May 10, 2007

TO: Members of the Facility and Plan Review Subcommittee
Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force

FROM: Chuk Agu

POTENTIAL REVISIONS TO CHAPTER 4 OF THE LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT

Recognizing the complexity of issues in Chapter 4 (Current Disposal Rate and Assessment of Disposal Capacity Needs) of the Countywide Siting Element, the following Chapter 4 documents are being submitted for your feedback and discussion at the May 17, 2007, Subcommittee meeting.

Attachment A - Revised Chapter 4 Table of Contents

Attachment B - Revised Figure 4-1 and Tables 4-1 to 4-14
(listed in Revised Chapter 4 Table of Contents)

Attachment C - Chapter 4 of the Los Angeles County Countywide Siting Element
(dated June 1997)

Please note that the information contained in Attachments A and B are tentative and will be updated as new information become available. Attachment C is provided for your information only. Based on the Subcommittee's input, staff will prepare and submit the preliminary draft of Chapter 4 for Subcommittee review and approval.

If you have any questions, please contact me at (626) 458-3556, Monday through Thursday, 7 a.m. to 5:30 p.m.

Attach.

Attachment A

Revised Chapter 4 Table of Contents

CHAPTER 4

CURRENT DISPOSAL RATE AND ASSESSMENT OF DISPOSAL CAPACITY NEEDS

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FIGURES

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Attachment B

Revised Figure 4-1 and Tables 4-1 to 4-16
(Listed in Revised Chapter 4 Table of Contents)

Figure 4-1
Graph of Population, Employment, and Taxable Sales in Los Angeles County

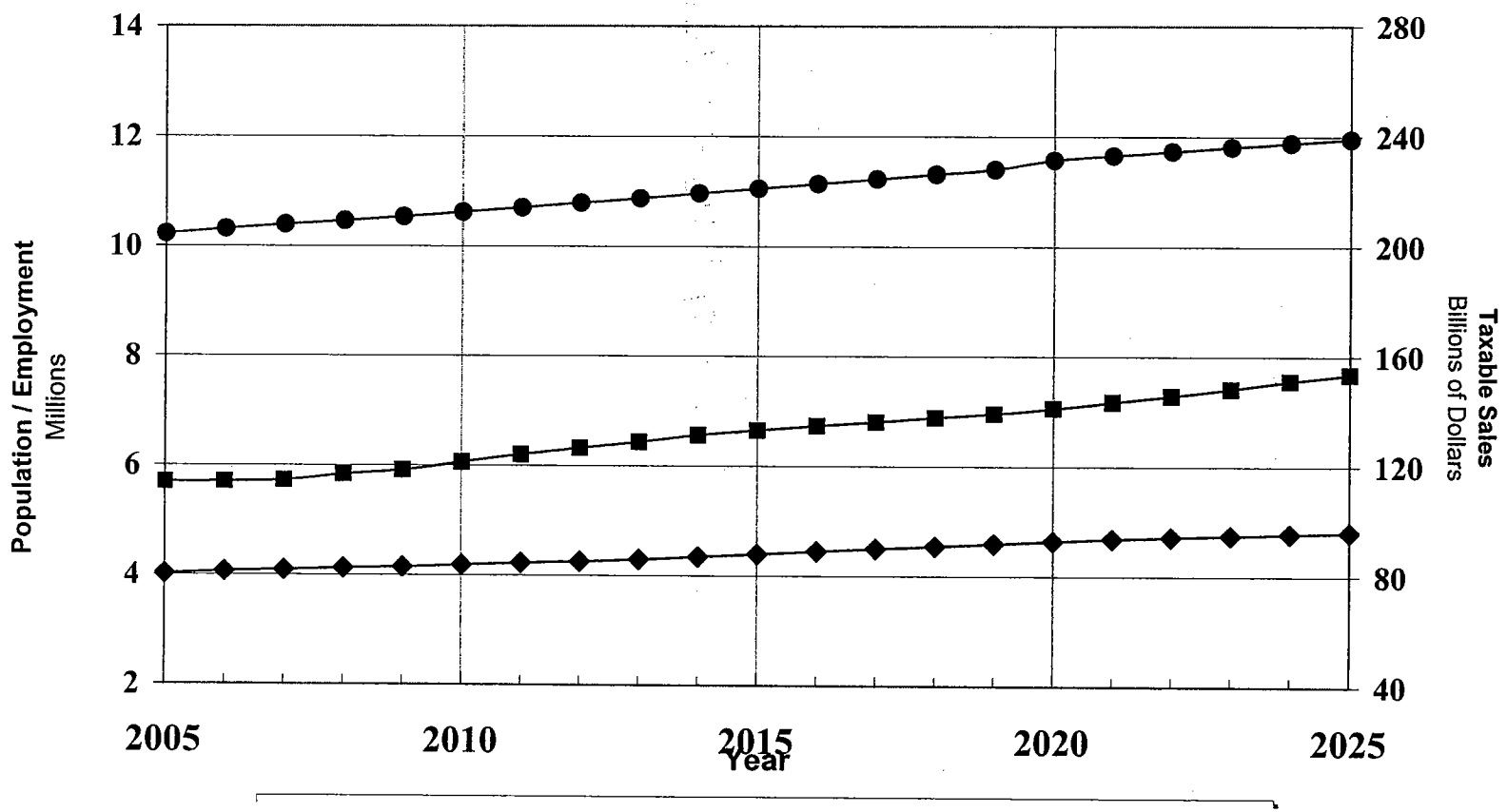

TABLE 4-1

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 Landfill	Solid Waste Facility Permit	Operation Days/week	Jan. 1991 SWFP Daily Capacity	LUP Daily Capacity	1990 Average Daily Tonnage 6days/wk	Quantity of Municipal Solid Waste Disposed Year 1990	Projected remaining permitted capacity (effective January 1, 1991)		Estimated remaining permitted capacity (effective January 1, 1990)	
			Tons	Tons	Tons	Million Tons	Million Tons	Million (d) Cubic Yds	Million Tons	Million (d) Cubic Yds
Antelope Valley	19-AA-0009	7	350	—	400	0.125	0.925	2.6	1.050	3.0
Azusa Land 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 (a)	—	9,744	3.04	15.96	23.8	19.00	28.3
Bradley West	19-AR-0008	6	7,000	9,500	1,923	0.60	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	22.0	11.50	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 (b)	4,000	3,109	0.97	4.2	7.0	5.2	8.6
Pebbly Beach	19-AA-0061	6	30	—	10	0.003	0.097	0.16	0.100	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	16.0
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	14.00	20
Spadra	19-AA-0015	6	3,000	—	2,724	0.85	6.95	9.93	7.80	11.14
Sunshine Canyon	19-AR-0002	6	7,000	6,000	3,141	0.98	0.4	1.64	1.4	5.66
Two 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	6.50	10.8
TOTAL			63,950 (c)		43,245	13.49	98.65	156.08	112.15	177.42

FOOTNOTES:

(a) Daily capacity established in 6/90, Notice and Order, as amended, by the City of West Covina's Local Enforcement Agency.

(b) Daily capacity established by Report of Disposal Site Information and Courts.

(c) Average daily tonnage, Monday through Friday.

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

NOTES:

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

Source: Los Angeles County Department of Public Works, January 1997.

TABLE 4-2
(PAGE 1 OF 2)
SUMMARY OF YEARLY SOLID WASTE DISPOSAL QUANTITIES*
LOS ANGELES COUNTY

REVISED

Year	A	B	C	D	E	F	G
	In-County Class III Landfill Disposal	In-County Dis… Tran… Fac…	…	Im…ts	In-County Un…sified …ill …sal	Total Disposal at Class III landfill + …sfo… Faci… A+…	Total Disposal at Class III landfill + Transformation + Unclassified landfill A+B+C+E-D
	TONS	T…	…S	…ONS	…S	TO…	TONS
1990	13,492,000	31…	N/A	N/A	…,1…,000	13,8…,00…	15,912,000
1991	12,230,000	4…,00…		N/A	…,000	12,6…	13,562,000
1992	11,922,000	523,000	22,000	N/A	867,000	12,467,000	13,334,000
1993	11,300,000	518,000	122,000	N/A	739,000	11,940,000	12,679,000
1994	11,590,000 **	526,000	128,000	305,000	522,000 **	11,939,000 **	12,461,000 **
1995	11,646,000	573,000	52,000	774,000	530,000	11,497,000	12,027,000

Column A Total disposal at Class III landfills in Los Angeles County. Includes waste imported from jurisdictions outside the County.
Column B Total disposal at transformation facilities in Los Angeles County. Includes waste imported from jurisdictions outside the County. For 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 Los Angeles County to disposal facilities located outside the County.
Column D Waste disposed at Class III landfills and transformation facilities located in Los Angeles County which originated outside the County.
Column E Total inert waste disposed by jurisdictions in Los Angeles County at permitted unclassified landfills.
Column F Includes disposal by jurisdictions in Los Angeles County at Class III landfills, Transformation facilities, and the waste exported to disposal facilities located outside the County. **For 1994 and 1995, total excludes waste imported from jurisdictions outside Los Angeles County.**
Column G Includes disposal at Class III landfills, transformation facilities, permitted Unclassified landfills, and the waste exported for disposal at landfills outside Los Angeles County. **For 1994 and 1995 total excludes waste imported from jurisdictions outside Los Angeles County.**

Notes :

* See Chapter 4, Subsections 4.3.2 and 4.3.3 for discussion.
** Excludes debris generated as a result of Northridge Earthquake.
N/A Not available.

Source : Los Angeles County Department of Public Works,January 1997

Table 4-2
SUMMARY OF YEARLY SOLID WASTE DISPOSAL QUANTITIES[1] LOS ANGELES COUNTY
IN TONS

Yearly	In-County Disposal at Class III Landfills	In-County Disposal at Transformation Facilities	Exports	Imports	In-County Disposal at 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[2]	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	12,445,000	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[3]	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	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
1997	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
1998	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
1999	9,950,602	455,245	738,323	210,600	1,010,000	11,144,170	11,144,170	12,154,170
2000	10,078,989	510,455	794,910	229,320	1,332,572	11,384,354	11,384,354	12,716,926
2001	9,825,357	547,466	1,095,711	182,832	1,296,425	11,468,534	11,468,534	12,764,959
2002	8,973,755	539,542	2,009,845	158,496	1,045,960	11,523,142	11,523,142	12,569,102
2003	9,152,334	539,188	2,207,873	153,504	919,600	11,899,395	11,899,395	12,818,995
2004	9,110,298	548,249	2,308,181	156,000	1,247,500	11,966,728	11,966,728	13,214,228
2005	9,574,072	535,225	2,177,097	235,872	85,678	12,286,394	12,286,394	12,372,072

Column A Total Disposal at Class III landfills in Los Angeles County. **1990-1995 includes waste imported from jurisdictions outside the County. 1999-2005 does not include waste imported from jurisdictions outside the County.**

Column B Total disposal at transformation facilities in Los Angeles County. 1990-1995 includes waste imported from jurisdictions outside the County. **1996-2005 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 Los Angeles County to disposal facilities located outside the County.

Column D Waste disposed at Class III landfills and transformation facilities located in Los Angeles County which originated outside the County.

Column E Total inert waste disposed by jurisdictions in Los Angeles County at permitted unclassified landfills.

Column F Includes disposal by jurisdictions in Los Angeles County at in-County Class III landfills and transformation facilities, and the waste exported to disposal facilities located outside the County.

Column G Includes disposal by jurisdictions in Los Angeles County at Class III landfills, Transformation facilities, and the waste exported to disposal facilities located outside the County. For 1994 and 1995, total excludes waste imported from jurisdictions outside the Los Angeles County. **1999-2005 does not include waste imported from jurisdictions outside the County.**

Column H Includes disposal at Class III landfills, transformation facilities, permitted Unclassified landfills, and the waste exported for disposal at landfills outside Los Angeles County**.** For 1994 and 1995, total excludes waste imported from jurisdictions outside the Los Angeles County. **1999-2005 does not include waste imported from jurisdictions outside the County.**

[1] See Chapter 4, Section 4.4 for discussion.
[2] N/A Not available
[3] Excludes debris generated as a result of Northridge Earthquake.

TABLE 4-2
(PAGE 2 OF 2)
SUMMARY OF YEARLY SOLID WASTE DISPOSAL QUANTITIES*
LOS ANGELES COUNTY

Year	A In-County Class III Landfill Disposal	B In-County Disposal at Transformation Facilities	C Exports	D Imports	E In-County Unclassified Landfill Disposal	F Total Disposal at Class III landfill + Transformation Facilities A+B+C-D	G Total Disposal at Class III landfill + Transformation + Unclassified landfill A+B+C+E-D
	Cubic Yards	Cubic Yards	Cubic Yards	Cubic Yards	Cubic Yards	Cubic Yards	Cubic Yards
1990	22,486,[illegible]	[illegible]00	N/A	[illegible]	[illegible]3,513,3[illegible]	[illegible]06,667	26,520,000
1991	20,383,333	775,000	N/A	N/A	1,445,0[illegible]	[illegible]58,333	13,562,000
[illegible]	[illegible],870,0[illegible]	[illegible]71,6[illegible]	[illegible]37	N/A	1,445,000	20,778,334	13,334,000
1993	18,833,333	863,333	203,333	N/A	[illegible],667	[illegible],999	12[illegible]00
1994	19,31[illegible],667 **	876,667	213,333	508,333	870,000 **	11,939,000 **	12,461,000 **
1995	[illegible]	[illegible]00	66,667	[illegible]	[illegible]333	[illegible]1,667	20,045,000

Column A Total disposal at Class III landfills in Los Angeles County. Includes waste imported from jurisdictions outside the County.
Column B Total disposal at transformation facilities in Los Angeles County. Includes waste imported from jurisdictions outside the County. For 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 Los Angeles County to disposal facilities located outside the County.
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Column F Includes disposal by jurisdictions in Los Angeles County at Class III landfills, Transformation facilities, and the waste exported to disposal facilities located outside the County. **For 1994 and 1995, total excludes waste imported from jurisdictions outside Los Angeles County.**
Column G Includes disposal at Class III landfills, transformation facilities, permitted Unclassified landfills, and the waste exported for disposal at landfills outside Los Angeles County. **For 1994 and 1995 total excludes waste imported from jurisdictions outside Los Angeles County.**

Notes :
The quantities expressed in Table 4-2 (page 2 of 2) were obtained from Table 4-2 (page 1 of 2) using a conversion factor of 1,200 lb/cy.
* See Chapter 4, Subsections 4.3.2 and 4.3.3 for discussion.
** Excludes debris generated as a result of Northridge Earthquake.
N/A Not available.

