1-B)	D	E	F	G=C+D-E-F											H
(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)											(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)					
2010	62,467	55%	28,110	675	1,728	0	27,057	1,800 462 6.5	240 121 2.8	3,500 762 6.0	5,000 3,461 6.2	1,700 723 13.1	49 10 0.06	13,200 5,825 12.5	10 1 0.04	3,400 786 4.1	11,000 7,844 80.8	350 240 3.8	34,620	(7,563)	6,147	—			
2011	62,813	55%	28,266	700	2,069	0	26,897	1,800 459 15.4	240 120 2.8	3,500 758 5.8	5,000 3,441 5.2	1,700 719 12.9	49 10 0.05	13,200 5,790 10.71	10 0.85 0.04	3,400 781 3.9	11,000 8,000 78.3	350 239 3.7	34,608	(7,711)	6,200	(13,911)			
2012	64,625	55%	29,081	700	2,069	0	27,713	1,800 473 15.2	240 124 2.8	3,500 781 5.6	5,000 3,545 4.1	1,700 741 12.6	49 10 0.05	13,200 5,966 8.85	10 0.88 0.04	3,400 805 3.6	11,000 8,500 75.7	350 246 3.6	34,666	(6,953)	6,200	(13,153)			
2013	66,534	55%	29,940	700	2,069	0	28,572	1,800 488 15.1	240 128 2.7	3,500 805 5.3	5,000 3,655 2.9	3,000 E 764 12.3	49 10 0.05	13,200 6,151 6.93 CP	10 0.90 0.04	3,400 830 3.4	11,000 9,000 72.8	350 254 3.6	36,027	(7,456)	7,500	(14,956)			
2014	68,799	55%	30,960	700	2,069	0	29,591	1,800 600 14.9	240 132 2.7	3,500 833 5.0	5,000 3,786 1.7	3,000 900 12.1	49 11 0.05		10 0.94 0.04	3,400 860 3.1	11,000 9,500 69.9	350 263 6.1 E	22,899	6,691	7,500	(809)			
2015	71,182	55%	32,032	700	2,069	0	30,663	1,800 800 14.7	240 137 2.6	3,500 864 4.8	5,000 3,500 0.6	3,000 1,100 11.7	49 11 0.04		10 0.97 0.04	3,400 891 2.8	11,000 10,000 66.8	350 272 6.0	22,976	7,688	10,000	(2,312)			
2016	73,520	56%	32,349	700	2,069	0	30,980	1,800 1,000 14.3	240 138 2.6	3,500 873 4.5	12,000 5,000 58.6 E	3,000 1,300 11.3	49 11 0.04		10 0.98 0.04	3,400 900 2.5	11,000 10,500 63.5	350 275 5.9	29,998	982	10,000	(9,018)			
2017	75,176	57%	32,326	700	2,069	1,300	29,657	1,800 1,200 14.0	240 132 2.6	3,500 835 4.2	12,000 6,000 56.7	3,000 1,500 10.8	49 11 0.03		10 0.94 0.04	3,400 862 2.3	11,000 11,000 60.1	350 263 5.9	29,904	(247)	10,000	(10,247)			
2018	77,024	58%	32,350	700	2,069	1,300	29,682	1,800 1,400 13.5	240 132 2.5	3,500 836 4.0	12,000 7,000 54.5	3,000 1,700 10.3	49 11 0.03		10 0.94 0.04	3,400 862 2.0	11,000 11,000 56.6	350 264 5.8	29,906	(224)	10,000	(10,224)			
2019	78,914	59%	32,355	700	2,069	1,300	29,686	1,800 1,600 13.0	240 132 2.5	3,500 836 3.7	12,000 8,000 52.0	3,000 1,900 9.7	49 11 0.03		10 0.94 0.04	3,400 862 1.7	11,000 11,000 53.2	350 264 5.7	29,906	(220)	10,000	(10,220)			
2020	80,628	60%	32,251	700	2,069	1,300	29,583	1,800 1,800 12.5	240 132 2.4	3,500 833 3.5	12,000 9,000 49.2	3,000 2,100 9.1	49 11 0.02		10 0.94 0.04	3,400 859 7.4 E	11,000 11,000 49.8	350 263 5.6	29,899	(316)	12,000	(12,316)			
2021	82,164	61%	32,044	700	2,069	2,300	28,375	1,800 1,800 11.9	240 127 2.4	3,500 799 3.2	12,000 10,000 46.1	3,000 2,300 8.3	49 10 0.02		10 0.90 0.04	3,400 824 7.2	11,000 11,000 46.3	350 252 5.5	29,813	(1,438)	12,000	(13,438)			
2022	83,741	62%	31,821	700	2,069	2,300	28,153	1,800 1,800 11.4	240 126 2.4	3,500 793 3.0	12,000 11,000 42.7	3,000 2,500 7.6	49 10 0.02		10 0.89 0.04	3,400 818 6.9	11,000 11,000 42.9	350 250 5.5	29,797	(1,645)	12,000	(13,645)			
2023	85,313	63%	31,566	700	2,069	2,300	27,897	1,800 1,800 10.8	240 125 2.3	3,500 786 2.7	12,000 12,000 38.9	3,000 2,700 6.7	49 10 0.02		10 0.88 0.04	3,400 810 6.7	11,000 11,000 39.5	350 248 5.4	29,779	(1,882)	12,000	(13,882)			
2024	86,991	64%	31,317	700	2,069	2,300	27,648	1,800 1,800 10.2	240 123 2.3	3,500 779 2.5	12,000 12,000 35.2	3,000 2,900 5.8	49 10 0.01		10 0.87 0.03	3,400 803 6.4	11,000 11,000 36.0	350 246 5.3	29,762	(2,114)	12,000	(14,114)			
2025	88,427	65%	30,949	700	2,069	2,300	27,281	1,800 1,800 9.7	240 122 2.2	3,500 768 2.2	12,000 12,000 31.4	3,000 3,000 4.9	49 10 0.01		10 0.86 0.03	3,400 793 6.2	11,000 11,000 32.6	350 242 5.2	29,736	(2,455)	12,000	(14,455)			

ASSUMPTIONS:

1. Waste Generation is estimated using the CalRecycle's Adjustment Methodology, UCLA's Anderson Forecast, dated August 2011 projections for population, employment (non-farm) and real taxable sales.

2. Daily Available Capacity (in blue text) is based on Maximum Permitted Daily Capacity (tpd) for facilities without a restricted wasteshed or Expected Average Daily Tonnage (tpd) for facilities with a restricted wasteshed. The calculation of maximum remaining capacity (tons) is based on similar rationale.

LEGEND:

CP -Closure due to permit expiration

CC -Closure due to exhausted capacity

E -Expansion may become effective

R -Restricted Wasteshed

Source: Los Angeles County Department of Public Works, October 2011

LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT  
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)

TABLE 4-15  
SCENARIO No. 6 - MAXIMIZING DIVERSION RATE (UP TO 75% BY 2025 - COMPLIES WITH AB 341 GOAL)

Existing In-County Class III Landfills & Transformation Facilities								Maximizing Diversion Rate (Up to 75% by 2025)										Utilization of Alternative Technology Facility Capacity (Up to 2,300 tpd by 2025)						
Proposed Expansions of In-County Class III Landfills								Increase in Exports to Available Out-of-County Disposal Facilities (Up to 12,000 tpd by 2025)																
Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities	Maximum Alternative Technology Capacity	Class III Landfill Daily Disposal Demand	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	
								IN-COUNTY CLASS III LANDFILLS											Total Available Capacity <sup>2</sup> from Class III Landfills		Export Need	Available Out-of-County Disposal Capacity	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)	
								R	R					R	R									
								Antelope Valley	Burbank	Calabasas	Chiquita	Lancaster	Pebbley Beach	Puente Hills	San Clemente	Scholl	Sunshine Canyon	Whittier						
	A	B	C=A(1-B)	D	E	F	G=C+D-E-F	Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6) Remaining Capacity at Year's End (Million Tons)											Daily Capacity (tpd-6)		I=G-H	J	K=I-J	
(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)												Remaining Capacity (Million Tons)						
																			H	(tpd-6)	(tpd-6)	(tpd-6)		
2010	62,467	55%	28,110	675	1,728	0	27,057	1,800	240	3,500	5,000	1,700	49	13,200	10	3,400	11,000	350	34,620	(7,563)	6,147	—		
								462	121	762	3,461	723	10	5,825	1	786	7,844	240						
								6.5	2.8	6.0	6.2	13.1	0.06	12.5	0.04	4.1	80.8	3.8	136					
2011	62,813	57%	27,010	700	2,069	0	25,641	1,800	240	3,500	5,000	1,700	49	13,200	10	3,400	11,000	350	34,519	(8,878)	6,200	(15,078)		
								438	114	722	3,280	685	9	5,520	0.81	745	8,000	228						
								15.4	2.8	5.8	5.2	12.9	0.05	10.79	0.04	3.9	78.3	3.7	139					
2012	64,625	59%	26,496	700	2,069	0	25,128	1,800	240	3,500	5,000	1,700	49	13,200	10	3,400	11,000	350	34,483	(9,355)	6,200	(15,555)		
								429	112	708	3,215	672	9	5,409	0.79	730	8,500	223						
								15.3	2.8	5.6	4.2	12.7	0.05	9.11	0.04	3.6	75.7	3.6	133					
2013	66,534	61%	25,948	700	2,069	0	24,580	1,800	240	3,500	5,000	3,000 E	49	13,200	10	3,400	11,000	350	35,744	(11,164)	7,500	(18,664)		
								420	110	692	3,144	657	9	5,291	0.78	714	9,000	218						
								15.1	2.7	5.4	3.2	12.3	0.05	7.46 CP	0.04	3.4	72.8	3.6	126					
2014	68,799	63%	25,456	700	2,069	0	24,087	1,800	240	3,500	5,000	3,000	49		10	3,400	11,000	350	22,509	1,578	7,500	(5,922)		
								600	108	678	3,081	900	9		0.76	700	9,500	214						
								15.0	2.7	5.2	2.3	12.1	0.05		0.04	3.2	69.9	6.1 E	116					
2015	71,182	65%	24,914	700	2,069	0	23,545	1,800	240	3,500	5,000	3,000	49		10	3,400	11,000	350	22,471	1,074	10,000	(8,926)		
								800	105	663	3,000	1,100	8		0.74	684	10,000	209						
								14.7	2.7	5.0	1.3	11.7	0.04		0.04	3.0	66.8	6.1	111					
2016	73,520	67%	24,262	700	2,069	0	22,893	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,424	(6,531)	10,000	(16,531)		
								1,000	102	645	5,000	1,300	8		0.72	665	10,500	203						
								14.4	2.6	4.7	59.3 E	11.3	0.04		0.04	2.8	63.5	6.0	165					
2017	75,176	69%	23,305	700	2,069	1,300	20,636	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,264	(8,628)	10,000	(18,628)		
								1,200	92	581	6,000	1,500	7		0.65	600	11,000	183						
								14.0	2.6	4.6	57.4	10.8	0.04		0.04	2.6	60.1	6.0	158					
2018	77,024	71%	22,337	700	2,069	1,300	19,668	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,195	(9,527)	10,000	(19,527)		
								1,400	88	554	7,000	1,700	7		0.62	571	11,000	175						
								13.6	2.6	4.4	55.2	10.3	0.04		0.04	2.4	56.6	5.9	151					
2019	78,914	73%	21,307	700	2,069	1,300	18,638	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,122	(10,484)	10,000	(20,484)		
								1,600	83	525	8,000	1,900	7		0.59	541	11,000	166						
								13.1	2.6	4.2	52.7	9.7	0.03		0.04	2.2	53.2	5.9	144					
2020	80,628	75%	20,157	700	2,069	1,300	17,488	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,041	(11,552)	12,000	(23,552)		
								1,800	78	493	9,000	2,100	6		0.55	508	11,000	155						
								12.5	2.5	4.1	49.9	9.1	0.03		0.04	8.1 E	49.8	5.8	142					
2021	82,164	75%	20,541	700	2,069	2,300	16,872	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	28,997	(12,125)	12,000	(24,125)		
								1,800	75	475	10,000	2,300	6		0.53	490	11,000	150						
								12.0	2.5	3.9	46.8	8.3	0.03		0.04	7.9	46.3	5.8	134					
2022	83,741	75%	20,935	700	2,069	2,300	17,267	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,025	(11,759)	12,000	(23,759)		
								1,800	77	486	11,000	2,500	6		0.55	502	11,000	153						
								11.4	2.5	3.8	43.4	7.6	0.03		0.04	7.8	42.9	5.7	125					
2023	85,313	75%	21,328	700	2,069	2,300	17,660	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,053	(11,393)	12,000	(23,393)		
								1,800	79	497	12,000	2,700	6		0.56	513	11,000	157						
								10.8	2.5	3.6	39.6	6.7	0.03		0.04	7.6	39.5	5.7	116					
2024	86,991	75%	21,748	700	2,069	2,300	18,079	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,083	(11,004)	12,000	(23,004)		
								1,800	81	509	12,000	2,900	6		0.57	525	11,000	161						
								10.3	2.4	3.5	35.9	5.8	0.02		0.04	7.5	36.0	5.6	107					
2025	88,427	75%	22,107	700	2,069	2,300	18,438	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,108	(10,670)	12,000	(22,670)		
								1,800	82	519	12,000	3,000	7		0.58	536	11,000	164						
								9.7	2.4	3.3	32.1	4.9	0.02		0.04	7.3	32.6	5.6	98					

ASSUMPTIONS:

1. Waste Generation is estimated using the CalRecycle's Adjustment Methodology, UCLA's Anderson Forecast, dated August 2011 projections for population, employment (non-farm) and real taxable sales.  
2. Daily Available Capacity (in blue text) is based on Maximum Permitted Daily Capacity (tpd) for facilities without a restricted watershed or Expected Average Daily Tonnage (tpd) for facilities with a restricted watershed. The calculation of maximum remaining capacity (tons) is based on similar rationale.

LEGEND:

- CP -Closure due to permit expiration  
CC -Closure due to exhausted capacity  
E -Expansion may become effective  
R -Restricted Watershed  
Source: Los Angeles County Department of Public Works, October 2011

LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT  
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)

TABLE 4-16  
SCENARIO No. 7 - INCREASE UTILIZATION OF ALTERNATIVE TECHNOLOGY FACILITY CAPACITY (UP TO 3,500 TPD BY 2025)

Existing In-County Class III Landfills & Transformation Facilities								Increase in Diversion Rate (Up to 65% by 2025)										Increase Utilization of Alternative Technology Facility Capacity (Up to 3,500 tpd by 2025)					
Proposed Expansions of In-County Class III Landfills								Increase in Exports to Available Out-of-County Disposal Facilities (Up to 12,000 tpd by 2025)															
Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities	Maximum Alternative Technology Capacity	Class III Landfill Daily Disposal Demand	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15
								IN-COUNTY CLASS III LANDFILLS											Total Available Capacity <sup>2</sup> from Class III Landfills	Export Need	Available Out-of-County Disposal Capacity	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)	
								R	R	R	R	R	R	R	R	R	R	R					
								Antelope Valley	Burbank	Calabasas	Chiquita	Lancaster	Pebble Beach	Puente Hills	San Clemente	Scholl	Sunshine Canyon City/County	Whittier					
	A	B	C=A(1-B)	D	E	F	G=C+D-E-F	Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6) Remaining Capacity at Year's End (Million Tons)											Daily Capacity (tpd-6)	I=G-H	J	K=I-J	
(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)												H					
2010	62,467	55%	28,110	675	1,728	0	27,057	1,800	240	3,500	5,000	1,700	49	13,200	10	3,400	11,000	350	34,620	(7,563)	6,147	—	
								462	121	762	3,461	723	9.7	5,825	0.86	786	7,541	240					
								6.5	2.8	6.0	6.2	13.1	0.06	12.4	0.04	4.1	80.8	3.8	136				
2011	62,813	55%	28,266	700	2,069	0	26,897	1,800	240	3,500	5,000	1,700	49	13,200	10	3,400	11,000	350	34,608	(7,711)	6,200	(13,911)	
								459	120	758	3,441	719	10	5,790	0.85	781	8,000	239					
								15.4	2.8	5.8	5.2	12.9	0.05	10.59	0.04	3.9	78.3	3.7	139				
2012	64,625	55%	29,081	700	2,069	0	27,713	1,800	240	3,500	5,000	1,700	49	13,200	10	3,400	11,000	350	34,666	(6,953)	6,200	(13,153)	
								473	124	781	3,545	741	10	5,966	0.88	805	8,500	246					
								15.2	2.8	5.6	4.1	12.6	0.05	8.73	0.04	3.6	75.7	3.6	132				
2013	66,534	55%	29,940	700	2,069	0	28,572	1,800	240	3,500	5,000	3,000 E	49	13,200	10	3,400	11,000	350	36,027	(7,456)	7,500	(14,956)	
								488	128	805	3,655	764	10	6,151	0.90	830	9,000	254					
								15.1	2.7	5.3	2.9	12.3	0.05	6.81 CP	0.04	3.4	72.8	3.6	125				
2014	68,799	55%	30,960	700	2,069	0	29,591	1,800	240	3,500	5,000	3,000	49		10	3,400	11,000	350	22,899	6,691	7,500	(809)	
								600	132	833	3,786	900	11		0.94	860	9,500	263					
								14.9	2.7	5.0	1.7	12.1	0.05		0.04	3.1	69.9	6.1 E	116				
2015	71,182	55%	32,032	700	2,069	0	30,663	1,800	240	3,500	5,000	3,000	49		10	3,400	11,000	350	22,976	7,688	10,000	(2,312)	
								800	137	864	3,000	1,100	11		0.97	891	10,000	272					
								14.7	2.6	4.8	0.8	11.7	0.04		0.04	2.8	66.8	6.0	110				
2016	73,520	56%	32,349	700	2,069	0	30,980	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,998	982	10,000	(9,018)	
								1,000	138	873	5,000	1,300	11		0.98	900	10,500	275					
								14.3	2.6	4.5	58.7 E	11.3	0.04		0.04	2.5	63.5	5.9	164				
2017	75,176	57%	32,326	700	2,069	1,800	29,157	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,869	(711)	10,000	(10,711)	
								1,200	130	821	6,000	1,500	10		0.92	847	11,000	259					
								14.0	2.6	4.2	56.9	10.8	0.03		0.04	2.3	60.1	5.9	157				
2018	77,024	58%	32,350	700	2,069	1,900	29,082	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,863	(782)	10,000	(10,782)	
								1,400	130	819	7,000	1,700	10		0.92	845	11,000	258					
								13.5	2.5	4.0	54.7	10.3	0.03		0.04	2.0	56.6	5.8	149				
2019	78,914	59%	32,355	700	2,069	2,000	28,986	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,857	(870)	10,000	(10,870)	
								1,600	129	816	8,000	1,900	10		0.92	842	11,000	257					
								13.0	2.5	3.7	52.2	9.7	0.03		0.04	1.7	53.2	5.7	142				
2020	80,628	60%	32,251	700	2,069	2,100	28,783	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,842	(1,059)	12,000	(13,059)	
								1,800	128	811	9,000	2,100	10		0.91	836	11,000	256					
								12.5	2.4	3.5	49.4	9.1	0.03		0.04	7.5 E	49.8	5.6	140				
2021	82,164	61%	32,044	700	2,069	3,200	27,475	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,749	(2,274)	12,000	(14,274)	
								1,800	123	774	10,000	2,300	10		0.87	798	11,000	244					
								11.9	2.4	3.2	46.3	8.3	0.02		0.04	7.2	46.3	5.5	131				
2022	83,741	62%	31,821	700	2,069	3,300	27,153	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,727	(2,574)	12,000	(14,574)	
								1,800	121	765	11,000	2,500	10		0.86	789	11,000	241					
								11.4	2.4	3.0	42.8	7.6	0.02		0.04	7.0	42.9	5.5	122				
2023	85,313	63%	31,566	700	2,069	3,400	26,797	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,701	(2,904)	12,000	(14,904)	
								1,800	120	755	12,000	2,700	10		0.85	779	11,000	238					
								10.8	2.3	2.8	39.1	6.7	0.02		0.04	6.7	39.5	5.4	113				
2024	86,991	64%	31,317	700	2,069	3,500	26,448	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,677	(3,229)	12,000	(15,229)	
								1,800	118	745	12,000	2,900	9		0.84	768	11,000	235					
								10.2	2.3	2.5	35.3	5.8	0.01		0.03	6.5	36.0	5.3	104				
2025	88,427	65%	30,949	700	2,069	3,500	26,081	1,800	240	3,500	12,000	3,000	49		10	3,400	11,000	350	29,650	(3,570)	12,000	(15,570)	
								9.7	2.3	2.3	31.6	4.9	0.01		0.03	6.3	32.6	5.2	95				

ASSUMPTIONS:

1. Waste Generation is estimated using the CalRecycle's Adjustment Methodology, UCLA's Anderson Forecast, dated August 2011 projections for population, employment (non-farm) and real taxable sales.  
2. Daily Available Capacity (in blue text) is based on Maximum Permitted Daily Capacity (tpd) for facilities without a restricted wasteshed or Expected Average Daily Tonnage (tpd) for facilities with a restricted wasteshed. The calculation of maximum remaining capacity (tons) is based on similar rationale.

LEGEND:

- CP -Closure due to permit expiration  
CC -Closure due to exhausted capacity  
E -Expansion may become effective  
R -Restricted Wasteshed

Source: Los Angeles County Department of Public Works, October 2011



LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT  
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)

TABLE 4-17  
SCENARIO No. 8 - FULL UTILIZATION OF OUT-OF-COUNTY DISPOSAL CAPACITY (UP TO 19,000 TPD BY 2025)