Source : Los Angeles County Department of Public Works,January 1997

Table 4-4
REMAINING PERMITTED COMBINED DISPOSAL CAPACITY OF EXISTING SOLID WASTE DISPOSAL FACILITIES IN LOS ANGELES COUNTY
As of January 1, 2006

Facility	Solid Waste Facility Permit Number	Location: City or Unincorporated Area	Operation days/week	12/31/2005 SWFP Maximum Daily Capacity (Tons)	LUP Maximum Daily Capacity (Tons)	2005 Average Daily Disposal 6 days/week (Tons) (See Note 1): In-County	Out-of-County	Total	MSW Disposed in 2005 (Million Tons): In-County	Out-of-County	Total	MSW Disposed in 2006 (Million Tons): In-County	Out-of-County	Total	Estimated Remaining Permitted Capacity (as of January 1, 2006) (See Note 2): Million Tons	Million (a) Cubic Yards	Comments
Class III Landfills																	
Antelope Valley	19-AA-0009	Palmdale	6	1,400		1,186	3	1,189	0.370	0.001	0.371	0.30	0.00	0.31	10.21	12.60	Remaining permitted capacity does not include the expansion in the bridge area between Landfill Unit1 and Landfill Unit 2. See footnote (c).
	19-AA-5624	Palmdale		1,800 (b)	1,800												
Bradley	19-AR-0008	Los Angeles	6	10,000	---	861	3	864	0.269	0.001	0.270	0.45	0.00	0.45	0.09	0.11	LUP expires 4/14/2007.
Burbank	19-AA-0040	Burbank	5	240	---	133	-	133	0.042	0.000	0.042	0.04	0.00	0.04	3.00	5.00	Limited to the City of Burbank's use only and provided waste is collected by the City's crews.
Calabasas	19-AA-0056	Uninc.	6	3,500	---	1,606	166	1,772	0.501	0.052	0.553	0.47	0.05	0.52	8.81	19.15	Limited to the Calabasas Wasteshed as defined by Los Angeles County Ordinance #91-0003.
Chiquita Canyon	19-AA-0052	Uninc.	6	6,000	6,000	4,910	55	4,965	1.532	0.017	1.549	1.51	0.02	1.53	13.74	19.63	Proposed expansion in 2008. LUP limits waste disposal to 30,000 tons per week. LUP expires 11/24/2019. New CUP pending.
Lancaster	19-AA-0050	Lancaster	6	1,700	1,700	1,490	13	1,503	0.465	0.004	0.469	0.38	0.01	0.39	17.86	23.50	LUP expires 8/1/2012.
Pebbly Beach	19-AA-0061	Uninc.	7	49	49	10	-	10	0.003	0.000	0.003	0.00	0.00	0.00	0.10	0.12	LUP expires 07/29/2028
Puente Hills	19-AA-0053	Uninc.	6	13,200	13,200	12,392	151	12,543	3.866	0.047	3.913	3.77	0.05	3.82	32.30	58.73	LUP limits waste disposal to 72,000 tons per week. Does not accept waste generated from portions of the City of Los Angeles outside the CSD boundary and Orange County.
San Clemente	19-AA-0063	Uninc.	2	10	---	2	-	2	0.001	0.000	0.001	0.00	0.00	0.00	0.024	0.19	Landfill owned and operated by the U. S. Navy.
Scholl Canyon	19-AA-0012	Glendale	6	3,400	---	1,452	-	1,452	0.453	0.000	0.453	0.45	0.00	0.45	6.80	14.20	Limited to the Scholl Canyon Wasteshed as defined by City of Glendale Ordinance #4782. Estimated closure date 2024.
Sunshine Canyon County	19-AA-0853	Uninc.	6	6,600	6,600	4,521	-	4,521	1.411	0.000	1.411	0.84	0.00	0.84	1.95	2.83	County LUP limits the weekly net tonnage to 36,000 tons. City of Los Angeles granted a LUP for the expansion of the landfill into the City on 12/8/99. City LUP limits the weekly tonnage to 30,000 tons. Total expansion capacity (County and City) will provide an additional 75 million tons as of January, 2006
Sunshine Canyon City	19-AR-0002-2	City		5,500	5,500	1,831		1,831	0.571	0.000	0.571	1.28	0.00	1.29	7.20	10.30	
Whittier (Savage Canyon)	19-AH-0001	Whittier	6	350	---	294	0	294	0.092	0.000	0.092	0.11	0.00	0.11	4.60	7.67	
TOTAL				53,749		30,686	392	31,078	9.574	0.122	9.696	9.61	0.14	9.75	106.68	174.02	
Unclassified Landfills																	
Azusa Land Reclamation	19-AA-0013	Azusa	6	6,500	---	193	268	460	0.080	0.084	0.164	0.10	0.07	0.16	36.54 (d)	44.56	
Brand Park	19-AA-0006	Glendale	5	100	---	-	-	-	0.000	0.000	0.000	-	-	-	0.69	0.35	Limited to City of Glendale Department of Public Works use only.
Peck Road Gravel Pit	19-AA-0838	Monrovia	6	1,210	---	18	-	18	0.006	0.000	0.006	0.00	-	0.00	9.79	6.53	
TOTAL				7,810		211	268	478	0.086	0.084	0.169	0.10	0.07	0.16	47.02	51.43	
Waste-to-Energy																	
Commerce Refuse To-Energy Facility	19-AA-0506	Commerce	5	1,000		---	320	4	325	0.100	0.001	0.101	0.10	0.00	0.10	466.64 (e)	777.73	Assumed to remain operational during the 15 - year planning period.
Southeast Resource Recovery Facility	19-AK-0083	Long Beach	7	2,240		---	1,395	92	1,487	0.435	0.029	0.464	0.43	0.06	0.49	1602.45 (f)	2,670.75	Assumed to remain operational during the 15 - year planning period.
TOTAL				3,240			1,715	96	1,811	0.535	0.030	0.565	0.53	0.06	0.59	2069.09 (g)	3,448.48	
Out-of-County Disposal	Waste Exported in 2005 by jurisdictions in Los Angeles County to Out-of-County Class III Disposal Facilities =			2,177,097 tons				6,978 tpd-6 average									

NOTES:

1. Disposal quantities are based on actual tonnages reported by owners/operators of permitted solid waste disposal facilities to the DPW through the State Disposal Reporting System. The 2005 disposal tonnages listed above are based on tonnage figures for the period of January 1 through December 31, 2005.
2. Estimated Remaining Permitted Capacity based on landfill owner/operator responses in a written survey conducted by DPW in August 2006 as well as a review of site specific permit criteria established by local land use agencies, LEAs, CRWQCBs, and the SCAQMD

FOOTNOTES:

(a) Conversion factor based on in-place solid waste density if 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 12/26/95 for the unincorporated County landfill area (expansion capacity included).
(c) The portion of the landfill within the previously unincorporated County area was annexed to the City of Palmdale on August 27, 2003.
(d) By Court order, on 10/2/96, the CRWQCB-Los Angeles region ordered the Azusa Land Reclamation Landfill to stop accepting MSW. 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.
(e) Based on SWFP limit of 2,800 tons per week, expressed as a daily average, six days/week.
(f) Based on EPA limit of 500,000 tons per year, expressed as a daily average, six days/week.
(g) Tonnage expressed as a daily average, six days/week

Abbreviations:

CRWQCB California Regional Water Quality Control Board
DORD Disposal Quantity Reporting Data
DPW Los Angeles County Department of Public Works
LEA Local Enforcement Agency
LUP Land Use Permit or Conditional Use Permit
MSW Municipal Solid Waste
SCAQMD South Coast Air Quality Management District
SWFP Solid Waste Facility Permit
tpd-6 Tons per day, 6 days/ week

Source: Los Angeles County Department of Public Works, January 2007

Table 4-5
2005 SOLID WASTE GENERATION BASED ON CLASS III AND TRANSFORMATION DISPOSAL QUANTITIES BY LOS ANGELES COUNTY JURISDICTIONS
(Excluding Inert Waste Landfills)

Year	A	B	C	D	E	F
	In-County Disposal		Out-of County Class III (Exports)	Total Disposal A+B+C*	State Mandated Diversion Rate	Calculated 2005 Solid Waste Generation
	Class III Landfills	Transformation Facilities				
	TONS	TONS	TONS	TONS	%	TONS
2005	9,574,072	535,225	2,177,097	12,286,394	50	24,572,788

*** Excludes disposal at unclassified (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 Los Angeles County. Does not includes waste imported from jurisdictions outside the county.

Column C Waste exported by jurisdictions in Los Angeles County to disposal facilities located outside the county.

Column D Columns A + B + C

Column E State Mandated Diversion Rate of 50 percent for the year 2005.

Column F 2005 solid waste generation is based on the disposal of 12,286,394 tons and 50 percent diversion. This estimate is used to project the county's Class III landfill and transformation disposal needs through the year 2020. Disposal at unclassified (inert waste) landfills is excluded from these calculations.

Source : Los Angeles County Department of Public Works, January 2007

Table 4-6
Solid Waste Generation Projections for the Planning Period

YEAR	POPULATION	EMPLOYMENT	TAXABLE SALES	B-YRWG	B-YNWG	RAF	NAF	TOTAL GENERATION (TONS)
2005	10,222,000	4,016,600	$113,900,000,000	10,320,571	14,252,217			24,572,788
2006	10,306,000	4,059,900	$114,100,000,000	10,320,571	14,252,217	1.007242832	1.006268094	24,736,873
2007	10,383,000	4,089,200	$114,500,000,000	10,320,571	14,252,217	1.013710863	1.011671384	24,880,635
2008	10,451,000	4,119,600	$116,700,000,000	10,320,571	14,252,217	1.023757967	1.025113273	25,175,904
2009	10,526,000	4,141,900	$118,300,000,000	10,320,571	14,252,217	1.032326367	1.034912958	25,404,002
2010	10,606,000	4,182,600	$121,100,000,000	10,320,571	14,252,217	1.044918475	1.052270916	25,781,349
2011	10,690,000	4,221,400	$123,900,000,000	10,320,571	14,252,217	1.05758798	1.069392355	26,156,124
2012	10,776,000	4,247,900	$126,300,000,000	10,320,571	14,252,217	1.068711777	1.083226723	26,468,098
2013	10,864,000	4,286,700	$128,600,000,000	10,320,571	14,252,217	1.080479484	1.098153254	26,802,284
2014	10,953,000	4,336,400	$131,100,000,000	10,320,571	14,252,217	1.093413521	1.115314618	27,180,358
2015	11,042,000	4,386,900	$132,900,000,000	10,320,571	14,252,217	1.104860916	1.129502698	27,500,713
2016	11,132,000	4,438,200	$134,500,000,000	10,320,571	14,252,217	1.115968038	1.142912401	27,806,463
2017	11,221,000	4,488,400	$136,000,000,000	10,320,571	14,252,217	1.126738288	1.155746191	28,100,528
2018	11,310,000	4,536,900	$137,600,000,000	10,320,571	14,252,217	1.137622218	1.16880734	28,399,007
2019	11,398,000	4,585,600	$139,100,000,000	10,320,571	14,252,217	1.148250192	1.181454405	28,688,942
2020	11,571,000	4,635,300	$141,100,000,000	10,320,571	14,252,217	1.164195561	1.196420861	29,066,813
2021	11,653,000	4,677,000	$143,400,000,000	10,320,571	14,252,217	1.175850284	1.211708394	29,404,977
2022	11,732,000	4,709,900	$145,600,000,000	10,320,571	14,252,217	1.186591048	1.225461492	29,711,840
2023	11,808,000	4,740,200	$148,200,000,000	10,320,571	14,252,217	1.197901203	1.24064686	30,044,993
2024	11,881,000	4,771,000	$151,000,000,000	10,320,571	14,252,217	1.209534719	1.256772432	30,394,883
2025	11,951,000	4,800,900	$153,500,000,000	10,320,571	14,252,217	1.220307003	1.271469025	30,715,518

Population: Countywide Population Projection (UCLA, Long Term Forecast of Los Angeles County, June 2006)
Employment: Countywide Employment Projection (UCLA, Long Term Forecast of Los Angeles County, June 2006) Employment data from UCLA only accounts for non-farm employment.
Taxable Sales: Countywide Taxable Sales (Source of information is UCLA, Long Term Forecast of Los Angeles County, June 2006).Taxable Sales data from UCLA considers the real dollar value.
B-Y RWG = Base Year Residential Waste Generation. Calculation based on 1990 Residential Waste Generation factor (42 percent of total waste generation).
B-Y NWG = Base Year Non-Residential Waste Generation. Calculation based on 1990 Non-residential Waste Generation factor (58 percent of total 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

The Adjustment Methodology Formula as adopted by the CIWMB is expressed as follows:
Estimated Reporting Year Solid Waste Generation = {[(B-Y RWG) (RAF)] + [(B-Y NWG)(NAF)]}
PR= Reporting Year Population **PB= Base Year Population**
ER= Reporting Year Employment **EB= Based Year Population**
CR= CR Reporting Year Consumer Price Index **CB= Base Year Consumer Price Index**
TR= Reporting Year Taxable Sales **TB= Base Year Taxable Sales**

Table 4-7

LOS ANGELES COUNTY SOLID WASTE DISPOSAL CAPACITY
(EXCLUDING INERT WASTE DISPOSAL CAPACITY PROVIDED BY UNCLASSIFIED LANDFILLS)
REQUIREMENTS FOR THE PLANNING PERIOD

A	B	C	D	E	F	G	H	I	J
						CLASS III LANDFILL DISPOSAL NEED			
						ANNUAL		CUMULATIVE (YEAR'S END)	
YEAR	TOTAL GENERATION TONS	PERCENT DIVERSION (ASSUMED)	TOTAL DIVERSION TONS	PROJECTED TRANSFORMATION & CLASS III LANDFILL DISPOSAL (TONS)	AVAILABLE TRANSFORMATION CAPACITY TONS	TONS	CUBIC YARDS	TONS	CUBIC YARDS
2005	24,572,788	50	12,286,394	12,286,394	645,600	- - -	- - -	- - -	- - -
2006	24,736,873	50	12,368,436	12,368,436	645,600	11,722,836	19,538,060	11,722,836	19,538,060
2007	24,880,635	50	12,440,318	12,440,318	645,600	11,794,718	19,657,863	23,517,554	39,195,923
2008	25,175,904	50	12,587,952	12,587,952	645,600	11,942,352	19,903,920	35,459,906	59,099,843
2009	25,404,002	50	12,702,001	12,702,001	645,600	12,056,401	20,094,001	47,516,307	79,193,844
2010	25,781,349	50	12,890,674	12,890,674	645,600	12,245,074	20,408,457	59,761,381	99,602,302
2011	26,156,124	50	13,078,062	13,078,062	645,600	12,432,462	20,720,770	72,193,843	120,323,072
2012	26,468,098	50	13,234,049	13,234,049	645,600	12,588,449	20,980,749	84,782,292	141,303,820
2013	26,802,284	50	13,401,142	13,401,142	645,600	12,755,542	21,259,237	97,537,834	162,563,057
2014	27,180,358	50	13,590,179	13,590,179	645,600	12,944,579	21,574,298	110,482,413	184,137,355
2015	27,500,713	50	13,750,357	13,750,357	645,600	13,104,757	21,841,261	123,587,170	205,978,616
2016	27,806,463	50	13,903,232	13,903,232	645,600	13,257,632	22,096,053	136,844,801	228,074,668
2017	28,100,528	50	14,050,264	14,050,264	645,600	13,404,664	22,341,107	150,249,465	250,415,775
2018	28,399,007	50	14,199,503	14,199,503	645,600	13,553,903	22,589,839	150,398,705	250,664,508
2019	28,688,942	50	14,344,471	14,344,471	645,600	13,698,871	22,831,452	163,948,336	273,247,227
2020	29,066,813	50	14,533,406	14,533,406	645,600	13,887,806	23,146,344	164,286,511	273,810,852
2021	29,404,977	50	14,702,489	14,702,489	645,600	14,056,889	23,428,148	178,343,400	297,238,999
2022	29,711,840	50	14,855,920	14,855,920	645,600	14,210,320	23,683,867	192,553,720	320,922,866
2023	30,044,993	50	15,022,496	15,022,496	645,600	14,376,896	23,961,494	192,720,296	321,200,493
2024	30,394,883	50	15,197,441	15,197,441	645,600	14,551,841	24,253,069	207,105,561	345,175,935
2025	30,715,518	50	15,357,759	15,357,759	645,600	14,712,159	24,520,265	207,432,455	345,720,758

NOTES:

1. The Waste Generation quantities (Column B) were estimated using the CIWMB's Adjustment Methodology, utilizing employment, population, and taxable sales projections
2. The waste generation estimate for 2005 is based on actual transformation and Class III landfill disposal by jurisdictions in Los Angeles County (at facilities in and out of the county). A 50 percent diversion rate is assumed for the 2005 calendar year. These tonnages **DO NOT** include inert waste disposed of at unclassified (inert waste) landfills.
3. The 2005 transformation and Class III landfill disposal quantity (Column E) is based on tonnages reported by permitted solid waste disposal facility operators in Los Angeles County and export quantities reported by other counties to the Los Angeles County Department of Public Works as part of the 2005 Disposal Quantity Reporting data.
4. Columns I and J (Cumulative Disposal Need) are the sum of the projected Class III landfill disposal needs of jurisdictions in Los Angeles County, beginning January 2005 through the end of 2020.
5. The quantities in Columns H and J were obtained from Columns G and I, respectively, using a waste in-place (landfill) density of 1,200 lb/cy.