Existing In-County Class III Landfills & Transformation Facilities								Increase in Diversion Rate (Up to 65% by 2025)										Utilization of Alternative Technology Facility Capacity (Up to 2,300 tpd by 2025)						
Proposed Expansions of In-County Class III Landfills								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities	Maximum Alternative Technology Capacity	Class III Landfill Daily Disposal Demand	IN-COUNTY CLASS III LANDFILLS											Total Available Capacity <sup>2</sup> from Class III Landfills	Export Need	Available Out-of-County Disposal Capacity	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)		
								Antelope Valley	R Burbank	R Calabasas	Chiquita	Lancaster	Pebbley Beach	Puente Hills	R San Clemente	R Scholl	R Sunshine Canyon City/County	R Whittier						
								Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6) Remaining Capacity at Year's End (Million Tons)															Daily Capacity (tpd-6)	
																			H	I=G-H	J	K=I-J		
	A	B	C=A(1-B)	D	E	F	G=C+D-E-F	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)			
2010	62,467	55%	28,110	675	1,728	0	27,057	1,800 462 6.5	240 121 2.8	3,500 762 6.0	5,000 3,461 6.2	1,700 723 13.1	49 9.7 0.06	13,200 5,825 12.4	10 0.86 0.04	3,400 786 4.1	11,000 7,541 80.8	350 240 3.8	34,620	(7,563)	6,147	—		
2011	62,813	55%	28,266	700	2,069	0	26,897	1,800 459 15.4	240 120 2.8	3,500 758 5.8	5,000 3,441 5.2	1,700 719 12.9	49 10 0.05	13,200 5,790 10.59	10 0.85 0.04	3,400 781 3.9	11,000 8,000 78.3	350 239 3.7	34,608	(7,711)	6,200	(13,911)		
2012	64,625	55%	29,081	700	2,069	0	27,713	1,800 473 15.2	240 124 2.8	3,500 781 5.6	5,000 3,545 4.1	1,700 741 12.6	49 10 0.05	13,200 5,966 8.73	10 0.88 0.04	3,400 805 3.6	11,000 8,500 75.7	350 246 3.6	34,666	(6,953)	6,200	(13,153)		
2013	66,534	55%	29,940	700	2,069	0	28,572	1,800 488 15.1	240 128 2.7	3,500 805 5.3	5,000 3,655 2.9	3,000 E 764 12.3	49 10 0.05	13,200 6,151 6.81 CP	10 0.90 0.04	3,400 830 3.4	11,000 9,000 72.8	350 254 3.6	36,027	(7,456)	7,500	(14,956)		
2014	68,799	55%	30,960	700	2,069	0	29,591	1,800 600 14.9	240 132 2.7	3,500 833 5.0	5,000 3,786 1.7	3,000 900 12.1	49 11 0.05		10 0.94 0.04	3,400 860 3.1	11,000 9,500 69.9	350 263 6.1 E	22,899	6,691	10,000	(3,309)		
2015	71,182	55%	32,032	700	2,069	0	30,663	1,800 800 14.7	240 137 2.6	3,500 864 4.8	5,000 3,000 0.8	3,000 1,100 11.7	49 11 0.04		10 0.97 0.04	3,400 891 2.8	11,000 10,000 66.8	350 272 6.0	22,976	7,688	11,000	(3,312)		
2016	73,520	56%	32,349	700	2,069	0	30,980	1,800 1,000 14.3	240 138 2.6	3,500 873 4.5	12,000 5,000 58.7 E	3,000 1,300 11.3	49 11 0.04		10 0.98 0.04	3,400 900 2.5	11,000 10,500 63.5	350 275 5.9	29,998	982	12,000	(11,018)		
2017	75,176	57%	32,326	700	2,069	1,300	29,657	1,800 1,200 14.0	240 132 2.6	3,500 835 4.2	12,000 6,000 56.9	3,000 1,500 10.8	49 11 0.03		10 0.94 0.04	3,400 862 2.3	11,000 11,000 60.1	350 263 5.9	29,904	(247)	13,000	(13,247)		
2018	77,024	58%	32,350	700	2,069	1,300	29,682	1,800 1,400 13.5	240 132 2.5	3,500 836 4.0	12,000 7,000 54.7	3,000 1,700 10.3	49 8 0.03		10 0.94 0.04	3,400 862 2.0	11,000 11,000 56.6	350 264 5.8	29,903	(222)	14,000	(14,222)		
2019	78,914	59%	32,355	700	2,069	1,300	29,686	1,800 1,600 13.0	240 132 2.5	3,500 836 3.7	12,000 8,000 52.2	3,000 1,900 9.7	49 8 0.03		10 0.94 0.04	3,400 862 1.7	11,000 11,000 53.2	350 264 5.7	29,904	(217)	15,000	(15,217)		
2020	80,628	60%	32,251	700	2,069	1,300	29,583	1,800 1,800 12.5	240 132 2.4	3,500 833 3.5	12,000 9,000 49.4	3,000 2,100 9.1	49 8 0.03		10 0.94 0.04	3,400 859 7.4 E	11,000 11,000 49.8	350 263 5.6	29,896	(314)	16,000	(16,314)		
2021	82,164	61%	32,044	700	2,069	2,300	28,375	1,800 1,800 11.9	240 127 2.4	3,500 799 3.2	12,000 10,000 46.3	3,000 2,300 8.3	49 8 0.02		10 0.90 0.04	3,400 824 7.2	11,000 11,000 46.3	350 252 5.5	29,811	(1,435)	17,000	(18,435)		
2022	83,741	62%	31,821	700	2,069	2,300	28,153	1,800 1,800 11.4	240 126 2.4	3,500 793 3.0	12,000 11,000 42.8	3,000 2,500 7.6	49 8 0.02		10 0.89 0.04	3,400 818 6.9	11,000 11,000 42.9	350 250 5.5	29,795	(1,642)	18,000	(19,642)		
2023	85,313	63%	31,566	700	2,069	2,300	27,897	1,800 1,800 10.8	240 125 2.3	3,500 786 2.7	12,000 12,000 39.1	3,000 2,700 6.7	49 8 0.02		10 0.88 0.04	3,400 810 6.7	11,000 11,000 39.5	350 248 5.4	29,777	(1,880)	19,000	(20,880)		
2024	86,991	64%	31,317	700	2,069	2,300	27,648	1,800 1,800 10.2	240 123 2.3	3,500 779 2.5	12,000 12,000 35.3	3,000 2,900 5.8	49 7 0.018		10 0.87 0.03	3,400 803 6.4	11,000 11,000 36.0	350 246 5.3	29,759	(2,111)	19,000	(21,111)		
2025	88,427	65%	30,949	700	2,069	2,300	27,281	1,800 1,800 9.7	240 122 2.2	3,500 768 2.2	12,000 12,000 31.6	3,000 3,000 4.9	49 7 0.02		10 0.86 0.03	3,400 793 6.2	11,000 11,000 32.6	350 242 5.2	29,733	(2,452)	19,000	(21,452)		
																			95					

ASSUMPTIONS:

1. Waste Generation is estimated using the CalRecycle's Adjustment Methodology, UCLA's Anderson Forecast, dated August 2011 projections for population, employment (non-farm) and real taxable sales.

2. Daily Available Capacity (in blue text) is based on Maximum Permitted Daily Capacity (tpd) for facilities without a restricted wasteshed or Expected Average Daily Tonnage (tpd) for facilities with a restricted wasteshed. The calculation of maximum remaining capacity (tons) is based on similar rationale.

LEGEND:

CP -Closure due to permit expiration

CC -Closure due to exhausted capacity

E -Expansion may become effective

R -Restricted Wasteshed

Source: Los Angeles County Department of Public Works, October 2011

LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT  
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)

TABLE 4-18  
SCENARIO No. 9 - BEST CASE (ALL SOLID WASTE MANAGEMENT OPTIONS CONSIDERED BECOME AVAILABLE)

- Existing In-County Class III Landfills & Transformation Facilities  
• Proposed Expansions of In-County Class III Landfills
- Maximizing Diversion Rate (Up to 75% by 2025)  
• Full Utilization of Available Out-of-County Disposal Capacity (Up to 16,000 tpd by 2025)
- Utilization of Alternative Technology Facility Capacity (Up to 3,000 tpd by 2025)

Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities	Maximum Alternative Technology Capacity	Class III Landfill Daily Disposal Demand	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
								IN-COUNTY CLASS III LANDFILLS										Total Available Capacity <sup>2</sup> from Class III Landfills	Export Need	Available Out-of County Disposal Capacity	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)	
								R	R					R	R		R					
								Antelope Valley	Burbank	Calabasas	Chiquita	Lancaster	Pebbly Beach	Puente Hills	San Clemente	Scholl	Sunshine Canyon City/County					Whittier
								Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6) Remaining Capacity at Year's End (Million Tons)														Daily Capacity (tpd-6)
	A	B	C=A(1-B)	D	E	F	G=C+D-E-F											Remaining Capacity (Million Tons)				
(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)											H	I=G-H	J	K=I-J		
																			(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
2010	62,467	55%	28,110	675	1,728	0	27,057	1,800 462 6.5	240 121 2.8	3,500 762 6.0	5,000 3,461 6.2	1,700 723 13.1	49 9.7 0.06	13,200 5,825 12.4	10 0.86 0.04	3,400 786 4.1	11,000 7,541 80.8	350 240 3.8	34,620 (7,563)	6,147	—	
2011	62,813	57%	27,010	700	2,069	0	25,641	1,800 438 15.4	240 114 2.8	3,500 722 5.8	5,000 3,280 5.2	1,700 685 12.9	49 9 0.05	13,200 5,520 10.68	10 0.81 0.04	3,400 745 3.9	11,000 8,000 78.3	350 228 3.7	34,519 (8,878)	7,500	(16,378)	
2012	64,625	59%	26,496	700	2,069	0	25,128	1,800 429 15.3	240 112 2.8	3,500 708 5.6	5,000 3,215 4.2	1,700 672 12.7	49 9 0.05	13,200 5,409 8.99	10 0.79 0.04	3,400 730 3.6	11,000 8,500 75.7	350 223 3.6	34,483 (9,355)	7,500	(16,855)	
2013	66,534	61%	25,948	700	2,069	0	24,580	1,800 420 15.1	240 110 2.7	3,500 692 5.4	5,000 3,144 3.2	3,000 E 657 12.3	49 9 0.05	13,200 5,291 7.34 CP	10 0.78 0.04	3,400 714 3.4	11,000 9,000 72.8	350 218 3.6	35,744 (11,164)	7,500	(18,664)	
2014	68,799	63%	25,456	700	2,069	0	24,087	1,800 600 15.0	240 108 2.7	3,500 678 5.2	5,000 3,081 2.3	3,000 900 12.1	49 9 0.05		10 0.76 0.04	3,400 700 3.2	11,000 9,500 69.9	350 214 6.1 E	22,509 (1,578)	10,000	(8,422)	
2015	71,182	65%	24,914	700	2,069	0	23,545	1,800 800 14.7	240 105 2.7	3,500 663 5.0	5,000 3,000 1.3	3,000 1,100 11.7	49 8 0.04		10 0.74 0.04	3,400 684 3.0	11,000 10,000 66.8	350 209 6.1	22,471 (1,074)	11,000	(9,926)	
2016	73,520	67%	24,262	700	2,069	0	22,893	1,800 1,000 14.4	240 102 2.6	3,500 645 4.7	12,000 5,000 59.3 E	3,000 1,300 11.3	49 8 0.04		10 0.72 0.04	3,400 665 2.8	11,000 10,500 63.5	350 203 6.0	29,424 (6,531)	12,000	(18,531)	
2017	75,176	69%	23,305	700	2,069	0	21,936	1,800 1,200 14.0	240 98 2.6	3,500 618 4.6	12,000 6,000 57.4	3,000 1,500 10.8	49 8 0.04		10 0.69 0.04	3,400 637 2.6	11,000 11,000 60.1	350 195 6.0	29,356 (7,420)	13,000	(20,420)	
2018	77,024	71%	22,337	700	2,069	600	20,368	1,800 1,400 13.6	240 91 2.6	3,500 574 4.4	12,000 7,000 55.2	3,000 1,700 10.3	49 7 0.04		10 0.64 0.04	3,400 592 2.4	11,000 11,000 56.6	350 181 5.9	29,245 (8,877)	14,000	(22,877)	
2019	78,914	73%	21,307	700	2,069	700	19,238	1,800 1,600 13.1	240 86 2.6	3,500 542 4.2	12,000 8,000 52.7	3,000 1,900 9.7	49 7 0.03		10 0.61 0.04	3,400 559 2.2	11,000 11,000 53.2	350 171 5.8	29,165 (9,927)	15,000	(24,927)	
2020	80,628	75%	20,157	700	2,069	800	17,988	1,800 1,800 12.5	240 80 2.5	3,500 507 4.1	12,000 9,000 49.9	3,000 2,100 9.1	49 6 0.03		10 0.57 0.04	3,400 523 8.1 E	11,000 11,000 49.8	350 160 5.8	29,076 (11,088)	16,000	(27,088)	
2021	82,164	75%	20,541	700	2,069	900	18,272	1,800 1,800 12.0	240 82 2.5	3,500 515 3.9	12,000 10,000 46.8	3,000 2,300 8.3	49 7 0.03		10 0.58 0.04	3,400 531 7.9	11,000 11,000 46.3	350 162 5.7	29,096 (10,824)	16,000	(26,824)	
2022	83,741	75%	20,935	700	2,069	1,000	18,567	1,800 1,800 11.4	240 83 2.5	3,500 523 3.7	12,000 11,000 43.4	3,000 2,500 7.6	49 7 0.03		10 0.59 0.04	3,400 539 7.7	11,000 11,000 42.9	350 165 5.7	29,117 (10,551)	16,000	(26,551)	
2023	85,313	75%	21,328	700	2,069	1,800	18,160	1,800 1,800 10.8	240 81 2.5	3,500 511 3.6	12,000 12,000 39.6	3,000 2,700 6.7	49 7 0.03		10 0.57 0.04	3,400 528 7.6	11,000 11,000 39.5	350 161 5.6	29,088 (10,929)	16,000	(26,929)	
2024	86,991	75%	21,748	700	2,069	2,800	17,579	1,800 1,800 10.3	240 78 2.4	3,500 495 3.4	12,000 12,000 35.9	3,000 2,900 5.8	49 6 0.024		10 0.56 0.04	3,400 511 7.4	11,000 11,000 36.0	350 156 5.6	29,047 (11,468)	16,000	(27,468)	
2025	88,427	75%	22,107	700	2,069	3,000	17,738	1,800 1,800 9.7	240 79 2.4	3,500 500 3.3	12,000 12,000 32.1	3,000 3,000 4.9	49 6 0.02		10 0.56 0.04	3,400 515 7.2	11,000 11,000 32.6	350 158 5.5	29,059 (11,320)	16,000	(27,320)	