Source: Los Angeles County Department of Public Works, January 2007

Table 4-8

Summary of Disposal Capacity Need Analysis Scenarios During the Planning Period and Assuming AB 939 Diversion is fully Implemented

Scenarios	Utilization of Existing Permitted In-County Class III Landfill Capacity	Utilization of Out-of-County Disposal Facilities Capacity	Development of New In-County Class III Landfill	Assuming Development of all Proposed Expansions of in-County Class III Landfills	Assuming Increased Diversion Rate to 60% in 2020	Utilization of Conversion Technologies	Comments
Scenario 1	Y	N	N	N	N	N	Existing landfill capacity only (Worst Case)
Scenario 2	Y	Y	N	N	N	N	Plus current export rate (7,500 tpd) (Status Quo)
Scenario 3	Y	N	N	Y	N	N	No current export Plus development of all proposed in-County landfill expansions
Scenario 4	Y	Y	N	Y	N	N	Plus current export rate (7,500 tpd) Plus development of all proposed in-County landfill expansions
Scenario 5	Y	Y	N	Y	Y	N	Plus current export rate (7,500 tpd) Plus development of all proposed in-County landfill expansions Plus increased diversion rate to 60% in 2020
Scenario 6	Y	Y	N	Y	Y	Y	Plus current export rate (7,500 tpd) Plus development of all proposed in-County landfill expansions Plus increased diversion rate to 60% in 2020 Plus Conversion Technologies

Table 4-9
SCENARIO I (Worst Case)

DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
ASSUMING NO NEW OR EXPANDED IN-COUNTY LANDFILLS AND
NO UTILIZATION OF OUT-OF-COUNTY DISPOSAL FACILITIES DURING THE PLANNING PERIOD
Based on January 1, 2005 through December 31, 2005 six-day average tonnages and
assuming AB 939 diversion is fully implemented

Year	Waste Generation Rate	Percent Diversion	Total L. A. Co. Disposal Need	Imported Waste	Waste Exports to Out-of County Landfills	Maximum Daily Transformation Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	Class III Landfill Daily Disposal Capacity Shortfall (Excess)
										R	R				L	R	R			R	
								Antelope Valley	Bradley	Burbank	Calabasas	Chiquita	Lancaster	Pebbly Beach	Puente Hills	San Clemente	Scholl	Sunshine County	Sunshine City	Whittier	
								Expected daily tonnage 6 day average (tpd-6)													
								Remaining permitted landfill capacity at year's end, Million Tons													
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)														(tpd-6)
2005	78,759	50%	39,379	756	6,978	1,715	30,686	1,186	861	133	1,606	4,910	1,490	9.6	12,392	2.3	1,452	4,521	1,831	294	
								10.2	0.1	3.0	8.8	13.7	17.9	0.10	32.3	0.02	6.8	2.0	7.2	4.6	
2006	79,285	50%	39,642	800	7,500	2,069	30,873	1,400	200	134	1,617	5,000	1,700	9.7	12,500	2.3	1,461	3,000	4,000	296	(447)
								9.8	0.0	3.0	8.3	12.2	17.3	0.094	28.4	0.023	6.3	1.0	6.0	4.5	
2007	79,746	50%	39,873	800	7,500	2,069	31,104	1,800	**C**	135	1,626	5,000	1,700	9.8	12,500	2.3	1,470	3,000	4,500	297	(937)
								9.2		2.9	7.8	10.6	16.8	0.091	24.5	0.023	5.9	0.1	4.5	4.4	
2008	80,692	50%	40,346	800	0	2,069	39,077	1,800		137	1,645	5,000	1,700	9.9	13,200	2.3	1,487	3,000	4,500	301	6,294
								8.7		2.9	7.3	9.1	16.3	0.088	20.4	0.022	5.4	**C**	3.1	4.3	
2009	81,423	50%	40,712	800	0	2,069	39,442	1,800		138	1,660	5,000	1,700	10.0	13,200	2.4	1,501		5,000	304	9,127
								8.1		2.8	6.8	7.5	15.7	0.085	16.3	0.021	5.0		1.6	4.2	
2010	82,633	50%	41,316	800	0	2,069	40,047	1,800		140	1,685	5,000	1,700	10.1	13,200	2.4	1,523		5,000	308	9,678
								7.5		2.8	6.2	5.9	15.2	0.082	12.1	0.020	4.5		0.0	4.1	
2011	83,834	50%	41,917	800	0	2,069	40,648	1,800		142	1,709	5,000	1,700	10.3	13,200	2.4	1,545		5,000	313	10,226
								7.0		2.7	5.7	4.4	14.7	0.078	8.0	0.0196	4.0		**C**	4.0	
2012	84,834	50%	42,417	800	0	2,069	41,148	1,800		144	1,730	5,000	1,700	10.4	13,200	2.5	1,564			316	15,681
								6.4		2.7	5.2	2.8	**C**	0.075	3.9	0.0188	3.5			3.9	
2013	85,905	50%	42,952	800	0	2,069	41,683	1,800		145	1,752	5,000		10.5	13,200	2.5	1,583			320	17,869
								5.8		2.7	4.6	1.3		0.072	**C**	0.0180	3.0			3.8	
2014	87,117	50%	43,558	800	0	2,069	42,289	1,800		148	1,776	5,000		10.7		2.5	1,606			325	31,621
								5.3		2.6	4.1	(0.3)		0.069		0.0172	2.5			3.7	
2015	88,143	50%	44,072	800	0	2,069	42,803	1,800		149	1,797	**C**		10.8		2.6	1,625			329	37,089
								4.7		2.6	3.5			0.065		0.0164	2.0			3.6	
2016	89,123	50%	44,562	800	0	2,069	43,293	1,800		151	1,817			10.9		2.6	1,643			332	37,536
								4.2		2.5	2.9			0.062		0.0156	1.5			3.5	
2017	90,066	50%	45,033	800	0	2,069	43,764	1,800		152	1,837			11.0		2.6	1,660			336	37,965
								3.6		2.5	2.4			0.058		0.0148	1.0			3.4	
2018	91,022	50%	45,511	800	0	2,069	44,242	1,800		154	1,856			11.1		2.6	1,678			339	38,401
								3.0		2.4	1.8			0.055		0.0140	0.5			3.3	
2019	91,952	50%	45,976	800	0	2,069	44,707	1,800		156	1,875			11.2		2.7	1,695			343	38,824
								2.5		2.4	1.2			0.051		0.0131	**C**			3.2	
2020	93,163	50%	46,581	800	0	2,069	45,312	1,800		158	1,900			11.4		2.7				347	41,093
								1.9		2.3	0.6			0.051		0.0123				3.1	
2021	94,247	50%	47,123	800	0	2,069	45,854	1,800		160	1,922			11.5		2.7				351	41,607
								1.3		2.3	0.0			0.048		0.0114				3.0	
2022	95,230	50%	47,615	800	0	2,069	46,346	1,800		161	1,942			11.7		2.8				355	42,073
								0.8		2.2	**C**			0.044		0.0106				2.9	
2023	96,298	50%	48,149	800	0	2,069	46,880	1,800		163				11.8		2.8				359	44,543
								0.2		2.2				0.040		0.0097				2.8	
2024	97,419	50%	48,710	800	0	2,069	47,441	1,800		165				11.9		2.8				363	45,098
								C		2.1				0.037		0.0088				2.7	
2025	98,447	50%	49,224	800	0	2,069	47,954			167				12.0		2.9				367	47,406
										2.1				0.037		0.0079				2.5	

ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at unclassified landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA.
2.- Diversion Rate is 50 percent for years 2005 through 2020.
3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/05 to 12/31/05.
4.- Expected Daily Tonnage Rate for Bradley Landfill is based on the assumption that the Landfill will remain open through April 14, 2007
5.- "tpd-6": tons per day, 6 day per week average.

LEGEND:

C -Closure due to exhausted capacity
L -Does not accept waste from the City of Los Angeles and Orange County
R -Restricted Wasteshed
CIWMB -California Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, May 2007

Table 4-10
SCENARIO 2 (Status Quo)

DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
ASSUMING NO NEW OR EXPANDED IN-COUNTY LANDFILLS AND
UTILIZATION OF OUT-OF-COUNTY DISPOSAL FACILITIES DURING THE PLANNING PERIOD
Based on January 1, 2005 through December 31, 2005 six-day average tonnages and
assuming AB 939 diversion is fully implemented

Year	Waste Generation Rate	Percent Diversion	Total L. A. Co. Disposal Need	Imported Waste	Waste Exports to Out-of County Landfills	Maximum Daily Transformation Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	Class III Landfill Daily Disposal Capacity Shortfall (Excess)
										R	R				L	R	R			R	
								Antelope Valley	Bradley	Burbank	Calabasas	Chiquita	Lancaster	Pebbly Beach	Puente Hills	San Clemente	Scholl	Sunshine County	Sunshine City	Whittier	
								Expected daily tonnage 6 day average (tpd-6)													
								Remaining permitted landfill capacity at year's end, Million Tons													
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)														(tpd-6)
2005	78,759	50%	39,379	756	6,978	1,715	30,686	1,186	861	133	1,606	4,910	1,490	9.6	12,392	2.3	1,452	4,521	1,831	294	
								10.2	0.1	3.0	8.8	13.7	17.9	0.10	32.3	0.02	6.8	2.0	7.2	4.6	
2006	79,285	50%	39,642	800	7,500	2,069	30,873	1,400	200	134	1,617	5,000	1,700	9.7	12,500	2.3	1,461	3,000	4,000	296	(447)
								9.8	0.0	3.0	8.3	12.2	17.3	0.094	28.4	0.023	6.3	1.0	6.0	4.5	
2007	79,746	50%	39,873	800	7,500	2,069	31,104	1,800	C	135	1,626	5,000	1,700	9.8	12,500	2.3	1,470	3,000	4,500	297	(937)
								9.2		2.9	7.8	10.6	16.8	0.091	24.5	0.023	5.9	0.1	4.5	4.4	
2008	80,692	50%	40,346	800	7,500	2,069	31,577	1,800		137	1,645	5,000	1,700	9.9	13,200	2.3	1,487	3,000	4,500	301	(1,206)
								8.7		2.9	7.3	9.1	16.3	0.088	20.4	0.022	5.4	C	3.1	4.3	
2009	81,423	50%	40,712	800	7,500	2,069	31,942	1,800		138	1,660	5,000	1,700	10.0	13,200	2.4	1,501		5,000	304	1,627
								8.1		2.8	6.8	7.5	15.7	0.085	16.3	0.021	5.0		1.6	4.2	
2010	82,633	50%	41,316	800	7,500	2,069	32,547	1,800		140	1,685	5,000	1,700	10.1	13,200	2.4	1,523		5,000	308	2,178
								7.5		2.8	6.2	5.9	15.2	0.082	12.1	0.020	4.5		0.0	4.1	
2011	83,834	50%	41,917	800	7,500	2,069	33,148	1,800		142	1,709	5,000	1,700	10.3	13,200	2.4	1,545		5,000	313	2,726
								7.0		2.7	5.7	4.4	14.7	0.078	8.0	0.0196	4.0		C	4.0	
2012	84,834	50%	42,417	800	7,500	2,069	33,648	1,800		144	1,730	5,000	1,700	10.4	13,200	2.5	1,564			316	8,181
								6.4		2.7	5.2	2.8	C	0.075	3.9	0.0188	3.5			3.9	
2013	85,905	50%	42,952	800	7,500	2,069	34,183	1,800		145	1,752	5,000		10.5	13,200	2.5	1,583			320	10,369
								5.8		2.7	4.6	1.3		0.072	C	0.0180	3.0			3.8	
2014	87,117	50%	43,558	800	7,500	2,069	34,789	1,800		148	1,776	5,000		10.7		2.5	1,606			325	24,121
								5.3		2.6	4.1	(0.3)		0.069		0.0172	2.5			3.7	
2015	88,143	50%	44,072	800	7,500	2,069	35,303	1,800		149	1,797	C		10.8		2.6	1,625			329	29,589
								4.7		2.6	3.5			0.065		0.0164	2.0			3.6	
2016	89,123	50%	44,562	800	7,500	2,069	35,793	1,800		151	1,817			10.9		2.6	1,643			332	30,036
								4.2		2.5	2.9			0.062		0.0156	1.5			3.5	
2017	90,066	50%	45,033	800	7,500	2,069	36,264	1,800		152	1,837			11.0		2.6	1,660			336	30,465
								3.6		2.5	2.4			0.058		0.0148	1.0			3.4	
2018	91,022	50%	45,511	800	7,500	2,069	36,742	1,800		154	1,856			11.1		2.6	1,678			339	30,901
								3.0		2.4	1.8			0.055		0.0140	0.5			3.3	
2019	91,952	50%	45,976	800	7,500	2,069	37,207	1,800		156	1,875			11.2		2.7	1,695			343	31,324
								2.5		2.4	1.2			0.051		0.0131	C			3.2	
2020	93,163	50%	46,581	800	7,500	2,069	37,812	1,800		158	1,900			11.4		2.7				347	33,593
								1.9		2.3	0.6			0.051		0.0123				3.1	
2021	94,247	50%	47,123	800	7,500	2,069	38,354	1,800		160	1,922			11.5		2.7				351	34,107
								1.3		2.3	0.0			0.048		0.0114				3.0	
2022	95,230	50%	47,615	800	7,500	2,069	38,846	1,800		161	1,942			11.7		2.8				355	34,573
								0.8		2.2	C			0.044		0.0106				2.9	
2023	96,298	50%	48,149	800	7,500	2,069	39,380	1,800		163				11.8		2.8				359	37,043
								0.2		2.2				0.040		0.0097				2.8	
2024	97,419	50%	48,710	800	7,500	2,069	39,941	1,800		165				11.9		2.8				363	37,598
								C		2.1				0.037		0.0088				2.7	
2025	98,447	50%	49,224	800	7,500	2,069	40,454			167				12.0		2.9				367	39,906
										2.1				0.037		0.0079				2.5	

ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at unclassified landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA.
2.- Diversion Rate is 50 percent for years 2005 through 2020.
3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/05 to 12/31/05.
4.- Expected Daily Tonnage Rate for Bradley Landfill is based on the assumption that the Landfill will remain open through April 14, 2007
5.- "tpd-6": tons per day, 6 day per week average.