ASSUMPTIONS:

1. Waste Generation is estimated using the CalRecycle's Adjustment Methodology, UCLA's Anderson Forecast, dated August 2011 projections for population, employment (non-farm) and real taxable sales.

2. Daily Available Capacity (in blue text) is based on Maximum Permitted Daily Capacity (tpd) for facilities without a restricted wasteshed or Expected Average Daily Tonnage (tpd) for facilities with a restricted wasteshed. The calculation of maximum remaining capacity (tons) is based on similar rationale.

LEGEND:

CP -Closure due to permit expiration

CC -Closure due to exhausted capacity

E -Expansion may become effective

R -Restricted Wasteshed

Source: Los Angeles County Department of Public Works, October 2011

**LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT**

**TABLE 4-19  
BASE YEAR PROJECTIONS BASED ON SB 1016 LIMIT**

<b>Year</b>	<b>Generation (Annual Tons)</b>	<b>Population</b>	<b>Per Capita Generation (Lbs/Resident/Day)</b>
2003	23,798,794	9,993,000	13.05
2004	23,933,735	10,105,000	12.98
2005	24,623,753	10,184,000	13.25
2006	23,614,933	10,233,000	12.65
Four-year Average of Generation:			12.98
Diversion requirement level:			50%
<b>Per Capita Disposal Equivalent:</b>			<b>6.49</b>
Per Capita Transformation credit limit ( =10% x 13.0):			1.30
<b>Year</b>	<b>Disposal (Annual Tons)</b>	<b>Population</b>	<b>Per Capita Disposal without Transformation Credit (Lbs/Resident/Day)</b>
2010	8,770,385	9,836,000	<b>4.89</b>
Transformation (Annual Tons)	Per Capita Transformation (Lbs/Resident/Day)	Transformation Credit (Lbs/Resident/Day)	Per Capita Disposal with Transformation Credit (Lbs/Resident/Day)
539,129	0.30	0.28	4.61
Is the per capita disposal less than the per capita disposal equivalent?			<b>Yes</b>

**Note:** Per Capita Generation =  $\frac{(\text{Generation}) * (2000 \text{ lb/ton}) * (365 \text{ days})}{(\text{Population})}$

Per Capita Disposal Equivalent =  $(\text{Four-Year Avg of Generation}) * (1 - \text{Diversion Requirement Level})$

**TABLE 4-20**  
**COMPARISON OF DAILY DISPOSAL DEMAND AND SB 1016 DISPOSAL LIMIT**  
**Status Quo**

Daily Disposal Demand						SB 1016 Disposal Limit			
Year	Total Annual Waste Generation <sup>1</sup>	Daily Waste Generation Rate	Diversion Rate <sup>2</sup> Status Quo	Total Daily Disposal Demand Status Quo	Los Angeles County Population <sup>3</sup>	SB 1016 Per Capita Disposal Equivalent <sup>4,5</sup>	SB 1016 Annual Disposal Limit <sup>6</sup>	SB 1016 Daily Disposal Limit <sup>6</sup>	Diversion Rate Equivalent Status Quo
	A	B = A/312	C	D = B(1-C)	E	F	(yearly) G = (E*F*365days)/(2000lb/ton)	(daily) H = G/312 days	I = (1 - H/B)*100
	(tons)	(tpd-6)		(tpd-6)	(Residents)	(lb/res/day)	(tons)	(tpd-6)	
2010	19,489,744	62,467	55%	28,110	9,836,000	6.49	11,650,004	37,340	40%
2011	19,597,652	62,813	55%	28,266	9,889,000	6.49	11,712,779	37,541	40%
2012	20,163,061	64,625	55%	29,081	9,951,000	6.49	11,786,213	37,776	42%
2013	20,758,574	66,534	55%	29,940	10,029,000	6.49	11,878,598	38,072	43%
2014	21,465,309	68,799	55%	30,960	10,109,000	6.49	11,973,352	38,376	44%
2015	22,208,722	71,182	55%	32,032	10,187,000	6.49	12,065,737	38,672	46%
2016	22,938,233	73,520	55%	33,084	10,259,000	6.49	12,151,016	38,946	47%
2017	23,455,058	75,176	55%	33,829	10,329,000	6.49	12,233,926	39,211	48%
2018	24,031,635	77,024	55%	34,661	10,398,000	6.49	12,315,651	39,473	49%
2019	24,621,187	78,914	55%	35,511	10,467,000	6.49	12,397,376	39,735	50%
2020	25,155,998	80,628	55%	36,283	10,536,000	6.49	12,479,102	39,997	50%
2021	25,635,173	82,164	55%	36,974	10,605,000	6.49	12,560,827	40,259	51%
2022	26,127,086	83,741	55%	37,683	10,675,000	6.49	12,643,737	40,525	52%
2023	26,617,529	85,313	55%	38,391	10,747,000	6.49	12,729,015	40,798	52%
2024	27,141,048	86,991	55%	39,146	10,819,000	6.49	12,814,294	41,071	53%
2025	27,589,195	88,427	55%	39,792	10,891,000	6.49	12,899,573	41,345	53%

**Footnotes:**

1. Waste Generation is estimated using the Waste Board's Adjustment Methodology, utilizing population projection, employment and taxable sales projections from UCLA longterm forecast, August 2
2. Diversion Rate remains at 55% through 2025.
3. Los Angeles Countywide Population Projection (UCLA, Long Term Forecast of Los Angeles County, August 2011)
4. SB 1016 Per Capita Disposal Equivalent is a numerical indicator of jurisdictional disposal divided by jurisdiction population (residents) to obtain disposal by individual.
5. SB 1016 Per Capita Disposal Equivalent is the Per Capita Disposal Rate average between 2003-2006.
6. SB 1016 Disposal Limit reflects the yearly and daily Per Capita Disposal Rate.

Source: Los Angeles County Department of Public Works

**TABLE 4-21**  
**COMPARISON OF DAILY DISPOSAL DEMAND AND SB 1016 DISPOSAL LIMIT**  
**Maximizing Diversion Rate (up to 75% Diversion Rate)**

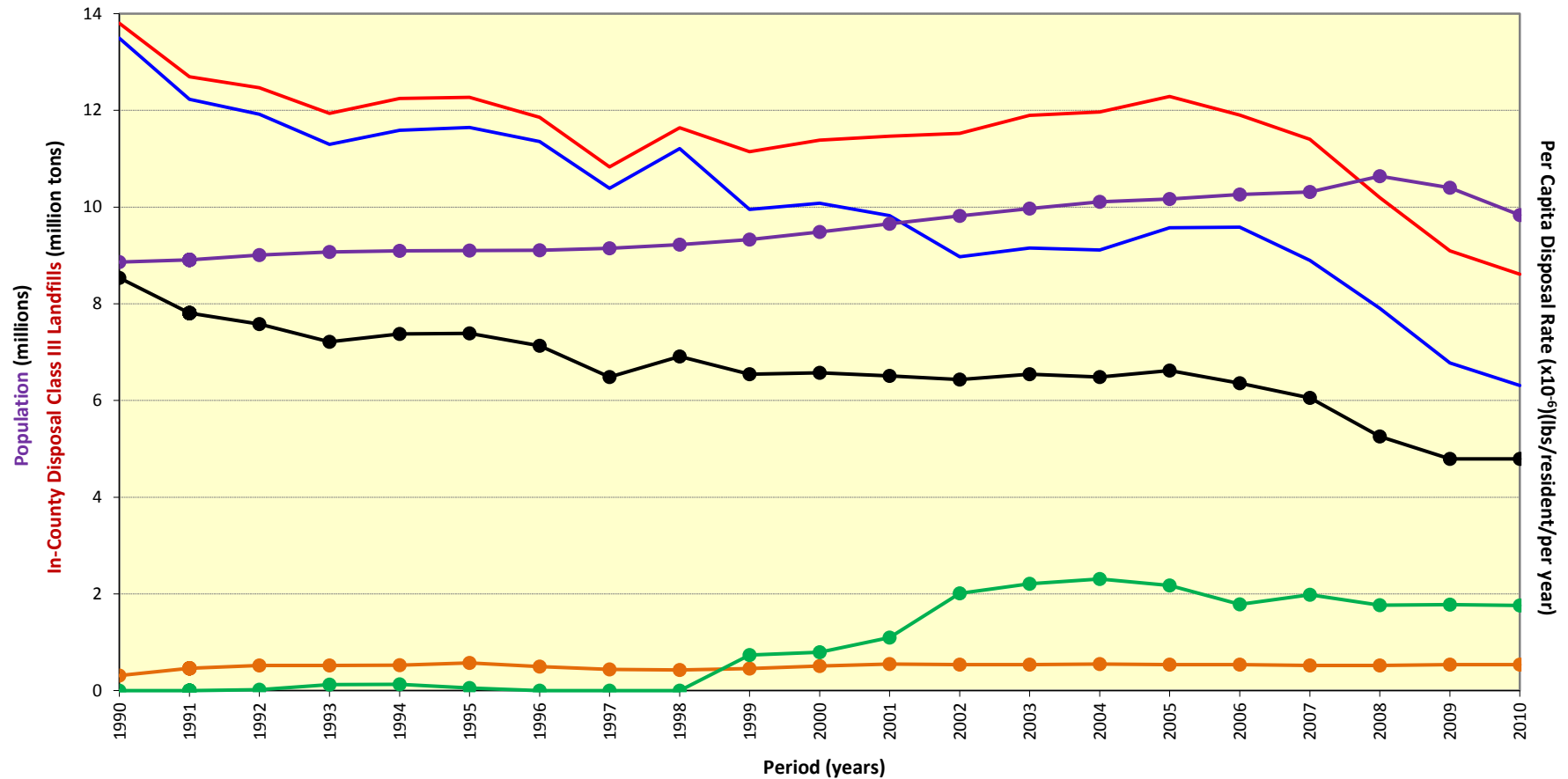
Daily Disposal Demand					SB 1016 Disposal Limit				
Year	Total Annual Waste Generation <sup>1</sup>	Daily Waste Generation Rate	Diversion Rate <sup>2</sup> Best Case	Total Daily Disposal Demand Best Case	Los Angeles County Population <sup>3</sup>	SB 1016 Per Capita Disposal Equivalent <sup>4,5</sup>	SB 1016 Annual Disposal Limit <sup>6</sup>	SB 1016 Daily Disposal Limit <sup>6</sup>	Diversion Rate Equivalent Best Case
	A	B = A/312	C	D = B(1-C)	E	F	G = (E*F*365days)/(2000lb/ton) (yearly)	H = G/312 days (daily)	I = (1 - H/B)*100
	(tons)	(tpd-6)		(tpd-6)	(Residents)	(lb/res/day)	(tons)	(tpd-6)	
2010	19,489,744	62,467	55%	28,110	9,836,000	6.49	11,650,004	37,340	40%
2011	19,597,652	62,813	57%	27,010	9,889,000	6.49	11,712,779	37,541	40%
2012	20,163,061	64,625	59%	26,496	9,951,000	6.49	11,786,213	37,776	42%
2013	20,758,574	66,534	61%	25,948	10,029,000	6.49	11,878,598	38,072	43%
2014	21,465,309	68,799	63%	25,456	10,109,000	6.49	11,973,352	38,376	44%
2015	22,208,722	71,182	65%	24,914	10,187,000	6.49	12,065,737	38,672	46%
2016	22,938,233	73,520	67%	24,262	10,259,000	6.49	12,151,016	38,946	47%
2017	23,455,058	75,176	69%	23,305	10,329,000	6.49	12,233,926	39,211	48%
2018	24,031,635	77,024	71%	22,337	10,398,000	6.49	12,315,651	39,473	49%
2019	24,621,187	78,914	73%	21,307	10,467,000	6.49	12,397,376	39,735	50%
2020	25,155,998	80,628	75%	20,157	10,536,000	6.49	12,479,102	39,997	50%
2021	25,635,173	82,164	75%	20,541	10,605,000	6.49	12,560,827	40,259	51%
2022	26,127,086	83,741	75%	20,935	10,675,000	6.49	12,643,737	40,525	52%
2023	26,617,529	85,313	75%	21,328	10,747,000	6.49	12,729,015	40,798	52%
2024	27,141,048	86,991	75%	21,748	10,819,000	6.49	12,814,294	41,071	53%
2025	27,589,195	88,427	75%	22,107	10,891,000	6.49	12,899,573	41,345	53%

**Footnotes:**

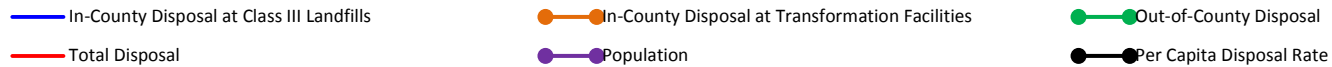
1. Waste Generation is estimated using the Waste Board's Adjustment Methodology, utilizing population projection, employment and taxable sales projections from UCLA longterm forecast, Aug
2. Diversion Rate remains at 55% through 2025.
3. Los Angeles Countywide Population Projection (UCLA, Long Term Forecast of Los Angeles County, August 2011)
4. SB 1016 Per Capita Disposal Equivalent is a numerical indicator of jurisdictional disposal divided by jurisdiction population (residents) to obtain disposal by individual.
5. SB 1016 Per Capita Disposal Equivalent is the Per Capita Disposal Rate average between 2003-2006.
6. SB 1016 Disposal Limit reflects the yearly and daily Per Capita Disposal Rate.

Source: Los Angeles County Department of Public Works

**Figure 4-1**  
**Graph of Los Angeles County Population and Solid Waste Disposal Trend (1990-2010)**



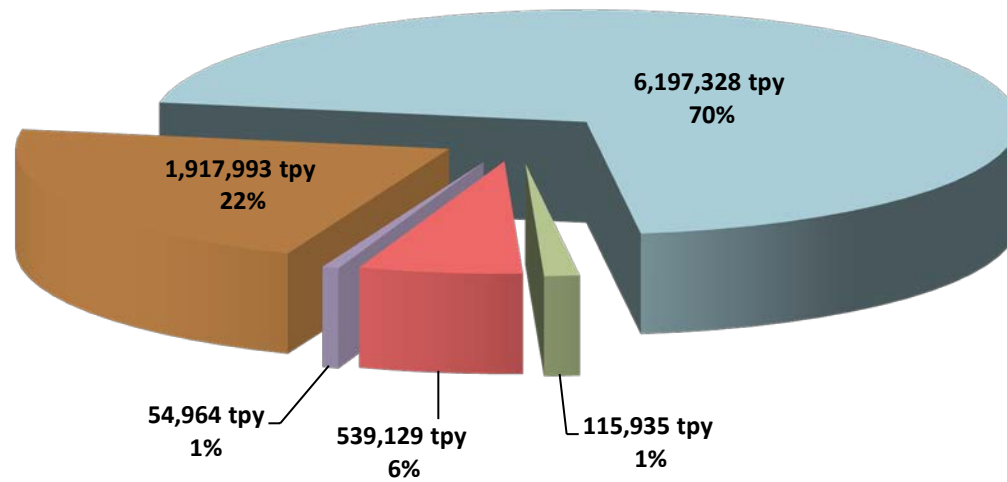
**Legend:**



**Notes:**

1. In-County disposal data at Class III landfills for the period 1990-1995 includes waste imported from jurisdictions outside the County. 1996-1998 data does not include waste imported from jurisdictions outside the County.
2. In-County disposal data at transformation facilities for the period 1990-1995 includes waste imported from jurisdictions outside the County. Data for the period 1996-1998 does not include waste imported from jurisdictions outside the County. 1990 excludes 500 tons/day of ash which were landfilled; for other years, ash has been diverted from disposal.
3. Out-of-County disposal data for the period 1996-1998 is not available. There is no record per SWIMS.

**Figure 4-2**  
**2010 Los Angeles County Solid Waste Disposal Distribution**  
(January 1, 2010 - December 31, 2010 in tons per year (tpy))



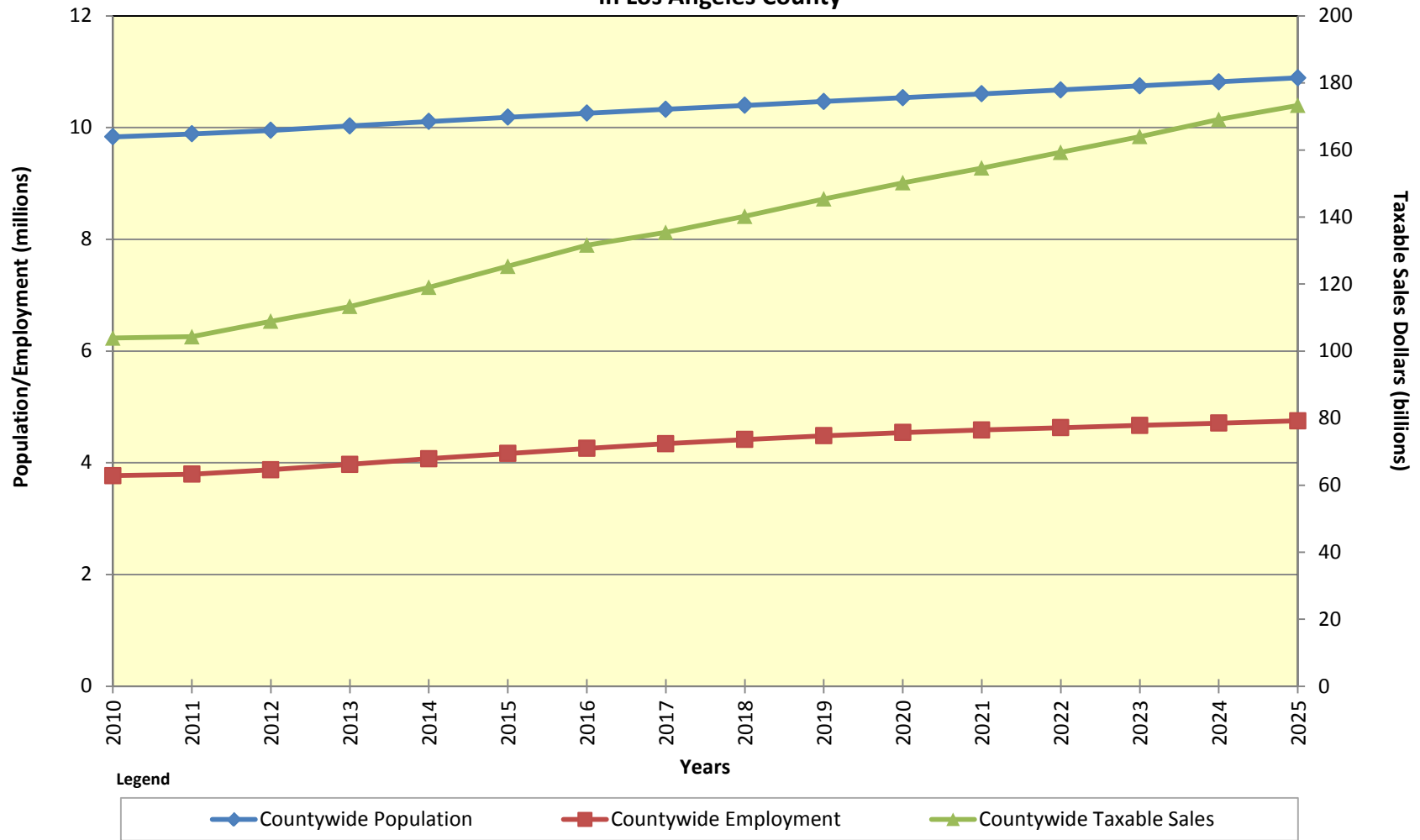
Legend:

<span style="color: #4682B4;">■</span> In-County Major Class III landfills	<span style="color: #90EE90;">■</span> In-County Minor Class III Landfills	<span style="color: #FF0000;">■</span> Transformation (Waste-to-Energy) Facilities
<span style="color: #800080;">■</span> In-County Permitted Inert Waste landfills	<span style="color: #A0522D;">■</span> Exports to out-of-County Class III landfills	