LEGEND:

C -Closure due to exhausted capacity
L -Does not accept waste from the City of Los Angeles and Orange County
R -Restricted Wasteshed
CIWMB -California Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, May 2007

Table 4-11
SCENARIO 3

DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
UTILIZING EXISTING LANDFILLS AND ASSUMING DEVELOPMENT OF ALL PROPOSED EXPANSIONS DURING THE PLANNING PERIOD
Based on January 1, 2005 through December 31, 2005 six-day average tonnages and assuming AB 939 diversion is fully implemented

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	Class III Landfill Daily Disposal Capacity Shortfall (Excess)
						EXISTING LANDFILLS													
								R	R				L	R	R			R	
						Antelope Valley	Bradley	Burbank	Calabasas	Chiquita	Lancaster	Pebbly Beach	Puente Hills	San Clemente	Scholl	Sunshine County	Sunshine City	Whittier	
						Expected daily tonnage 6 day average (tpd-6) / Remaining permitted landfill capacity at year's end, Million Tons														
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)														(tpd-6)
2005	78,759	50%	39,379	1,715	30,686	1,186 10.2	861 0.1	133 3.0	1,606 8.8	4,910 13.7	1,490 17.9	9.6 0.097	12,392 32.3	2.3 0.024	1,452 6.8	4,521 2.0	1,831 7.2	294 4.6	
2006	79,285	50%	39,642	2,069	37,573	1,400 19.0	200 0.0	134 3.0	1,617 8.3	5,000 12.2	1,700 17.3	9.7 0.094	12,500 28.4	2.3 0.023	1,461 6.3	3,000 1.0	4,000 6.0	296 4.5	6,253
2007	79,746	50%	39,873	2,069	37,804	1,800 18.4	**C**	135 2.9	1,626 7.8	5,000 10.6	1,700 16.8	9.8 0.091	12,500 24.5	2.3 0.023	1,470 5.9	3,500 **E** 9.2	4,500 4.5	297 4.4	5,263
2008	80,692	50%	40,346	2,069	38,277	1,800 17.9		137 2.9	1,645 7.3	5,000 9.1	1,700 16.3	9.9 0.088	13,200 20.4	2.3 0.022	1,487 5.4	3,500 8.1	4,500 3.1	301 4.3	4,994
2009	81,423	50%	40,712	2,069	38,642	3,600 **E** 16.7		138 2.8	1,660 6.8	5,000 **E** 39.5	3,000 **E** 15.3	10.0 0.085	13,200 16.3	2.4 0.021	1,501 5.0	6,000 6.2	5,000 1.6	304 4.2	(773)
2010	82,633	50%	41,316	2,069	39,247	3,600 15.6		140 2.8	1,685 6.2	5,000 37.9	3,000 14.4	10.1 0.082	13,200 12.1	2.4 0.020	1,523 4.5	6,000 **E** 20.6	5,000 **E** 47.2	308 4.1	(222)
2011	83,834	50%	41,917	2,069	39,848	3,600 14.5		142 2.7	1,709 5.7	5,000 36.4	3,000 13.5	10.3 0.078	13,200 8.0	2.4 0.0196	1,545 4.0	6,000 18.7	5,000 45.6	313 4.0	326
2012	84,834	50%	42,417	2,069	40,348	3,600 13.4		144 2.7	1,730 5.2	5,000 34.8	3,000 12.5	10.4 0.075	13,200 3.9	2.5 0.0188	1,564 3.5	6,000 16.9	5,000 44.1	316 3.9	781
2013	85,905	50%	42,952	2,069	40,883	3,600 12.2		145 2.7	1,752 4.6	5,000 33.3	3,000 11.6	10.5 0.072	13,200 (0.2)	2.5 0.0180	1,583 3.0	6,000 15.0	5,000 42.5	320 3.8	1,269
2014	87,117	50%	43,558	2,069	41,489	3,600 11.1		148 2.6	1,776 4.1	5,000 31.7	3,000 10.7	10.7 0.069	**C**	2.5 0.0172	1,606 2.5	6,000 13.1	5,000 41.0	325 3.7	15,021
2015	88,143	50%	44,072	2,069	42,003	3,600 10.0		149 2.6	1,797 3.5	5,000 30.1	3,000 9.7	10.8 0.065		2.6 0.0164	1,625 2.0	6,000 11.2	5,000 39.4	329 3.6	15,489
2016	89,123	50%	44,562	2,069	42,493	3,600 8.9		151 2.5	1,817 2.9	5,000 28.6	3,000 8.8	10.9 0.062		2.6 0.0156	1,643 1.5	6,000 9.4	5,000 37.8	332 3.5	15,936
2017	90,066	50%	45,033	2,069	42,964	3,600 7.7		152 2.5	1,837 2.4	5,000 27.0	3,000 7.8	11.0 0.058		2.6 0.0148	1,660 1.0	6,000 7.5	5,000 36.3	336 3.4	16,365
2018	91,022	50%	45,511	2,069	43,442	3,600 6.6		154 2.4	1,856 1.8	5,000 25.5	3,000 6.9	11.1 0.055		2.6 0.0140	1,678 0.5	6,000 5.6	5,000 34.7	339 3.3	16,801
2019	91,952	50%	45,976	2,069	43,907	3,600 5.5		156 2.4	1,875 1.2	5,000 23.9	3,000 6.0	11.2 0.051		2.7 0.0131	1,695 **C**	6,000 3.8	5,000 33.2	343 3.2	17,224
2020	93,163	50%	46,581	2,069	44,512	3,600 4.4		158 2.3	1,900 0.6	5,000 22.3	3,000 5.0	11.4 0.048		2.7 0.0123		6,000 1.9	5,000 31.6	347 3.1	19,493
2021	94,247	50%	47,123	2,069	45,054	3,600 3.2		160 2.3	1,922 0.0	5,000 20.8	3,000 4.1	11.5 0.044		2.7 0.0114		6,000 0.0	5,000 30.0	351 3.0	20,007
2022	95,230	50%	47,615	2,069	45,546	3,600 2.1		161 2.2	1,942 **C**	5,000 19.2	3,000 3.2	11.7 0.041		2.8 0.0106		6,000 **C**	5,000 28.5	355 2.9	20,473
2023	96,298	50%	48,149	2,069	46,080	3,600 1.0		163 2.2		5,000 17.7	3,000 2.2	11.8 0.037		2.8 0.0097			5,000 26.9	359 2.8	28,943
2024	97,419	50%	48,710	2,069	46,641	3,600 **C**		165 2.1		5,000 16.1	3,000 1.3	11.9 0.033		2.8 0.0088			5,000 25.4	363 2.7	29,498
2025	98,447	50%	49,224	2,069	47,154			167 2.1		5,000 14.5	3,000 0.4	12.0 0.029		2.9 0.0079			5,000 23.8	367 2.5	33,606

ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at unclassified landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA.
2.- Diversion Rate is 50 percent for years 2005 through 2020.
3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/05 to 12/31/05.
4.- Expected Daily Tonnage Rate for Bradley Landfill Expansion is based on the historical use of the landfill.
5.- "tpd-6": tons per day, 6 day per week average.

LEGEND:

C -Closure due to exhausted capacity
E -Expansion becomes effective
L -Does not accept waste from the City of Los Angeles and Orange County
R -Restricted Wasteshed
CIWMB -California Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, May 2007

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Table 4-12
SCENARIO 4

DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
UTILIZING EXISTING LANDFILLS AND ASSUMING DEVELOPMENT OF ALL PROPOSED EXPANSIONS
AND UTILIZATION OF OUT-OF-COUNTY DISPOSAL FACILITIES DURING THE PLANNING PERIOD
Based on January 1, 2005 through December 31, 2005 six-day average tonnages and assuming AB 939 diversion is fully implemented

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Imported Waste	Waste Exports to Out-of County Landfills	Maximum Daily Transformation Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	Class III Landfill Daily Disposal Capacity Shortfall (Excess)
								EXISTING LANDFILLS													
										R	R				L	R	R			R	
								Antelope Valley	Bradley	Burbank	Calabasas	Chiquita	Lancaster	Pebbly Beach	Puente Hills	San Clemente	Scholl	Sunshine County	Sunshine City	Whittier	
								Expected daily tonnage 6 day average (tpd-6)													
								Remaining permitted landfill capacity at year's end, Million Tons													
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)														(tpd-6)
2005	78,759	50%	39,379	756	6,978	1,715	30,686	1,186	861	133	1,606	4910	1,490	9.6	12,392	2.3	1,452	4,521	1,831	294	
								10.2	0.1	3.0	8.8	13.7	17.9	0.097	32.3	0.024	6.8	2.0	7.2	4.6	
2006	79,285	50%	39,642	800	7,500	2,069	30,873	1,400	200	134	1,617	5,000	1,700	9.7	12,500	2.3	1,461	3,000	4,000	296	(447)
								19.0	0.0	3.0	8.3	12.2	17.3	0.094	28.4	0.023	6.3	1.0	6.0	4.5	
2007	79,746	50%	39,873	800	7,500	2,069	31,104	1,800	C	135	1,626	5,000	1,700	9.8	12,500	2.3	1,470	3,500	4,500	297	(1,437)
								18.4		2.9	7.8	10.6	16.8	0.091	24.5	0.023	5.9	E 9.2	4.5	4.4	
2008	80,692	50%	40,346	800	7,500	2,069	31,577	1,800		137	1,645	5,000	1,700	9.9	13,200	2.3	1,487	3,500	4,500	301	(1,706)
								17.9		2.9	7.3	9.1	16.3	0.088	20.4	0.022	5.4	8.1	3.1	4.3	
2009	81,423	50%	40,712	800	7,500	2,069	31,942	3,600		138	1,660	5,000	3,000	10.0	13,200	2.4	1,501	6,000	5,000	304	(7,473)
								E 16.7		2.8	6.8	E 39.5	E 15.3	0.085	16.3	0.021	5.0	6.2	1.6	4.2	
2010	82,633	50%	41,316	800	7,500	2,069	32,547	3,600		140	1,685	5,000	3,000	10.1	13,200	2.4	1,523	6,000	5,000	308	(6,922)
								15.6		2.8	6.2	37.9	14.4	0.082	12.1	0.020	4.5	E 20.6	E 47.2	4.1	
2011	83,834	50%	41,917	800	7,500	2,069	33,148	3,600		142	1,709	5,000	3,000	10.3	13,200	2.4	1,545	6,000	5,000	313	(6,374)
								14.5		2.7	5.7	36.4	13.5	0.078	8.0	0.0196	4.0	18.7	45.6	4.0	
2012	84,834	50%	42,417	800	7,500	2,069	33,648	3,600		144	1,730	5,000	3,000	10.4	13,200	2.5	1,564	6,000	5,000	316	(5,919)
								13.4		2.7	5.2	34.8	12.5	0.075	3.9	0.0188	3.5	16.9	44.1	3.9	
2013	85,905	50%	42,952	800	7,500	2,069	34,183	3,600		145	1,752	5,000	3,000	10.5	13,200	2.5	1,583	6,000	5,000	320	(5,431)
								12.2		2.7	4.6	33.3	11.6	0.072	(0.2)	0.0180	3.0	15.0	42.5	3.8	
2014	87,117	50%	43,558	800	7,500	2,069	34,789	3,600		148	1,776	5,000	3,000	10.7	C	2.5	1,606	6,000	5,000	325	8,321
								11.1		2.6	4.1	31.7	10.7	0.069		0.0172	2.5	13.1	41.0	3.7	
2015	88,143	50%	44,072	800	7,500	2,069	35,303	3,600		149	1,797	5,000	3,000	10.8		2.6	1,625	6,000	5,000	329	8,789
								10.0		2.6	3.5	30.1	9.7	0.065		0.0164	2.0	11.2	39.4	3.6	
2016	89,123	50%	44,562	800	7,500	2,069	35,793	3,600		151	1,817	5,000	3,000	10.9		2.6	1,643	6,000	5,000	332	9,236
								8.9		2.5	2.9	28.6	8.8	0.062		0.0156	1.5	9.4	37.8	3.5	
2017	90,066	50%	45,033	800	7,500	2,069	36,264	3,600		152	1,837	5,000	3,000	11.0		2.6	1,660	6,000	5,000	336	9,665
								7.7		2.5	2.4	27.0	7.8	0.058		0.0148	1.0	7.5	36.3	3.4	
2018	91,022	50%	45,511	800	7,500	2,069	36,742	3,600		154	1,856	5,000	3,000	11.1		2.6	1,678	6,000	5,000	339	10,101
								6.6		2.4	1.8	25.5	6.9	0.055		0.0140	0.5	5.6	34.7	3.3	
2019	91,952	50%	45,976	800	7,500	2,069	37,207	3,600		156	1,875	5,000	3,000	11.2		2.7	1,695	6,000	5,000	343	10,524
								5.5		2.4	1.2	23.9	6.0	0.051		0.0131	C	3.8	33.2	3.2	
2020	93,163	50%	46,581	800	7,500	2,069	37,812	3,600		158	1,900	5,000	3,000	11.4		2.7		6,000	5,000	347	12,793
								4.4		2.3	0.6	22.3	5.0	0.048		0.0123		1.9	31.6	3.1	
2021	94,247	50%	47,123	800	7,500	2,069	38,354	3,600		160	1,922	5,000	3,000	11.5		2.7		6,000	5,000	351	13,307
								3.2		2.3	0.0	20.8	4.1	0.044		0.0114		0.0	30.0	3.0	
2022	95,230	50%	47,615	800	7,500	2,069	38,846	3,600		161	1,942	5,000	3,000	11.7		2.8		6,000	5,000	355	13,773
								2.1		2.2	C	19.2	3.2	0.041		0.0106		C	28.5	2.9	
2023	96,298	50%	48,149	800	7,500	2,069	39,380	3,600		163		5,000	3,000	11.8		2.8			5,000	359	22,243
								1.0		2.2		17.7	2.2	0.037		0.0097			26.9	2.8	
2024	97,419	50%	48,710	800	7,500	2,069	39,941	3,600		165		5,000	3,000	11.9		2.8			5,000	363	22,798
								C		2.1		16.1	1.3	0.033		0.0088			25.4	2.7	
2025	98,447	50%	49,224	800	7,500	2,069	40,454			167		5,000	3,000	12.0		2.9			5,000	367	26,906
										2.1		14.5	0.4	0.029		0.0079			23.8	2.5	

ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at unclassified landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA.
2.- Diversion Rate is 50 percent for years 2005 through 2020.
3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/05 to 12/31/05.
4.- Expected Daily Tonnage Rate for Bradley Landfill Expansion is based on the historical use of the landfill.
5.- "tpd-6": tons per day, 6 day per week average.
6.- Import quantities for 2007 and beyond are assumed.
7.- Export quantities for 2007 and beyond are assumed.

LEGEND:

C -Closure due to exhausted capacity
E -Expansion becomes effective
L -Does not accept waste from the City of Los Angeles and Orange County
R -Restricted Wasteshed
CIWMB -California Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, May 2007

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Table 4-13
SCENARIO 5
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS
UTILIZING EXISTING LANDFILLS, ASSUMING DEVELOPMENT OF ALL PROPOSED EXPANSIONS, INCREASING THE DIVERSION RATE, ANI
UTILIZATION OF OUT-OF-COUNTY DISPOSAL FACILITIES DURING THE PLANNING PERIOD
Based on January 1, 2005 through December 31, 2005 six-day average tonnages an
assuming AB 939 diversion is fully implementec

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Imported Waste	Waste Exports to Out-of County Landfills	Maximum Daily Transformation Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	Class III Landfill Daily Disposal Capacity Shortfall (Excess)
								EXISTING LANDFILLS													
								Antelope Valley	Bradley	R Burbank	R Calabasas	Chiquita	Lancaster	Pebbly Beach	L Puente Hills	R San Clemente	R Scholl	Sunshine County	Sunshine City	R Whittier	
											Expected daily tonnage 6 day average (tpd-6)										
											Remaining permitted landfill capacity at year's end, Million Tons										
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)														(tpd-6)
2005	78,759	50%	39,379	756	6,978	1,715	30,686	1,186	861	133	1,606	4,910	1,490	9.6	12,392	2.29	1,452	4,521	1,831	294	
								10.2	0.1	3.0	8.8	13.7	17.9	0.097	32.3	0.024	6.8	2.0	7.2	4.6	
2006	79,285	50%	39,642	800	7,500	2,069	30,873	1,400	200	134	1,617	5,000	1,700	9.7	12,500	2.31	1,461	3,000	4,000	296	(447)
								19.0	0.0	3.0	8.3	12.2	17.3	0.094	28.4	0.023	6.3	1.0	6.0	4.5	
2007	79,746	50%	39,873	800	7,500	2,069	31,104	1,800	C	135	1,626	5,000	1,700	9.8	12,500	2.32	1,470	3,500 E	4,500	297	(1,437)
								18.4		2.9	7.8	10.6	16.8	0.091	24.5	0.023	5.9	9.2	4.5	4.4	
2008	80,692	50%	40,346	800	7,500	2,069	31,577	1,800		137	1,645	5,000	1,700	9.9	13,200	2.35	1,487	3,500	4,500	301	(1,706)
								17.9		2.9	7.3	9.1	16.3	0.088	20.4	0.022	5.4	8.1	3.1	4.3	
2009	81,423	50%	40,712	800	7,500	2,069	31,942	3,600 E		138	1,660	5,000 E	3,000 E	10.0	13,200	2.37	1,501	6,000	5,000	304	(7,473)
								16.7		2.8	6.8	39.5	15.3	0.085	16.3	0.021	5.0	6.2	1.6	4.2	
2010	82,633	50%	41,316	800	7,500	2,069	32,547	3,600		140	1,685	5,000	3,000	10.1	13,200	2.40	1,523	6,000 E	5,000 E	308	(6,922)
								15.6		2.8	6.2	37.9	14.4	0.082	12.1	0.020	4.5	20.6	47.2	4.1	
2011	83,834	51%	41,079	800	7,500	2,069	32,309	3,600		141	1,693	5,000	3,000	10.2	13,200	2.42	1,530	6,000	5,000	310	(7,176)
								14.5	.	2.7	5.7	36.4	13.5	0.078	8.0	0.0196	4.0	18.7	45.6	4.0	
2012	84,834	52%	40,720	800	7,500	2,069	31,951	3,600		141	1,696	5,000	3,000	10.2	13,200	2.42	1,533	6,000	5,000	310	(7,541)
								13.4		2.7	5.2	34.8	12.5	0.075	3.9	0.0188	3.5	16.9	44.1	3.9	
2013	85,905	53%	40,375	800	7,500	2,069	31,606	3,600		141	1,700	5,000	3,000	10.2	13,200	2.43	1,537	6,000	5,000	311	(7,896)
								12.2		2.7	4.7	33.3	11.6	0.072	(0.2)	0.0181	3.0	15.0	42.5	3.8	
2014	87,117	54%	40,074	800	7,500	2,069	31,305	3,600		142	1,707	5,000	3,000	10.2	C	2.44	1,543	6,000	5,000	312	4,987
								11.1		2.6	4.1	31.7	10.7	0.069		0.0173	2.6	13.1	41.0	3.7	
2015	88,143	55%	39,664	800	7,500	2,069	30,895	3,600		142	1,710	5,000	3,000	10.3		2.44	1,546	6,000	5,000	313	4,571
								10.0		2.6	3.6	30.1	9.7	0.066		0.0165	2.1	11.2	39.4	3.6	
2016	89,123	56%	39,214	800	7,500	2,069	30,445	3,600		142	1,712	5,000	3,000	10.3		2.44	1,548	6,000	5,000	313	4,117
								8.9		2.5	3.1	28.6	8.8	0.062		0.0158	1.6	9.4	37.8	3.5	
2017	90,066	57%	38,728	800	7,500	2,069	29,959	3,600		142	1,713	5,000	3,000	10.3		2.45	1,549	6,000	5,000	313	3,629
								7.7		2.5	2.5	27.0	7.8	0.059		0.0150	1.1	7.5	36.3	3.4	
2018	91,022	58%	38,229	800	7,500	2,069	29,460	3,600		142	1,714	5,000	3,000	10.3		2.45	1,550	6,000	5,000	314	3,128
								6.6		2.4	2.0	25.5	6.9	0.056		0.0143	0.6	5.6	34.7	3.4	
2019	91,952	59%	37,700	800	7,500	2,069	28,931	3,600		142	1,715	5,000	3,000	10.3		2.45	1,550	6,000	5,000	314	2,598
								5.5		2.4	1.4	23.9	6.0	0.053		0.0135	0.1	3.8	33.2	3.3	
2020	93,163	60%	37,265	800	7,500	2,069	28,496	3,600		143	1,720	5,000	3,000	10.3		2.46	1,555	6,000	5,000	315	2,151
								4.4		2.3	0.9	22.3	5.0	0.050		0.0127		1.9	31.6	3.2	
2021	94,247	60%	37,699	800	7,500	2,069	28,930	3,600		144	1,740	5,000	3,000	10.4		2.48		6,000	5,000	318	4,114
								3.2		2.3	0.4	20.8	4.1	0.046		0.0120		0.0	30.0	3.1	
2022	95,230	60%	38,092	800	7,500	2,069	29,323	3,600		146	1,758	5,000	3,000	10.5		2.51		6,000	5,000	322	4,484
								2.1		2.3	C	19.2	3.2	0.043		0.0112		C	28.5	3.0	
2023	96,298	60%	38,519	800	7,500	2,069	29,750	3,600		148		5,000	3,000	10.7		2.54			5,000	325	12,664
								1.0		2.2		17.7	2.2	0.040		0.0104			26.9	2.9	
2024	97,419	60%	38,968	800	7,500	2,069	30,199	3,600		149		5,000	3,000	10.8		2.57			5,000	329	13,107
								C		2.2		16.1	1.3	0.036		0.0096			25.4	2.8	
2025	98,447	60%	39,379	800	7,500	2,069	30,610			151		5,000	3,000	10.9		2.59			5,000	332	17,113
										2.1		14.5	0.4	0.033		0.0088			23.8	2.6	

ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at unclassified landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA.

2.- Diversion Rate is 50 percent for years 2005 through 2020.

3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/05 to 12/31/05.

4.- Expected Daily Tonnage Rate for Bradley Landfill Expansion is based on the historical use of the landfill.

5.- "tpd-6": tons per day, 6 day per week average.

6.- Import quantities for 2007 and beyond are assumed.

7.- Export quantities for 2007 and beyond are assumed.

LEGEND:

C -Closure due to exhausted capacity
E -Expansion becomes effective
L -Does not accept waste from the City of Los Angeles and Orange County
R -Restricted Wasteshed
CIWMB -California Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, May 2007

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Table 4-14
SCENARIO 6
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
UTILIZING EXISTING LANDFILLS, ASSUMING DEVELOPMENT OF ALL PROPOSED EXPANSIONS, INCREASING THE DIVERSION RATE, AND UTILIZATION OF OUT-OF-COUNTY DISPOSAL FACILITIES DURING THE PLANNING PERIOD AND UTILIZING CONVERSION TECHNOLOGIES
Based on January 1, 2005 through December 31, 2005 six-day average tonnages and assuming AB 939 diversion is fully implemented

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Conversion Capacity	Imported Waste	Waste Exports to Out-of County Landfills	Maximum Daily Transformation Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	Class III Landfill Daily Disposal Capacity Shortfall (Excess)
									EXISTING LANDFILLS													
									Antelope Valley	Bradley	R Burbank	R Calabasas	Chiquita	Lancaster	Pebbly Beach	L Puente Hills	R San Clemente	R Scholl	Sunshine County	Sunshine City	R Whittier	
									Expected daily tonnage 6 day average (tpd-6)													
									Remaining permitted landfill capacity at year's end, Million Tons													
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)														(tpd-6)
2005	78,759	50%	39,379	0	756	6,978	1,715	30,686	1,186	861	133	1,606	4,910	1,490	9.6	12,392	2.29	1,452	4,521	1,831	294	
									10.2	0.1	3.0	8.8	13.7	17.9	0.097	32.3	0.024	6.8	2.0	7.2	4.6	
2006	79,285	50%	39,642	0	800	7,500	2,069	30,873	1,400	200	134	1,617	5,000	1,700	9.7	12,500	2.31	1,461	3,000	4,000	296	(447)
									19.0	0.0	3.0	8.3	12.2	17.3	0.094	28.4	0.023	6.3	1.0	6.0	4.5	
2007	79,746	50%	39,873	0	800	7,500	2,069	31,104	1,800	C	135	1,626	5,000	1,700	9.8	12,500	2.32	1,470	3,500	4,500	297	(1,437)
									18.4		2.9	7.8	10.6	16.8	0.091	24.5	0.023	5.9	E 9.2	4.5	4.4	
2008	80,692	50%	40,346	0	800	7,500	2,069	31,577	1,800		137	1,645	5,000	1,700	9.9	13,200	2.35	1,487	3,500	4,500	301	(1,706)
									17.9		2.9	7.3	9.1	16.3	0.088	20.4	0.022	5.4	8.1	3.1	4.3	
2009	81,423	50%	40,712	0	800	7,500	2,069	31,942	3,600		138	1,660	5,000	3,000	10.0	13,200	2.37	1,501	6,000	5,000	304	(7,473)
									E 16.7		2.8	6.8	E 39.5	E 15.3	0.085	16.3	0.021	5.0	6.2	1.6	4.2	
2010	82,633	50%	41,316	0	800	7,500	2,069	32,547	3,600		140	1,685	5,000	3,000	10.1	13,200	2.40	1,523	6,000	5,000	308	(6,922)
									15.6		2.8	6.2	37.9	14.4	0.082	12.1	0.020	4.5	E 20.6	E 47.2	4.1	
2011	83,834	51%	41,079	0	800	7,500	2,069	32,309	3,600		141	1,693	5,000	3,000	10.2	13,200	2.42	1,530	6,000	5,000	310	(7,176)
									14.5		2.7	5.7	36.4	13.5	0.078	8.0	0.0196	4.0	18.7	45.6	4.0	
2012	84,834	52%	40,720	0	800	7,500	2,069	31,951	3,600		141	1,696	5,000	3,000	10.2	13,200	2.42	1,533	6,000	5,000	310	(7,541)
									13.4		2.7	5.2	34.8	12.5	0.075	3.9	0.0188	3.5	16.9	44.1	3.9	
2013	85,905	53%	40,375	0	800	7,500	2,069	31,606	3,600		141	1,700	5,000	3,000	10.2	13,200	2.43	1,537	6,000	5,000	311	(7,896)
									12.2		2.7	4.7	33.3	11.6	0.072	(0.2)	0.0181	3.0	15.0	42.5	3.8	
2014	87,117	54%	40,074	1,500	800	7,500	2,069	29,805	3,600		142	1,707	5,000	3,000	10.2	C	2.44	1,543	6,000	5,000	312	3,487
									11.1		2.6	4.1	31.7	10.7	0.069		0.0173	2.6	13.1	41.0	3.7	
2015	88,143	55%	39,664	1,500	800	7,500	2,069	29,395	3,600		142	1,710	5,000	3,000	10.3		2.44	1,546	6,000	5,000	313	3,071
									10.0		2.6	3.6	30.1	9.7	0.066		0.0165	2.1	11.2	39.4	3.6	
2016	89,123	56%	39,214	2,000	800	7,500	2,069	28,445	3,600		142	1,712	5,000	3,000	10.3		2.44	1,548	6,000	5,000	313	2,117
									8.9		2.5	3.1	28.6	8.8	0.062		0.0158	1.6	9.4	37.8	3.5	
2017	90,066	57%	38,728	2,000	800	7,500	2,069	27,959	3,600		142	1,713	5,000	3,000	10.3		2.45	1,549	6,000	5,000	313	1,629
									7.7		2.5	2.5	27.0	7.8	0.059		0.0150	1.1	7.5	36.3	3.4	
2018	91,022	58%	38,229	3,000	800	7,500	2,069	26,460	3,600		142	1,714	5,000	3,000	10.3		2.45	1,550	6,000	5,000	314	128
									6.6		2.4	2.0	25.5	6.9	0.056		0.0143	0.6	5.6	34.7	3.4	
2019	91,952	59%	37,700	3,000	800	7,500	2,069	25,931	3,600		142	1,715	5,000	3,000	10.3		2.45	1,550	6,000	5,000	314	(402)
									5.5		2.4	1.4	23.9	6.0	0.053		0.0135	0.1	3.8	33.2	3.3	
2020	93,163	60%	37,265	3,000	800	7,500	2,069	25,496	3,600		143	1,720	5,000	3,000	10.3		2.46	1,555	6,000	5,000	315	(849)
									4.4		2.3	0.9	22.3	5.0	0.050		0.0127	C	1.9	31.6	3.2	
2021	94,247	60%	37,699	2,000	800	7,500	2,069	26,930	3,600		144	1,740	5,000	3,000	10.4		2.48	1,573	6,000	5,000	318	541
									3.2		2.3	0.4	20.8	4.1	0.046		0.0120	#VALUE!	0.0	30.0	3.1	
2022	95,230	60%	38,092	2,000	800	7,500	2,069	27,323	3,600		146	1,758	5,000	3,000	10.5		2.51	1,589	6,000	5,000	322	895
									2.1		2.3	(0.2)	19.2	3.2	0.043		0.0112	#VALUE!	(1.9)	28.5	3.0	
2023	96,298	60%	38,519	3,000	800	7,500	2,069	26,750	3,600		148	1,778	5,000	3,000	10.7		2.54	1,607	6,000	5,000	325	279
									1.0		2.2	(0.7)	17.7	2.2	0.040		0.0104	#VALUE!	(3.7)	26.9	2.9	
2024	97,419	60%	38,968	3,000	800	7,500	2,069	27,199	3,600		149	1,799	5,000	3,000	10.8		2.57	1,626	6,000	5,000	329	682
									(0.1)		2.2	(1.3)	16.1	1.3	0.036		0.0096	#VALUE!	(5.6)	25.4	2.8	
2025	98,447	60%	39,379	3,000	800	7,500	2,069	27,610	3,600		151	1,818	5,000	3,000	10.9		2.59	1,643	6,000	5,000	332	1,052
									(1.2)		2.1	(1.9)	14.5	0.4	0.033		0.0088	C	(7.5)	23.8	2.6	

ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at unclassified landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA.