Figure 4-3

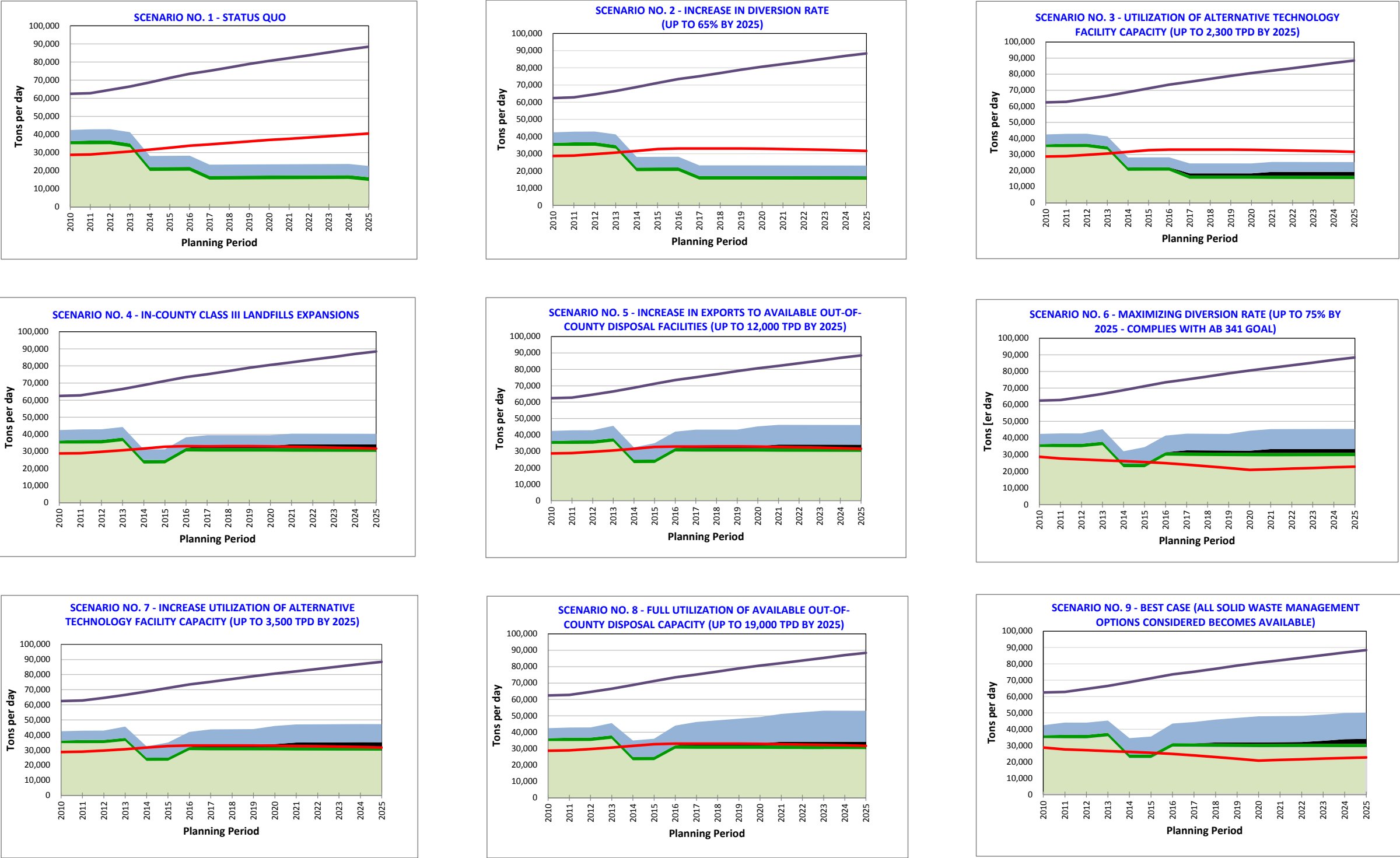
**Graph of Population, Employment, Taxable Sales, and Solid Waste Generation Projection  
in Los Angeles County**









**Notes:**

1. Population, Employment and Taxable Sales are based on Countywide Population, Employment and Taxable Sales Projection from the UCLA Long Term Forecast of Los Angeles County, dated August 2010.
2. See Table 4-6 for projection data.

**FIGURE 4-4**  
**GRAPH OF SOLID WASTE DISPOSAL CAPACITY PROJECTIONS FOR EACH SCENARIO<sup>1</sup> FOR THE PLANNING PERIOD (2010-2025)**

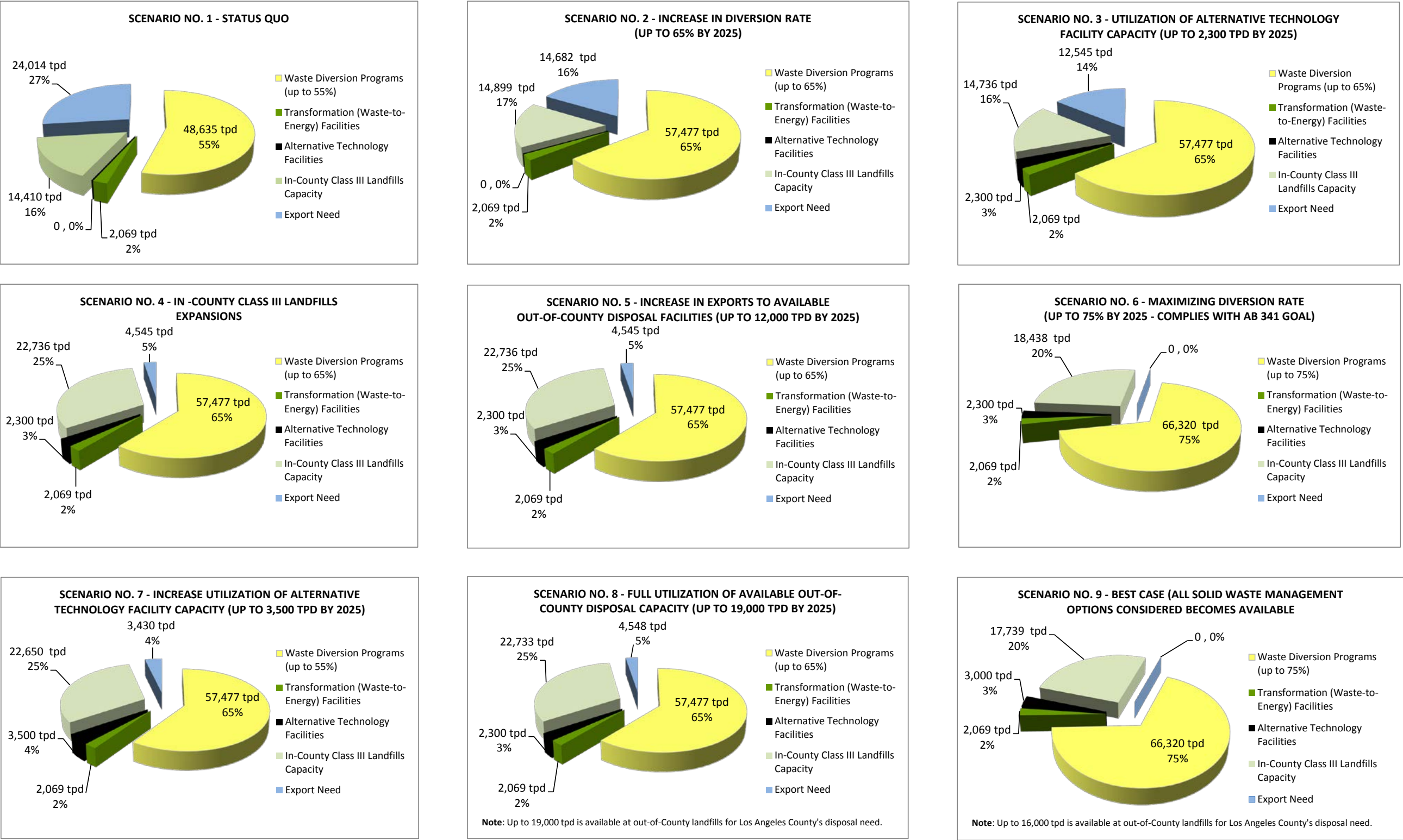


**Legends:**

	Exports to Out-of-County Landfills		Alternative Technology Facility Daily Capacity		Transformation (Waste-to-Energy) Facility Daily Capacity
	In-County Class III Landfills Daily Disposal Capacity		Daily Disposal Demand (including Imports)		Daily Waste Generation

**Footnote:**  
<sup>1</sup> See Chapter 4, Section 4.10 (Disposal Capacity Need Analysis Scenarios) and Table 4-9 (Summary of Description of Disposal Capacity Need Analysis Scenarios) for a detailed description of each scenario and assumptions.

FIGURE 4-5  
LOS ANGELES COUNTY PROJECTED SOLID WASTE DISPOSAL IN 2025 FOR EACH SCENARIO<sup>1</sup> FOR THE PLANNING PERIOD (2010-2025)

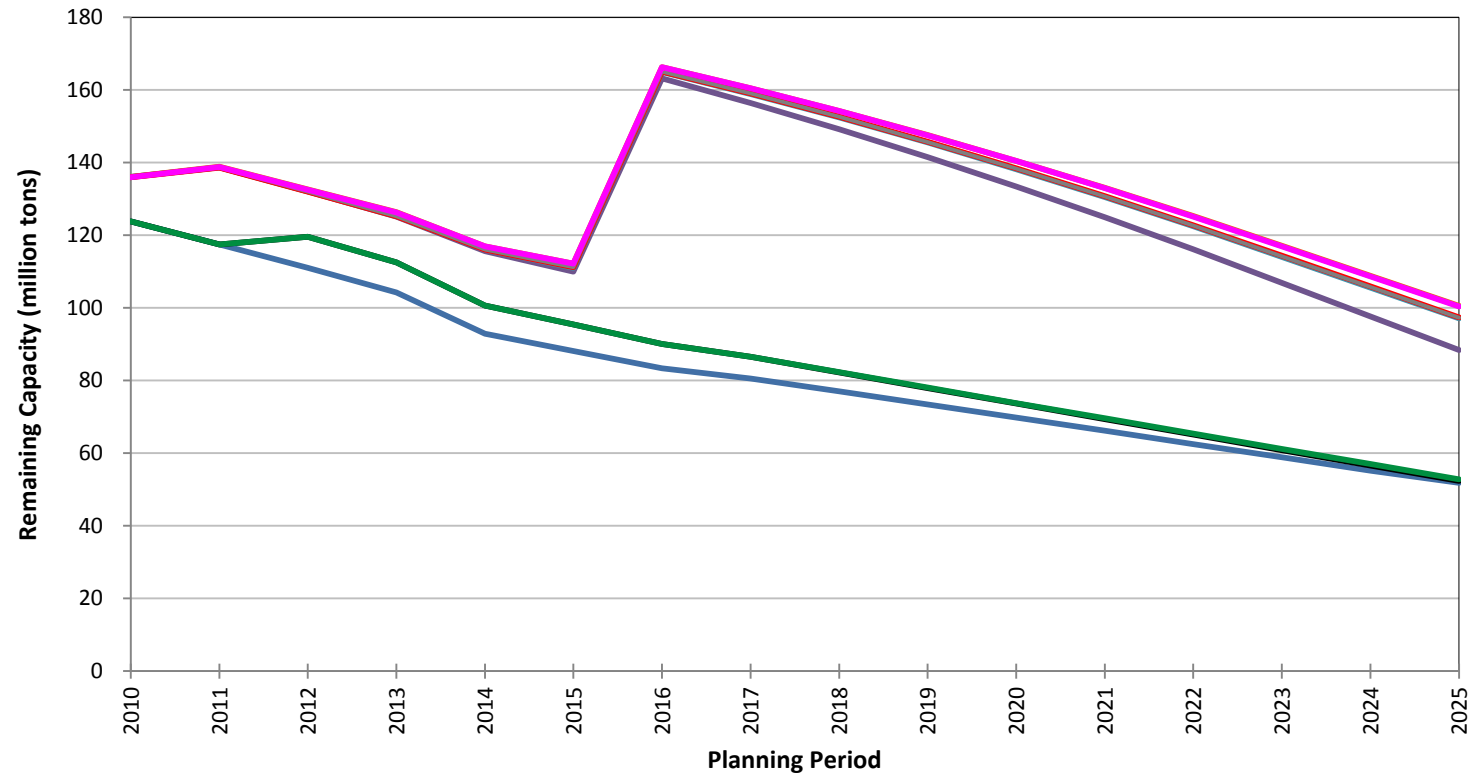


Footnote:

<sup>1</sup> See Chapter 4, Section 4.10 (Disposal Capacity Need Analysis Scenarios) and Table 4-9 (Summary of Description of Disposal Capacity Need Analysis Scenarios) for a detailed description of each scenario and assumptions.