2.- Diversion Rate is 50 percent for years 2005 through 2020.

3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/05 to 12/31/05.

4.- Expected Daily Tonnage Rate for Bradley Landfill Expansion is based on the historical use of the landfill.

5.- "tpd-6": tons per day, 6 day per week average.

6.- Import quantities for 2007 and beyond are assumed.

7.- Export quantities for 2007 and beyond are assumed.

LEGEND:

C -Closure due to exhausted capacity
E -Expansion becomes effective
L -Does not accept waste from the City of Los Angeles and Orange County
R -Restricted Wasteshed
CIWMB -California Integrated Waste Management Board

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Table 4-13
SCENARIO 5
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS
UTILIZING EXISTING LANDFILLS, ASSUMING DEVELOPMENT OF ALL PROPOSED EXPANSIONS, INCREASING THE DIVERSION RATE, ANI
UTILIZATION OF OUT-OF-COUNTY DISPOSAL FACILITIES DURING THE PLANNING PERIOD
Based on January 1, 2005 through December 31, 2005 six-day average tonnages an
assuming AB 939 diversion is fully implementec

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Imported Waste	Waste Exports to Out-of County Landfills	Maximum Daily Transformation Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	Class III Landfill Daily Disposal Capacity Shortfall (Excess)
								EXISTING LANDFILLS													
								Antelope Valley	Bradley	R Burbank	R Calabasas	Chiquita	Lancaster	Pebbly Beach	L Puente Hills	R San Clemente	R Scholl	Sunshine County	Sunshine City	R Whittier	
											Expected daily tonnage 6 day average (tpd-6)										
											Remaining permitted landfill capacity at year's end, Million Tons										
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)														(tpd-6)
2005	78,759	50%	39,379	756	6,978	1,715	30,686	1,186	861	133	1,606	4,910	1,490	9.6	12,392	2.29	1,452	4,521	1,831	294	
								10.2	0.1	3.0	8.8	13.7	17.9	0.097	32.3	0.024	6.8	2.0	7.2	4.6	
2006	79,285	50%	39,642	800	7,500	2,069	30,873	1,400	200	134	1,617	5,000	1,700	9.7	12,500	2.31	1,461	3,000	4,000	296	(447)
								19.0	0.0	3.0	8.3	12.2	17.3	0.094	28.4	0.023	6.3	1.0	6.0	4.5	
2007	79,746	50%	39,873	800	7,500	2,069	31,104	1,800	C	135	1,626	5,000	1,700	9.8	12,500	2.32	1,470	3,500 E	4,500	297	(1,437)
								18.4		2.9	7.8	10.6	16.8	0.091	24.5	0.023	5.9	9.2	4.5	4.4	
2008	80,692	50%	40,346	800	7,500	2,069	31,577	1,800		137	1,645	5,000	1,700	9.9	13,200	2.35	1,487	3,500	4,500	301	(1,706)
								17.9		2.9	7.3	9.1	16.3	0.088	20.4	0.022	5.4	8.1	3.1	4.3	
2009	81,423	50%	40,712	800	7,500	2,069	31,942	3,600 E		138	1,660	5,000 E	3,000 E	10.0	13,200	2.37	1,501	6,000	5,000	304	(7,473)
								16.7		2.8	6.8	39.5	15.3	0.085	16.3	0.021	5.0	6.2	1.6	4.2	
2010	82,633	50%	41,316	800	7,500	2,069	32,547	3,600		140	1,685	5,000	3,000	10.1	13,200	2.40	1,523	6,000 E	5,000 E	308	(6,922)
								15.6		2.8	6.2	37.9	14.4	0.082	12.1	0.020	4.5	20.6	47.2	4.1	
2011	83,834	51%	41,079	800	7,500	2,069	32,309	3,600		141	1,693	5,000	3,000	10.2	13,200	2.42	1,530	6,000	5,000	310	(7,176)
								14.5	.	2.7	5.7	36.4	13.5	0.078	8.0	0.0196	4.0	18.7	45.6	4.0	
2012	84,834	52%	40,720	800	7,500	2,069	31,951	3,600		141	1,696	5,000	3,000	10.2	13,200	2.42	1,533	6,000	5,000	310	(7,541)
								13.4		2.7	5.2	34.8	12.5	0.075	3.9	0.0188	3.5	16.9	44.1	3.9	
2013	85,905	53%	40,375	800	7,500	2,069	31,606	3,600		141	1,700	5,000	3,000	10.2	13,200	2.43	1,537	6,000	5,000	311	(7,896)
								12.2		2.7	4.7	33.3	11.6	0.072	(0.2)	0.0181	3.0	15.0	42.5	3.8	
2014	87,117	54%	40,074	800	7,500	2,069	31,305	3,600		142	1,707	5,000	3,000	10.2	C	2.44	1,543	6,000	5,000	312	4,987
								11.1		2.6	4.1	31.7	10.7	0.069		0.0173	2.6	13.1	41.0	3.7	
2015	88,143	55%	39,664	800	7,500	2,069	30,895	3,600		142	1,710	5,000	3,000	10.3		2.44	1,546	6,000	5,000	313	4,571
								10.0		2.6	3.6	30.1	9.7	0.066		0.0165	2.1	11.2	39.4	3.6	
2016	89,123	56%	39,214	800	7,500	2,069	30,445	3,600		142	1,712	5,000	3,000	10.3		2.44	1,548	6,000	5,000	313	4,117
								8.9		2.5	3.1	28.6	8.8	0.062		0.0158	1.6	9.4	37.8	3.5	
2017	90,066	57%	38,728	800	7,500	2,069	29,959	3,600		142	1,713	5,000	3,000	10.3		2.45	1,549	6,000	5,000	313	3,629
								7.7		2.5	2.5	27.0	7.8	0.059		0.0150	1.1	7.5	36.3	3.4	
2018	91,022	58%	38,229	800	7,500	2,069	29,460	3,600		142	1,714	5,000	3,000	10.3		2.45	1,550	6,000	5,000	314	3,128
								6.6		2.4	2.0	25.5	6.9	0.056		0.0143	0.6	5.6	34.7	3.4	
2019	91,952	59%	37,700	800	7,500	2,069	28,931	3,600		142	1,715	5,000	3,000	10.3		2.45	1,550	6,000	5,000	314	2,598
								5.5		2.4	1.4	23.9	6.0	0.053		0.0135	0.1	3.8	33.2	3.3	
2020	93,163	60%	37,265	800	7,500	2,069	28,496	3,600		143	1,720	5,000	3,000	10.3		2.46	1,555	6,000	5,000	315	2,151
								4.4		2.3	0.9	22.3	5.0	0.050		0.0127		1.9	31.6	3.2	
2021	94,247	60%	37,699	800	7,500	2,069	28,930	3,600		144	1,740	5,000	3,000	10.4		2.48		6,000	5,000	318	4,114
								3.2		2.3	0.4	20.8	4.1	0.046		0.0120		0.0	30.0	3.1	
2022	95,230	60%	38,092	800	7,500	2,069	29,323	3,600		146	1,758	5,000	3,000	10.5		2.51		6,000	5,000	322	4,484
								2.1		2.3	C	19.2	3.2	0.043		0.0112		C	28.5	3.0	
2023	96,298	60%	38,519	800	7,500	2,069	29,750	3,600		148		5,000	3,000	10.7		2.54			5,000	325	12,664
								1.0		2.2		17.7	2.2	0.040		0.0104			26.9	2.9	
2024	97,419	60%	38,968	800	7,500	2,069	30,199	3,600		149		5,000	3,000	10.8		2.57			5,000	329	13,107
								C		2.2		16.1	1.3	0.036		0.0096			25.4	2.8	
2025	98,447	60%	39,379	800	7,500	2,069	30,610			151		5,000	3,000	10.9		2.59			5,000	332	17,113
										2.1		14.5	0.4	0.033		0.0088			23.8	2.6	

ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at unclassified landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA.

2.- Diversion Rate is 50 percent for years 2005 through 2020.

3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/05 to 12/31/05.

4.- Expected Daily Tonnage Rate for Bradley Landfill Expansion is based on the historical use of the landfill.

5.- "tpd-6": tons per day, 6 day per week average.

6.- Import quantities for 2007 and beyond are assumed.

7.- Export quantities for 2007 and beyond are assumed.

LEGEND:

C -Closure due to exhausted capacity
E -Expansion becomes effective
L -Does not accept waste from the City of Los Angeles and Orange County
R -Restricted Wasteshed
CIWMB -California Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, May 2007

Attachment C

Chapter 4 of
Los Angeles County
Countywide Siting Element, (dated, June 1997)

CHAPTER 4
CURRENT DISPOSAL RATE AND ASSESSMENT OF DISPOSAL CAPACITY NEEDS

4.1 PURPOSE AND REQUIREMENTS

The purpose of this chapter is to quantify the current disposal rate in Los Angeles County and address the disposal capacity needs of the 88 cities in Los Angeles County and the County unincorporated communities for a planning period of 15 years pursuant to Section 187553(b), Title 14 of the CCR. The 15-year planning period is defined to begin with the year in which the CSE is prepared, which for this document is 1996. Specific requirements for the content of this chapter are drawn from the California Code of Regulations, Title 14, Division 7, Chapter 9, Article 6.5, Sections 18755 and 18755.3.

4.2 SPECIFIC REQUIREMENTS

The California Code of Regulations, Title 14, Section 18755.3 requires the following:

a) Each county, 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 the 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.

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 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.

4.3 EXISTING DISPOSAL QUANTITIES AND CAPACITY

4.3.1 1990 Disposal Quantities and Capacity

In accordance with the requirements of the CCR, Title 14, Section 18777, in March 1991, the Task Force completed a study that quantified the amount of solid waste disposed of at landfills and transformation facilities located in Los Angeles County, as well as a projection of remaining permitted combined capacity of these facilities. A summary of the study was submitted to the California Integrated Waste Management Board (CIWMB) in a report dated March 28, 1991. A copy of the report is provided in Appendix 4-A. An overview of the study is provided below.

4.3.1.1 1990 Disposal Quantities

In 1990, the residents/businesses of Los Angeles County disposed of approximately 15.9 million tons of solid waste at existing landfills and transformation facilities within the County. Of this amount, approximately 13.5 million tons were disposed at 19 permitted Class III landfills; 0.3 million tons were managed by two waste-to-energy facilities (does not include 0.15 million tons of residual ash which was landfilled); and 2.1 million tons were disposed at the unclassified landfills. A list of the Class III facilities, as well as disposal quantities for each facility as provided in the March 28, 1991, report to the CIWMB is provided in Table 4-1. The disposal quantities listed were established based on monthly surveys of solid waste disposal facilities conducted by the Los Angeles County Department of Public Works during the 1990 calendar year, a written survey of each solid waste disposal facility conducted during the month of October 1990, and a telephone survey conducted in January 1991.

The above quantities translate into a 1990 average disposal rate of approximately 51,000 tons per day (six days/week) Countywide; 43,245 tons per day at Class III landfills; 1,000 tons per day at waste-to-energy facilities (excluding 500 tons of ash landfilled), and 6,755 tons per day at unclassified landfills.

4.3.1.2 1990 Remaining Permitted Disposal Capacity

The remaining permitted disposal capacity for Class III landfills as of December 31, 1990, was also established by the Task Force at approximately 99 million tons (156 million cubic yards based on in-place solid waste density provided by landfill operators). The analysis was

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 Landfill	Solid Waste Facility Permit	Operation Days/week	Jan. 1991 SWFP Daily Capacity	LUP Daily Capacity	1990 Average Daily Tonnage 6days/wk	Quantity of Municipal Solid Waste Disposed Year 1990	Projected remaining permitted capacity (effective January 1, 1991)		Estimated remaining permitted capacity (effective January 1, 1990)	
			Tons	Tons	Tons	Million Tons	Million Tons	Million (d) Cubic Yds	Million Tons	Million (d) Cubic Yds
Antelope Valley	19-AA-0009	7	350	—	400	0.125	0.925	2.6	1.050	3.0
Azusa Land 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 (a)	—	9,744	3.04	15.96	23.8	19.00	28.3
Bradley West	19-AR-0008	6	7,000	9,500	1,923	0.60	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	22.0	11.50	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 (b)	4,000	3,109	0.97	4.2	7.0	5.2	8.6
Pebbly Beach	19-AA-0061	6	30	—	10	0.003	0.097	0.16	0.100	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	16.0
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	14.00	20
Spadra	19-AA-0015	6	3,000	—	2,724	0.85	6.95	9.93	7.80	11.14
Sunshine Canyon	19-AR-0002	6	7,000	6,000	3,141	0.98	0.4	1.64	1.4	5.66
Two Harbors	19-AA-0062	5	3.5	—	3.5	0.000088	0.0073	0.0104	0.0074	0.0105
Whitter (Savage Canyon)	19-AH-0001	6	350	—	353	0.11	6.39	10.6	6.50	10.8
TOTAL			63,950 (c)		43,245	13.49	98.65	156.08	112.15	177.42

FOOTNOTES:

(a) Daily capacity established in 6/90, Notice and Order, as amended, by the City of West Covina's Local Enforcement Agency.

(b) Daily capacity established by Report of Disposal Site Information and Courts.

(c) Average daily tonnage, Monday through Friday.

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

NOTES:

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

Source: Los Angeles County Department of Public Works, January 1997.

based on various data collected by the Los Angeles County Department of Public Works from facility operators and site specific permit criteria established by local land use agencies, local enforcement agencies, California Regional Water Quality Control Boards and the California Integrated Waste Management Board. A summary of the data collected and various permit limitations are also shown on Table 4-1.

The remaining permitted combined disposal capacity of Class III landfills as of January 1, 1990, can be established at approximately 112.5 million tons (178 million cubic yards), which is the sum of the remaining permitted capacity as of December 31, 1990, and the total quantities disposed during the 1990 calendar year.

4.3.2 1990-1995 Disposal Trends

For many years, the Los Angeles County Department of Public Works has established a process for tracking solid waste disposal quantities at landfills and transformation facilities based on the monthly Solid Waste Management Fee invoices submitted to the Department on a quarterly basis by the facility operators. These invoices are audited periodically and are compared with the quantities landfill and transformation facility operators report to local enforcement agencies, as well as other regulatory agencies.

State law, Section 41821.5 of the PRC, has provided jurisdictions an additional tool to track waste quantities through the establishment of the Disposal Reporting System (see Section 4.3.3.1). As of January 1995, all permitted solid waste facility operators were required by the new regulations to report quarterly to their respective county or regional agency the amount of waste disposed by each jurisdiction utilizing their facilities.

Based on the disposal information from these two tracking systems, a downward trend in the quantities of solid waste disposed was observed during the period 1990 through 1995, at permitted Class III landfills within the County with no reduction in quantities of solid waste managed at the two transformation facilities. The reported disposal quantities during this period are summarized on a yearly basis in Table 4-2. While aggressive waste diversion programs being implemented by jurisdictions throughout the County contributed in substantial measure to this drop in disposal quantities, much of this reduction occurred as a result of the recession experienced in the region between 1990 and 1995.

Another trend that developed during this period was an increase in the amount of municipal solid waste imported from other counties such as Orange, Riverside, San Bernardino, San Diego, and Ventura Counties for disposal at Los Angeles County disposal facilities. During the 1995 calendar year, approximately 774,000 tons of solid waste were disposed at in-County facilities which originated from neighboring counties. This trend was attributed to steep increases in disposal costs experienced in those counties and/or the difficulties in permitting new disposal capacity.

TABLE 4-2
(PAGE 1 OF 2)
SUMMARY OF YEARLY SOLID WASTE DISPOSAL QUANTITIES*
LOS ANGELES COUNTY

Year	A	B	C	D	E	F	G
	In-County Class III Landfill Disposal	In-County Disposal at Transformation Facilities	Exports	Imports	In-County Unclassified Landfill Disposal	Total Disposal at Class III landfill + Transformation Facilities A+B+C-D	Total Disposal at Class III landfill + Transformation + Unclassified landfill A+B+C+E-D
	TONS	TONS	TONS	TONS	TONS	TONS	TONS
1990	13,492,000	312,000	N/A	N/A	2,108,000	13,804,000	15,912,000
1991	12,230,000	465,000	N/A	N/A	867,000	12,695,000	13,562,000
1992	11,922,000	523,000	22,000	N/A	867,000	12,467,000	13,334,000
1993	11,300,000	518,000	122,000	N/A	739,000	11,940,000	12,679,000
1994	11,590,000 **	526,000	128,000	305,000	522,000 **	11,939,000 **	12,461,000 **
1995	11,646,000	573,000	52,000	774,000	530,000	11,497,000	12,027,000

Column A Total disposal at Class III landfills in Los Angeles County. Includes waste imported from jurisdictions outside the County.
Column B Total disposal at transformation facilities in Los Angeles County. Includes waste imported from jurisdictions outside the County. For 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 Los Angeles County to disposal facilities located outside the County.
Column D Waste disposed at Class III landfills and transformation facilities located in Los Angeles County which originated outside the County.
Column E Total inert waste disposed by jurisdictions in Los Angeles County at permitted unclassified landfills.
Column F Includes disposal by jurisdictions in Los Angeles County at Class III landfills, Transformation facilities, and the waste exported to disposal facilities located outside the County. **For 1994 and 1995, total excludes waste imported from jurisdictions outside Los Angeles County.**
Column G Includes disposal at Class III landfills, transformation facilities, permitted Unclassified landfills, and the waste exported for disposal at landfills outside Los Angeles County. **For 1994 and 1995 total excludes waste imported from jurisdictions outside Los Angeles County.**

Notes :

* See Chapter 4, Subsections 4.3.2 and 4.3.3 for discussion.
** Excludes debris generated as a result of Northridge Earthquake.
N/A Not available.

Source : Los Angeles County Department of Public Works,January 1997

TABLE 4-2
(PAGE 2 OF 2)
SUMMARY OF YEARLY SOLID WASTE DISPOSAL QUANTITIES*
LOS ANGELES COUNTY

Year	A	B	C	D	E	F	G
	In-County Class III Landfill Disposal	In-County Disposal at Transformation Facilities	Exports	Imports	In-County Unclassified Landfill Disposal	Total Disposal at Class III landfill + Transformation Facilities A+B+C-D	Total Disposal at Class III landfill + Transformation + Unclassified landfill A+B+C+E-D
	Cubic Yards	Cubic Yards	Cubic Yards	Cubic Yards	Cubic Yards	Cubic Yards	Cubic Yards
1990	22,486,667	520,000	N/A	N/A	3,513,333	23,006,667	26,520,000
1991	20,383,333	775,000	N/A	N/A	1,445,000	21,158,333	13,562,000
1992	19,870,000	871,667	36,667	N/A	1,445,000	20,778,334	13,334,000
1993	18,833,333	863,333	203,333	N/A	1,231,667	19,899,999	12,679,000
1994	19,316,667 **	876,667	213,333	508,333	870,000 **	11,939,000 **	12,461,000 **
1995	19,410,000	955,000	86,667	1,290,000	883,333	19,161,667	20,045,000

Column A Total disposal at Class III landfills in Los Angeles County. Includes waste imported from jurisdictions outside the County.
Column B Total disposal at transformation facilities in Los Angeles County. Includes waste imported from jurisdictions outside the County. For 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 Los Angeles County to disposal facilities located outside the County.
Column D Waste disposed at Class III landfills and transformation facilities located in Los Angeles County which originated outside the County.
Column E Total inert waste disposed by jurisdictions in Los Angeles County at permitted unclassified landfills.
Column F Includes disposal by jurisdictions in Los Angeles County at Class III landfills, Transformation facilities, and the waste exported to disposal facilities located outside the County. **For 1994 and 1995, total excludes waste imported from jurisdictions outside Los Angeles County.**
Column G Includes disposal at Class III landfills, transformation facilities, permitted Unclassified landfills, and the waste exported for disposal at landfills outside Los Angeles County. **For 1994 and 1995 total excludes waste imported from jurisdictions outside Los Angeles County.**

Notes :
The quantities expressed in Table 4-2 (page 2 of 2) were obtained from Table 4-2 (page 1 of 2) using a conversion factor of 1,200 lb/cy.
* See Chapter 4, Subsections 4.3.2 and 4.3.3 for discussion.
** Excludes debris generated as a result of Northridge Earthquake.
N/A Not available.

Source : Los Angeles County Department of Public Works,January 1997

The trend toward importation may be reversed in the future due to the 1996 closure of the BKK and Lopez Canyon Landfills and the prohibition on the disposal of non-inert solid waste at the Azusa Land Reclamation Landfill. While the impact of these closures was somewhat off-set by the reopening of the Sunshine Canyon Landfill, these events resulted in a net loss of nearly 16,000 tpd (about one fourth) of Los Angeles County's daily permitted capacity.

4.3.3 1995 Disposal Quantities and Capacity

4.3.3.1 Disposal Quantity Reporting System

On October 27, 1994, the CIWMB adopted regulations for the Disposal Reporting System pursuant to Sections 18800 through 18813 of the CCR and Section 41821.5 of the PRC. Effective January 1995, the regulations required all solid waste disposal facility operators/owners to provide information on a quarterly basis as to the quantities of waste disposed at their facilities by individual jurisdictions. Based on these regulations formulated by the CIWMB, the Disposal Reporting System provides the jurisdictions in Los Angeles County and the Los Angeles County Department of Public Works with a valuable tool for tracking the amount of solid waste disposed by all jurisdictions utilizing disposal facilities in the County.

The CIWMB regulations mandate that disposal facility operators, through quarterly surveys, obtain the jurisdictional origin of the waste being disposed at their facilities from haulers. The facility operators are required to submit this information to the County. The County in turn reports the information to each jurisdiction as to the amount of waste disposed at each disposal facility during the quarter.

To assist the local jurisdictions, solid waste haulers and facility operators in their compliance with these regulations, the Task Force drafted uniform Disposal Quantity Reporting Forms and distributed them to all cities, haulers, and facility operators in Los Angeles County for their review and comments. The Task Force finalized the Forms based on the comments received by mail and at a workshop attended by over 100 representatives of cities, haulers, and facility operators.

The data obtained from the Disposal Quantity Reporting system serves as the basis for all jurisdictions to measure their individual waste disposal reduction goals. This data was also used in the Los Angeles County CSE to measure 1995 disposal quantities (see Section 4.3.3.2) and project waste generation quantities for the 1996-2010 planning period (see Section 4.4).

4.3.3.2 1995 Disposal Quantities

The 1995 disposal quantities are based on Disposal Reporting System data for the period of January 1 through December 31, 1995. In 1995, the residents and businesses in Los Angeles County disposed of approximately 12.0 million tons of solid waste at existing permitted land disposal and transformation facilities located in and out of the County. The disposed quantity distribution among the various types of disposal facilities was as follows:

- In-County Class III Landfills

  - 11 major landfills — 10,809,000 tons

  - 6 minor landfills (including Two Harbors Landfill which closed in November 1995) — 126,000 tons

- Transformation facilities — 510,000 tons

- Exports to out-of-County Class III landfills — 52,000 tons

- Unclassified landfills (inert waste only) — 530,000 tons

Total Disposed — 12,027,000 tons

It should be noted that the 1995 solid waste disposal quantities calculated above have been adjusted to account for the following:

- The in-County Class III landfill disposal quantities **exclude** approximately 712,000 tons of solid waste imported from Orange, Riverside, San Bernardino, San Diego, Ventura, and other Counties.

- The quantities disposed at transformation facilities **exclude** approximately 62,500 tons of solid waste imported from Orange, Riverside, San Bernardino, and San Diego Counties.

The above disposal quantities for solid waste generated in Los Angeles County translate into a 1995 average disposal rate of approximately 38,550 tons per day (six days/week) Countywide; 35,050 tons per day at Class III landfills; 1,630 tons per day at waste-to-energy facilities; 170 tons per day exported to out-of-County Class III landfills; and 1,670 tons per day at permitted unclassified landfills. Table 4-3 lists existing permitted landfills and transformation facilities and the quantities of solid waste disposed of originating in Los Angeles County. In addition, approximately 2,550 tons per day (six days/week) were imported to Los Angeles County for disposal at Class III landfills, unclassified landfills, and

transformation facilities. Please note that the quantities listed in Tables 4-2 and 4-3 may differ slightly from the above quantities due to rounding.

4.3.3.3 Remaining Permitted Disposal Capacity as of December 31, 1995

As part of the preparation of the CSE, a new study was conducted by the Department of Public Works to determine among other things, the remaining combined permitted disposal capacity, as of December 31, 1995. The study consisted of a written survey of all permitted solid waste disposal facilities in Los Angeles County, as well as review of site specific permit criteria established by local land use agencies, 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 provided in Chapter 3, Table 3-2 through 3-21 are also shown in Table 4-3.

Based on the data provided in Table 4-3, as of December 31, 1995, the remaining permitted combined Class III disposal capacity for solid waste landfills and transformation facilities located in Los Angeles County are estimated as follows:

- Remaining permitted Class III landfill capacity = 102.3 million tons (approximately 187.9 million cubic yards).

  The 102.2 million tons include 16.9 million tons of capacity at Sunshine Canyon Landfill which was fully permitted by not operational as of December 31, 1995.

- The remaining permitted unclassified landfill capacity = 53.1 million tons (35.4 million cubic yards)

- The remaining permitted transformation capacity = 1,977 tons per day.

  The above transformation capacity is a 6-day/week average based on the Solid Waste Facility Permit limits of 2,800 tons per week for the Commerce Refuse-to-Energy Facility and 471,000 tons per year for the Southeast Resource Recovery Facility. It should also be noted that ash generated by transformation facilities is currently all being diverted.

4.4 DISPOSAL NEED PROJECTIONS (1996-2010)

Section 18755.3 (b) of Title 14 of the CCR requires a description of the anticipated disposal capacity needs for the 15-year planning period beginning with the year the CSE is prepared. Each jurisdiction was required to address this issue as part of the preparation of their Source Reduction and Recycling Element (SRRE); however, utilization of the solid waste quantity projection data contained in the jurisdictions' SRREs posed three problems.

- First, the SRRE projection data typically covered the planning period from 1990 to 2005, whereas the CSE's planning period would extend from 1996 to 2010 in the case of Los Angeles County. Therefore, additional projections would be required for the period from 2006 through 2010.

- Second, the local economy experienced a deep recession between 1990 and 1995, which significantly reduced solid waste generation and disposal quantities in Los Angeles County. For the most part, the local jurisdictions' SRREs had been completed or were nearing completion before the greatest impact of the recession was experienced. Thus, this factor was not taken into consideration in the projections contained in the SRREs.

- Third, the Countywide 1990 solid waste disposal quantities calculated based on data provided in all jurisdictions' SRREs are substantially less than the actual 1990 quantities as determined by the Task Force and reported to the California Integrated Waste Management Board in the report dated March 28, 1991, see Subsection 4.3. As such, the 1990 SRREs' data was not used to project the disposal capacity need through 2010.

Based on the foregoing, it was clear that new projections were needed which reflected more accurately the conditions existing at the time of preparation of the CSE and which better accounted for expected economic conditions in the future. The methodology selected for use in projecting solid waste generation and disposal for the 1996-2010 planning period is described below.

4.4.1 Base Year Waste Generation and Disposal

The Disposal Reporting System data and the monthly Solid Waste Management Fee (tipping fee) invoices submitted to the Department of Public Works by disposal facility operators provide accurate, up-to-date information on the total quantities of solid waste disposed at Los Angeles County facilities and on the quantities exported for disposal at out-of-County sites. Thus, the year for which the most current and complete data is available, 1995, was selected as the base year to be used in projecting waste quantities. The 1995 disposal quantities are based on Disposal Reporting System data from January 1, 1995, through December 31, 1995.

It should be noted that as of January 1997, the Disposal Reporting System data for the fourth quarter of 1996 was not available. As such, the solid waste generation and disposal need projections for Los Angeles County are based on the 1995 (the base year) data.

In order to determine the 1995 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.

For 1995, the State-mandated diversion rate of 25 percent is assumed to have been met. The diversion rates are assumed to increase linearly in increments of 5 percent per year until reaching 50 percent by the year 2000. The diversion rate is assumed to remain at 50 percent beyond the year 2000.

4.4.2 Selection of Waste Generation Projection Methodology

A number of alternatives were considered for use in projecting countywide waste generation for the 1996-2010 planning period. These include use of the waste generation growth factors from each jurisdiction's SRRE, an adaptation of the CIWMB's Adjustment Methodology, and waste generation growth rates based on population growth projections.

The use of growth factors from each jurisdiction's SRRE were not selected because of the complexity involved in projecting waste generation for 89 individual jurisdictions. In many instances, the jurisdiction's projections were based on jurisdiction-specific population and economic growth projections which are either difficult to emulate or which may now be outdated.

Other methodologies, such as the projection of per capita waste generation in conjunction with population trends, were not used because of their failure to take into consideration 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 Los Angeles County can be attributed to economic activity (i.e., about 58 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 take into account this important factor. For example, linearly projecting the per capita waste generation data for 1990 through 1994 (a recessionary period) and using the projected per capita waste generation figures to project total waste generation, incorrectly assumes that the recession of the early 1990s would continue into the future without any economic recovery.