**Figure 4-6**  
**Los Angeles County Countywide Siting Element**

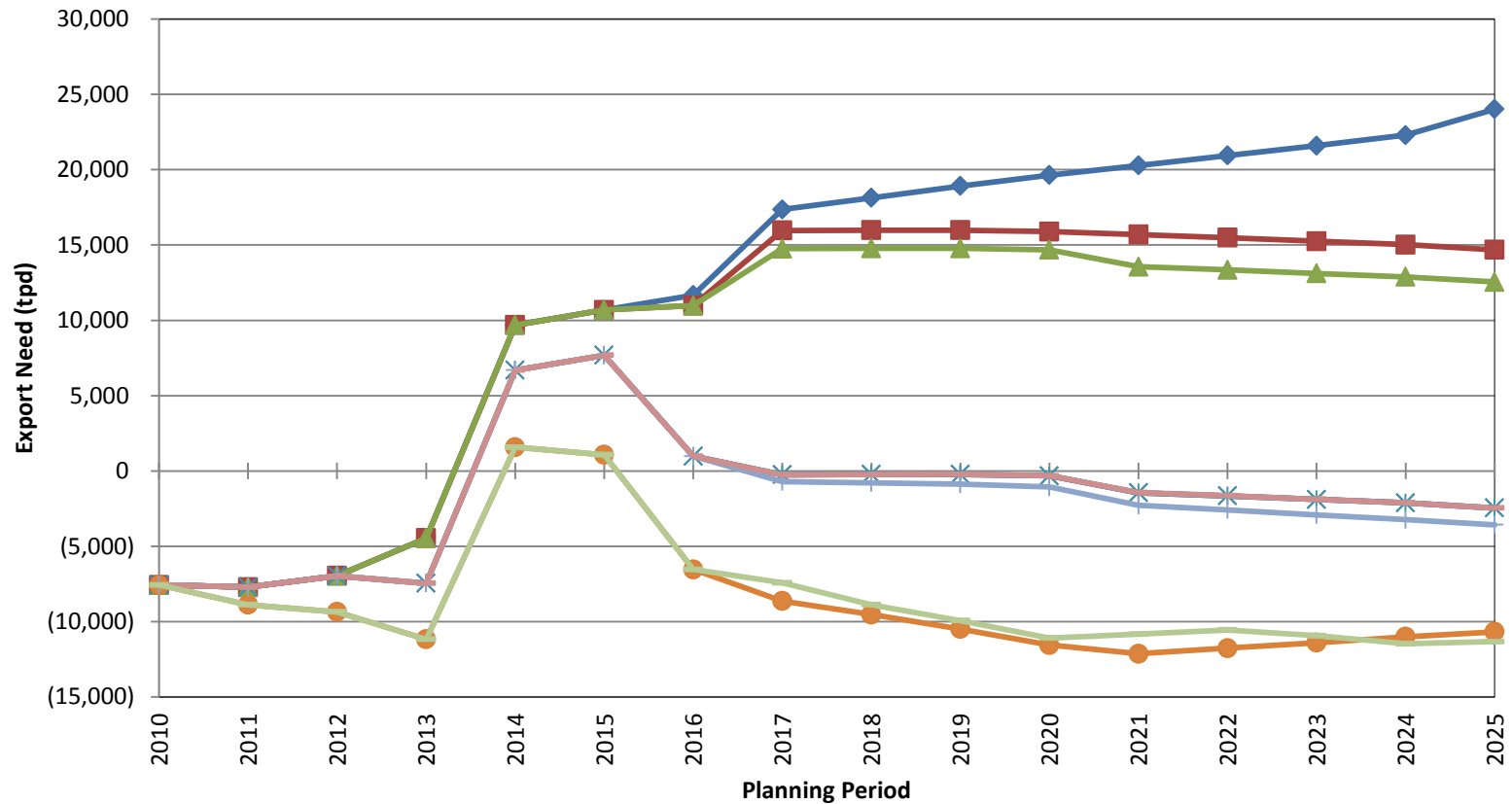
**GRAPH OF IN-COUNTY CLASS III LANDFILLS REMAINING DISPOSAL CAPACITY  
FOR EACH DISPOSAL CAPACITY NEED ANALYSIS SCENARIO**



- Scenario No. 1 - Status Quo
- Scenario No. 2 - Increase in Diversion Rate (up to 65% by 2025)
- Scenario No. 3 - Utilization of Alternative Technology Capacity (up to 2,300 tpd by 2025)
- Scenario No. 4 - In-County Class III Landfills Expansions
- Scenario No. 5 - Increase in Available Out-of-County Disposal Capacity (up to 12,000 tpd by 2025)
- Scenario No. 6 - Maximizing Diversion Rate (up to 75% by 2025)
- Scenario No. 7 - Increase in Alternative Technology Capacity (up to 3,500 tpd by 2025)
- Scenario No. 8 - Full Utilization of Out-of-County Disposal Capacity (up to 19,000 tpd by 2025)
- Scenario No. 9 - Best Case (All Solid Waste Management Options Considered Becomes Available)

**Figure 4-7**  
**Los Angeles County Countywide Siting Element**

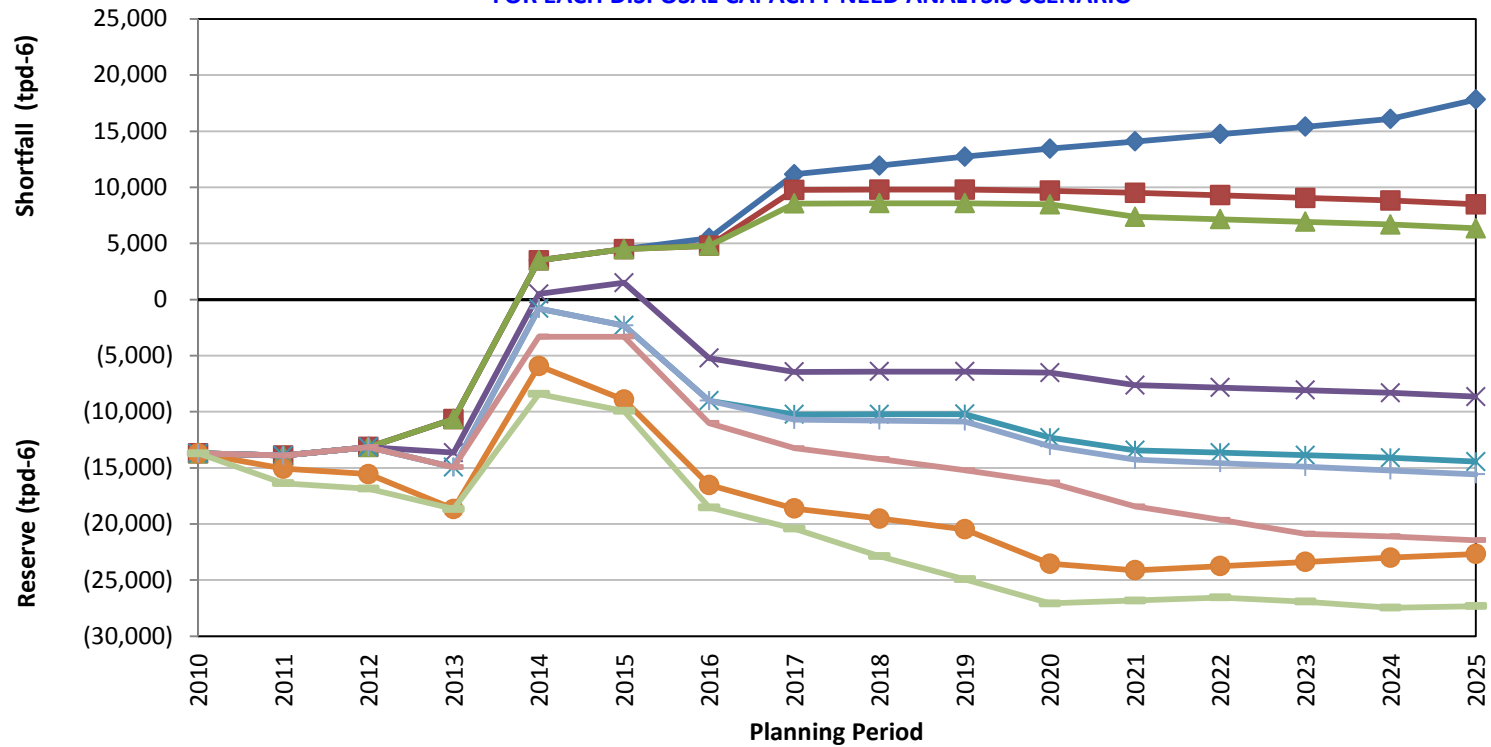
**GRAPH OF LOS ANGELES COUNTY SOLID WASTE DISPOSAL EXPORT NEED  
FOR EACH DISPOSAL CAPACITY NEED ANALYSIS SCENARIO**



- Scenario No. 1 - Status Quo
- Scenario No. 2 - Increase in Diversion Rate (up to 65% by 2025)
- Scenario No. 3 - Utilization of Alternative Technology Facility Capacity (up to 2,300 tpd by 2025)
- Scenario No. 4 - In-County Class III Landfills Expansions
- Scenario No. 5 - Increase in Exports to Out-of-County Disposal Facilities (up to 12,000 tpd by 2025)
- Scenario No. 6 - Maximizing Diversion Rate (up to 75% by 2025)
- Scenario No. 7 - Increase Utilization of Alternative Technology Facility Capacity (up to 3,500 tpd by 2025)
- Scenario No. 8 - Full Utilization of Out-of-County Disposal Capacity (up to 19,000 tpd by 2025)
- Scenario No. 9 - Best Case (All Solid Waste Management Options Considered Becomes Available)

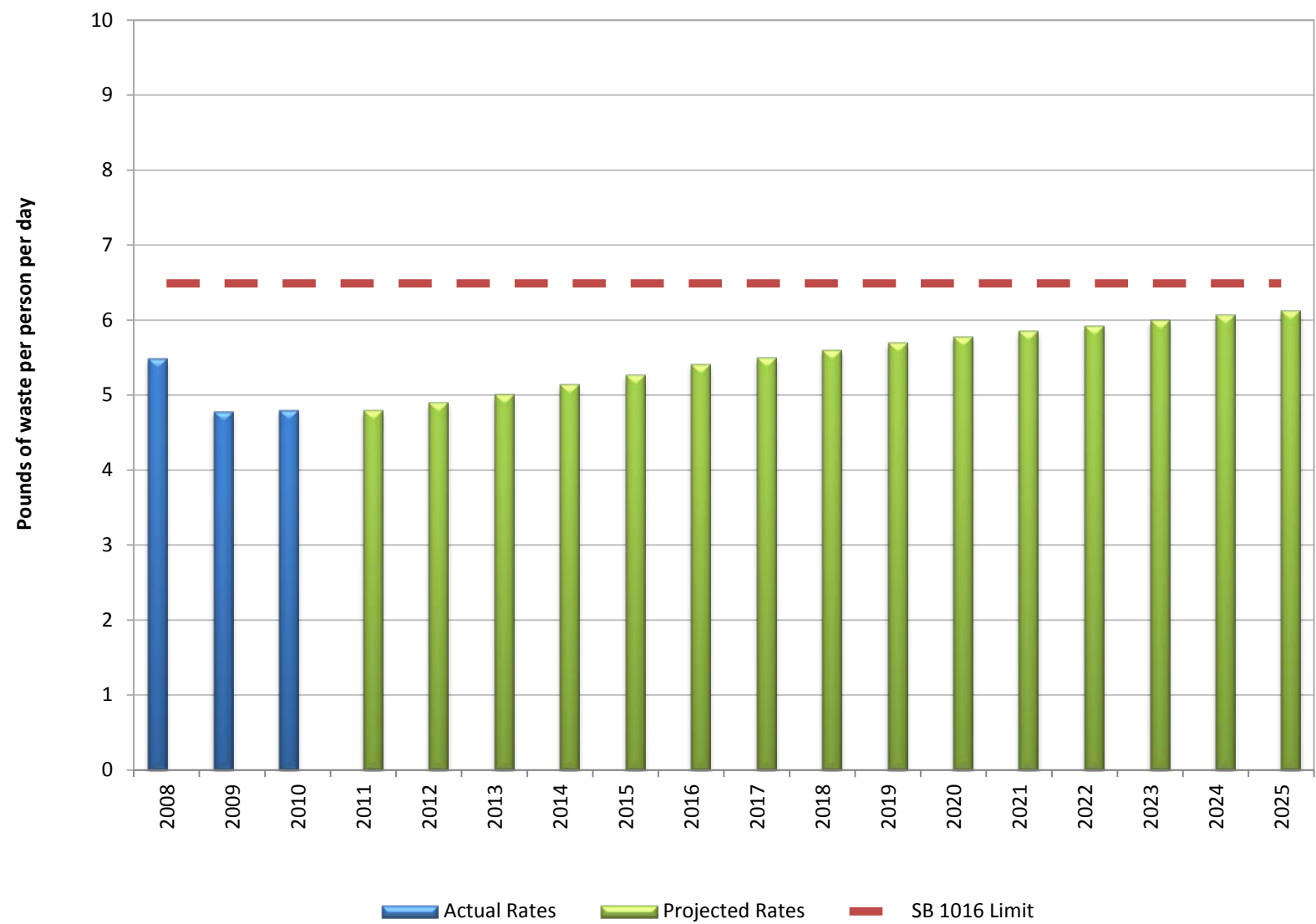
**Figure 4-8**  
**Los Angeles County Countywide Siting Element**

**GRAPH OF CLASS III LANDFILLS DAILY DISPOSAL CAPACITY SHORTFALL (RESERVE)**  
**FOR EACH DISPOSAL CAPACITY NEED ANALYSIS SCENARIO**



- Scenario No. 1 - Status Quo
- Scenario No. 2 - Increase in Diversion Rate (up to 65% by 2025)
- Scenario No. 3 - Utilization of Alternative Technology Facility Capacity (up to 2,300 tpd by 2025)
- Scenario No. 4 - In-County Class III Landfills Expansions
- Scenario No. 5 - Increase in Exports to Out-of-County Disposal Facilities (up to 12,000 tpd by 2025)
- Scenario No. 6 - Maximizing Diversion Rate (up to 75% by 2025)
- Scenario No. 7 - Increase Utilization of Alternative Technology Facility Capacity (up to 3,500 tpd by 2025)
- Scenario No. 8 - Full Utilization of Out-of-County Disposal Capacity (up to 19,000 tpd by 2025)
- Scenario No. 9 - Best Case (All Solid Waste Management Options Considered Becomes Available)

**Figure 4-9**  
**Disposal Projection for Countywide Areas**





**APPENDIX 4-A**

**Los Angeles County Solid Waste Management Committee/  
Integrated Waste Management Task Force's Report (dated March 28, 1991)  
to the California Integrated Waste Management Board –  
on the Remaining Permitted Disposal Capacity of Solid Waste Facilities  
in Los Angeles County**

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THOMAS A. TIDEMANSON  
CHAIRMAN

LOS ANGELES COUNTY  
SOLID WASTE MANAGEMENT COMMITTEE /  
INTEGRATED WASTE MANAGEMENT TASK FORCE  
900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331  
P.O. BOX 1480 ALHAMBRA, CALIFORNIA 91802

March 28, 1991

WM-2

Mr. George Larson, Chief Executive O  
California Integrated Waste Manageme  
1020 Ninth Street, Suite 300  
Sacramento, CA 95814

Dear Mr. Larson:

REMAINING PERMITTED DISPOSAL CAPACIT  
SOLID WASTE FACILITIES IN  
LOS ANGELES COUNTY

Pursuant to the requirements of Section 41791 of the Public Resources Code regarding the date of submission of the Countywide Siting Element and the County Integrated Waste Management Plan for Los Angeles County, the following is offered.

The citizens of Los Angeles County are currently disposing of approximately 51,000 tons (1990 average daily disposal  $\approx$  six days/week) of solid waste per day. Approximately 43,245 tons of this waste are disposed of in 19 permitted Class III landfills (see Table 1, enclosed), 1,000 tons are managed by two waste-to-energy facilities (does not include the 500 tons of residual ash which is landfilled), and the remaining inert waste tons are disposed of at the permitted unclassified landfills.

At present, the remaining permitted Class III capacity in this County is estimated at 99 million tons (Table 1). Based on the 1990 average disposal rate of 43,245 tons per day (six days per week) as shown on Table 1, this capacity will be mathematically exhausted by the year 1999. However, this is misleading in that the majority of landfills have a number of restrictions which significantly impact their operations. These include expiration of the land use permit; restriction on acceptance of waste generated outside a jurisdiction and/or watershed boundary; permit restrictions on daily tonnage that can be accepted; and/or limitation on daily tonnage that can be handled at a facility due to lack of manpower and equipment.

At the present time, several of the operating Class III landfills have operating restrictions reducing available daily disposal capacity in the County. Burbank and Whittier (Savage Canyon) can only receive solid waste generated within their respective cities. Lopez Canyon can only receive solid waste generated by single- and multi-family residential customers within the City of Los Angeles which have been collected by City of Los Angeles Bureau of Sanitation trucks; while Puente Hills and Spadra are prohibited from receiving any waste

Mr. George Larson  
March 28, 1991  
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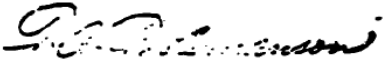
originating from the City of Los Angeles. Calabasas and Scholl Canyon Landfills only accept solid waste generated within defined wastesheds, while Brand Park, Pitchess Honor Rancho, and San Clemente are not open to the public.

As indicated in Table 1, Class III landfills had a permitted daily capacity of 63,950 tons in January 1991; however, this permitted capacity was reduced by 6,500 tons per day to 57,450 tons per day due to closure of Azusa Western Landfill as the result of a California Appellate Court decision. Additionally, by January 30, 1996, eight of the remaining landfills, representing 35,500 tons of permitted daily capacity, could be closed due to capacity limitations or the expiration of land use permits.

Based on the foregoing and utilizing a diversion rate of 25 percent, the County of Los Angeles will experience daily disposal capacity shortfalls within five years. Accordingly, the County will prepare and submit the CSE and the CoIWMF to the Board by January 1, 1992, pursuant to requirements of Section 41791 of the PRC.

We look forward to working with you in implementing the provisions of the California Integrated Waste Management Act of 1989, as well as other matters of joint interest.

Very truly yours,



T. A. TIDEMANSON, Chairman  
Los Angeles County Solid Waste Management  
Committee/Integrated Waste Management Task Force

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TABLE 1  
F EXISTING SOLID WASTE FACILITIES IN LOS ANGELES COUNTY

Class III Landfill	Solid Waste Facility Permit	Facility Address	Oper. Days/Week	Jan. 1991 Daily Capacity (tons)	LUP Daily Capacity (tons)	1990 Average Daily Tonnage 8 days/week	Add'l Tonnage That Can Be Handled	Quantity of Municipal Solid Waste Disposed million tons/Year 1990	Projected remaining permitted capacity million cubic yards	Comments
Antelope Valley	18-AA-0009	3500 West City Ranch Road Piedmont, CA 91350	7	350	-----	400	0	0.125	0.925	Approx. date of closure 1994
Arroyo Land Reclamation BCR	18-AA-0013	1201 Oldstone Avenue Azusa, CA 91702	6	6,500	6,500	2,754	0	0.88	0	1/81 Appeals Court's rescinded permit.
	18-AF-0001	2210 South Azusa Avenue West Covina, CA 91790	6	12,000 <sup>a</sup>	-----	8,744	3,600 <sup>b</sup>	3.04	15.96	Date of closure 11/30/95
Bradley West	18-AR-0008	9227 Tujunga Avenue Sun Valley, CA 91352	6	7,000	6,500	1,923	1,577	0.60	11.8	LUP expires 12/28/93
Brand Park	18-AA-0008	1601 West Mountain Street Glendale, CA 91207	5	104	-----	48	0 <sup>c</sup>	0.015	0.306	Private use only
Burbank	18-AA-0040	1600 Leeward View Drive Burbank, CA 91510	5	240	-----	184	44	0.081	11.44	Limited to the City's use only
Calabasas	18-AA-0056	28918 Ventura Freeway Agoura, CA 91301	6	3,500	-----	2,724	776	0.85	15.155	Limited to the Calabasas
Chiquita Canyon	18-AA-0052	22201 Henry Mayo Drive Northridge, CA 91322	7	5,000	-----	1,743	3,257	0.55	1.78	Wastelined LUP expires 11/24/97
Lancaster	18-AA-0050	600 East Avenue F Lancaster, CA 93304	6	450	-----	295	5	0.092	0.15	LUP expires 12/93
Lopez Canyon	18-AA-0020	11950 Lopez Canyon Road Pacoima, CA 91331	5	4,100 <sup>d</sup>	4,000	3,106	891	0.97	4.2	LUP expires 1/30/96 limited to City of Los Angeles use only.
Public Beach	18-AA-0041	Sanja Catalina Island Avalon, CA 90701	6	30	-----	10	20	0.003	0.097	Approx. date of closure 1994. Private use only
Pittsburg Honor Rancho	18-AA-0037	29200 The Old Road Saugus, CA 91350	5	23	-----	17	6	0.0054	2.24	LUP limits to 72,000 tpy LUP expires 10/31/93, no waste from City of L.A. LUP expires 10/31/91
Puerto Hills	18-AA-0053	2800 S. Morban Hill Rd. Whittier, CA 90607	6	12,000	13,200	11,839	1,341	3.7	7.5	Limited to the Scholl Cyn. Wastelined only
San Clemente	18-AA-0083	San Clemente Island LA County, CA 91193	5	1	-----	1	0	0.002	0.024	LUP limits to 18,000 tpy reduces to 1,500 tpy 7/1/95, no City of L.A.
Scholl Canyon	18-AA-0011	3721 North Figueroa St. Los Angeles, CA 90041	6	3,400	-----	2,179	1,221	0.98	13.32	Waste accepted LUP expires 9/28/91
Spadra	18-AA-0015	4125 West Valley Blvd. Walnut, CA 91789	6	3,000	-----	2,724	276	0.85	6.95	Limited to the City of Whittier use only
Sunshine Canyon (North Valley)	18-AR-0002	14747 San Fernando Road Los Angeles, CA 91242	6	7,000	6,000	2,141	2,859	0.96	0.4	
Two Harbors	18-AA-0062	Two Harbors Avalon, CA	5	3.5	-----	3.5	0	0.000068	0.0073	
Whittier (Garage Canyon)	18-AH-0001	13919 East Penn Street Whittier, CA 91350	6	350	-----	353	0	0.11	6.39	
<b>Total</b>				<b>63,850<sup>e</sup></b>		<b>49,249</b>	<b>11,962</b>	<b>13.48</b>	<b>96.65</b>	<b>156.58</b>

Sources: Los Angeles County Department of Public Works, January 1991.  
Based on written surveys of all solid waste facilities currently operating in Los Angeles County conducted October, 1990 and phone survey, January 1991.

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Note: <sup>a</sup> Daily capacity established in 8/90. Notice and Order, as amended, by the City of West Covina.  
<sup>b</sup> Daily capacity established by 2011 and Courts.  
<sup>c</sup> Ceased operation as a Class III landfill on 3/21/81.  
<sup>d</sup> Max can handle additional 2,400 tpy if Surp limit is revised.  
<sup>e</sup> Operator has indicated the that additional waste cannot be handled due to manpower and equipment limitation.  
<sup>f</sup> Average daily tonnage Monday through Friday.

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