The use of growth rates based on population growth projections was considered for use since population projections are available from the State Department of Finance through the year 2010. However, projections based on population growth would not be able to account for economic downturns or a resumption of strong economic growth in the Los Angeles area in the next few years, 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 the CIWMB's Adjustment Methodology, which is described below.

4.4.2.1 Description of the Adjustment Methodology

Public Resources Code Section 41780.1(c) mandates that before measuring compliance with the solid waste diversion goals of 25 and 50 percent for the years 1995 and 2000, respectively, each jurisdiction must use a California Integrated Waste Management Board-approved standard adjustment methodology when calculating their maximum allowable disposal quantity for the year.

The CIWMB-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 valuable tool for more accurately measuring their progress in reducing solid waste disposal, as well as for estimating future disposal quantities.

The adjustment 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 rate 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 formula as adopted by the CIWMB is expressed as follows:

Target Year Solid Waste Generation = [(B-Y RWG) (T-Y RAF)] + [(B-Y NWG) (T-Y NWG)]

Where:
B-Y RWG = Base-Year Residential Waste Generation
B-Y NWG = Base-Year Non-residential Waste Generation
P = Population in base-year or target-year
E = Employment in base-year or target-year
T = Taxable Sales in base-year or target-year
T-Y RAF = Target-Year Residential Adjustment Factor
T-Y NWG = Target-Year Non-residential Adjustment Factor
T-Y RAF = $[(P_{t\text{-}y}/P_{b\text{-}y}) + \textbf{T-Y NAF}]/2$
T-Y NAF = $[(E_{t\text{-}y}/E_{b\text{-}y})+(T_{t\text{-}y}/T_{b\text{-}y})]/2$

It can be seen that the adjustment formula 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 method allows the jurisdiction to develop and use locally-developed alternative data or the use of countywide or other data which the jurisdiction deems representative of its situation.

The Adjustment Methodology was field-tested in spring 1994 by 47 jurisdictions in the State. Based on the test results and independent scientific review, the accuracy of the method is considered to be generally very good.

4.4.3 Waste Generation Projections

The Adjustment Methodology is considered to provide the most accurate representation of the effects of economic and population growth on waste generation. As previously indicated, the methodology requires the use of historical data on population, employment, taxable sales, and the Consumer Price Index. It also requires knowledge on the distribution of waste generation by sector (residential and non-residential) for the year to be projected. Therefore, the adaptation of this method for waste projection purposes would require projections of the above factors through the year 2010. Although no State projections are available through the year 2010 for Los Angeles County employment and taxable sales, and no data is available on the distribution of waste generation by sector for each year of the planning period, a number of reasonable assumptions can be made to enable the use of the CIWMB's Adjustment Methodology in projecting waste generation. It should be noted that although certain assumptions are necessary to enable the use of this Methodology, it still represents the best available method for projecting solid waste generation and the only one that takes into account projected changes in future economic conditions. The following is a discussion of the best available data through the year 2010, and how it was projected to estimate unavailable data for use in the CIWMB's Adjustment Methodology.

- **Distribution of Waste Generation by Sector**

  No data is available on the distribution of waste generation by sector for 1994 and future years. However, the data provided in each jurisdiction's SRRE for the base year (1990), can be used to determine the 1990 countywide waste generation distribution by sector. For Los Angeles County, this distribution is as follows:

  - 1990 Residential Waste Generation = 42 percent of total waste generation
  - 1990 Non-residential Waste Generation = 58 percent of total waste generation

  The 1990 distribution by sector was used to approximate the distribution for the years 1996 through 2010.

- **Population Projections**

State Department of Finance population projections are available for Los Angeles County for each year during the planning period. No additional projections or assumptions are necessary for use of this data in applying the Adjustment Methodology.

- **Employment**

The State Department of Finance (DoF), the Southern California Association of Governments (SCAG), University of California at Los Angeles (UCLA), the Federal Reserve Bank of San Francisco, the Los Angeles County Economic Development Corporation (LAEDC), and major financial institutions were contacted to determine whether projections for Los Angeles County employment were available through the year 2010. Three of these sources provided sufficient historical and projection data on employment that could be used to project employment through the 15-year planning period (1996 through 2010). These are:

- SCAG (SCAG Regional Comprehensive Plan, Chapter 3, adopted June 1994, updated June 1996)- included data on total Los Angeles County employment and total non-farm employment for 1995, 2000, 2005, and 2010;

- LAEDC (1996 estimate and 1997/2000 forecast, July 1996) - included historical/projection data on total non-farm employment in Los Angeles County for 1995-1997 and for the year 2000; and

- UCLA (UCLA - BFP Los Angeles County Forecast, August 1995) - included historical/projection data on total non-farm employment in Los Angeles County for 1995 through the year 2000.

Of the three sources, only SCAG provided projections for total Los Angeles County employment. However, comparison of total non-farm employment data from these sources shows their projections are nearly identical, with the projected growth rates from SCAG for total employment and total non-farm employment being marginally lower. Of all sources, the SCAG projections for total Los Angeles County employment were selected since they included forecasts through the end of the planning period.

- **Taxable Sales**

No taxable sales projections for Los Angeles County, through the year 2010, are available from the DoF, SCAG, UCLA, LAEDC, or other institutions contacted. Three of these sources provided sufficient historical and projection data on taxable

sales that could be used to project taxable sales through the 15-year planning period (1996 through 2010). These are:

- DoF (California Taxable Sales, May, 6, 1996)- included data on historical/projected total taxable sales in constant dollars in California for 1995-2005;

- LAEDC (1996 estimate and 1997/2000 forecast, July 1996) - included historical/projection data on total taxable retail sales in the metropolitan Los Angeles area for 1995-1997 and for the year 2000 which was corrected for the effects of inflation using the EDC consumer price index projection; and

- UCLA (UCLA - Business Forecasting Project, Los Angeles County Forecast, August 1995) - included historical/projection data on real taxable sales in Los Angeles County for 1995 through the year 2000.

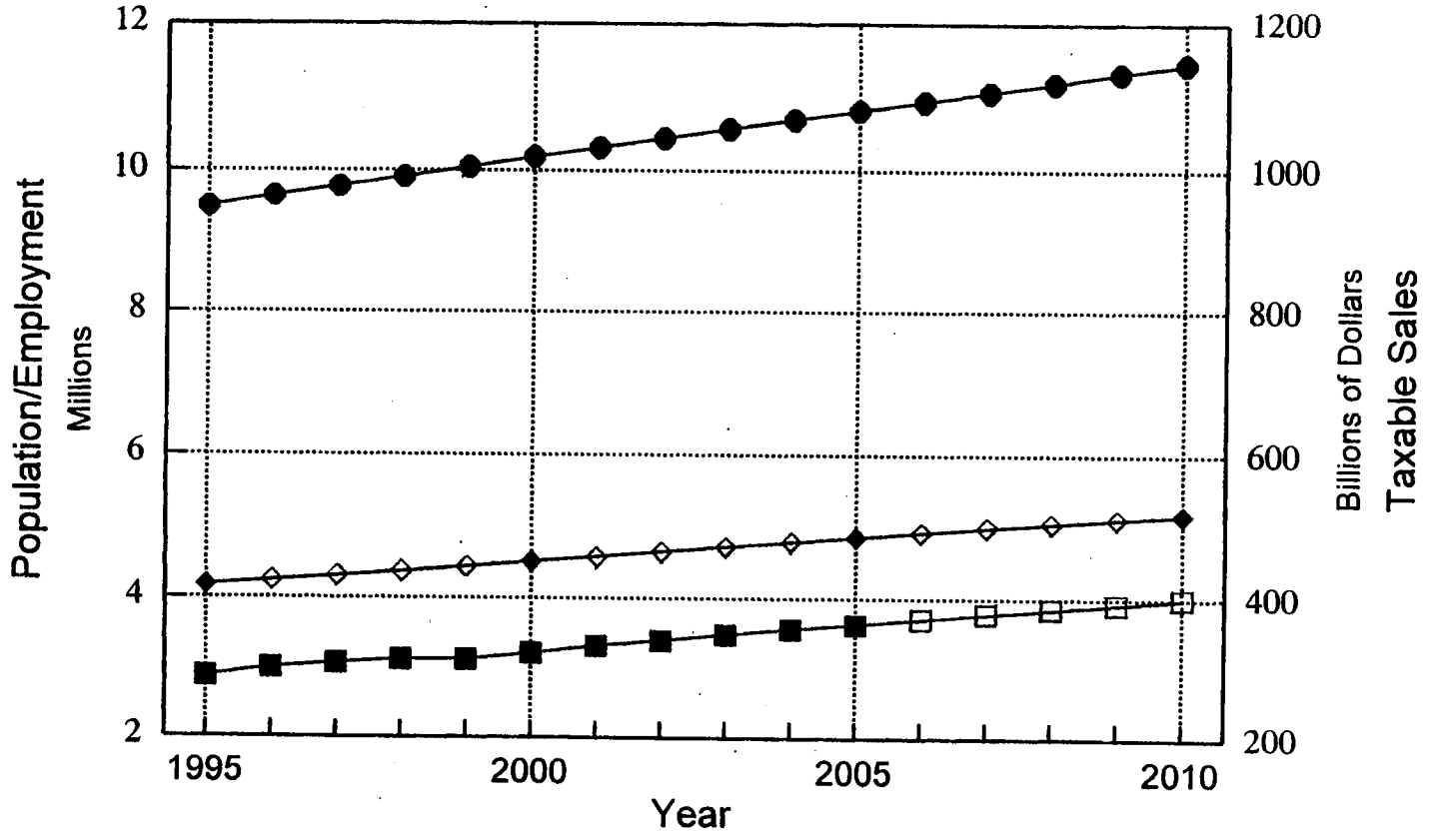
The growth rates of the forecasted taxable sales data from these sources are similar through the year 2000 with the DoF data showing slightly lower growth rates. Of all sources, the DoF taxable sales projections were selected since they included more complete forecasts closest to the end of the planning period (i.e., data from the DoF is available through the year 2005, as opposed to the year 2000 for the others). The other forecasts, when projected, appeared to be much more optimistic regarding the future state of the economy.

Since Los Angeles County's economy represents a significant share of the total state economy (which means that trends at the County level closely follow trends at the State level), and since the Adjustment Methodology considers the relative changes in the factors used, rather than absolute amounts, it was determined that the changes in taxable sales projections at the State level would provide a good representation of the changes expected in Los Angeles County. The taxable sales amounts for the period 2006 through 2010 were estimated by continuing the trend exhibited by the State Department of Finance projections for the years 2003 through 2005. No adjustments for inflation are necessary since the State projections are available in terms of constant dollars (i.e., adjusted to consider effect of changes in projected cost of living).

Figure 4-1 shows the resulting projections for population, employment, and taxable sales. The shaded symbols are used to indicate data available from the sources identified above whereas unshaded symbols indicate figures projected based on the data available.

The resulting projections in waste generation, diversion and disposal for each year of the 15-year planning period are shown in Table 4-4. This table also provides the needed

Population, Employment, and Taxable Sales
in Los Angeles County



1. Shaded plot symbols indicate State or SCAG data.
2. Taxable sales figures are statewide and are expressed in billions of dollars.

Figure 4-1

TABLE 4-4

LOS ANGELES COUNTY SOLID WASTE DISPOSAL CAPACITY

REQUIREMENTS FOR THE 1996 - 2010 PLANNING PERIOD

A	B	C	D	E	F	G	H	I	J
						CLASS III LANDFILL DISPOSAL NEED			
						ANNUAL		CUMULATIVE (YEAR'S END)	
YEAR	TOTAL GENERATION TONS	PERCENT DIVERSION	TOTAL DIVERSION TONS	PROJECTED TRANSFORMATION & CLASS III LANDFILL DISPOSAL (TONS)	AVAILABLE TRANSFORMATION CAPACITY TONS	TONS	CUBIC YARDS	TONS	CUBIC YARDS
1995	15,329,359	25	3,832,340	11,497,000	616,800	---	---	---	---
1996	15,726,813	30	4,718,044	10,948,503	616,800	10,331,703	17,219,505	10,331,703	17,219,505
1997	16,002,526	35	5,600,384	10,401,642	616,800	9,784,842	16,308,070	20,116,545	33,527,575
1998	16,262,256	40	6,504,902	9,757,354	616,800	9,140,554	15,234,256	29,257,099	48,761,831
1999	16,405,678	45	7,382,555	9,023,123	616,800	8,406,323	14,010,538	37,663,421	62,772,369
2000	16,742,087	50	8,371,044	8,371,044	616,800	7,754,244	12,923,739	45,417,665	75,696,108
2001	17,102,214	50	8,551,107	8,551,107	616,800	7,934,307	13,223,845	53,351,972	88,919,953
2002	17,407,134	50	8,703,567	8,703,567	616,800	8,086,767	13,477,945	61,438,739	102,397,898
2003	17,733,877	50	8,866,939	8,866,939	616,800	8,250,139	13,750,231	69,688,877	116,148,129
2004	18,041,168	50	9,020,584	9,020,584	616,800	8,403,784	14,006,307	78,092,661	130,154,436
2005	18,329,961	50	9,164,981	9,164,981	616,800	8,548,181	14,246,968	86,640,842	144,401,403
2006	18,623,831	50	9,311,916	9,311,916	616,800	8,695,116	14,491,859	95,335,957	158,893,262
2007	18,915,815	50	9,457,908	9,457,908	616,800	8,841,108	14,735,179	104,177,065	173,628,442
2008	19,205,724	50	9,602,862	9,602,862	616,800	8,986,062	14,976,770	113,163,127	188,605,212
2009	19,493,143	50	9,746,572	9,746,572	616,800	9,129,772	15,216,286	122,292,898	203,821,497
2010	19,777,664	50	9,888,832	9,888,832	616,800	9,272,032	15,453,387	131,564,930	219,274,884

NOTES:

1. The Waste Generation quantities (Column B) were estimated using the CIWMB's Adjustment Methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments, using 1995 as the base year.
2. Waste generation estimate for 1995 is based on actual transformation and Class III landfill disposal by jurisdictions in Los Angeles County for the 1995 Calandar Year and assumes a 25 percent diversion rate.
3. The 1995 transformation and Class III landfill disposal quantity (Column E) is based on actual tonnages reported by permitted solid waste disposal facility operators and export quantities reported by other counties to the Los Angeles County Department Department of Public Works as part of the 1995 Disposal Quantity Reporting Data.
4. The Cumulative Disposal Need (Columns I and J) listed is the sum of the projected Class III landfill disposal needs of jurisdictions in Los Angeles County, beginning January 1996 through the end of the year listed.
5. The quantities expressed in Columns H and J were obtained from Columns G and I, respectively, using a conversion factor of 1,200 lb/cy.

Source: Los Angeles County Department Of Public Works, January 1997

Class III landfill disposal capacity for each year of the planning period assuming no additional transformation capacity will be developed during the 15-year planning period. Additionally, the analysis assumes that Los Angeles County will be responsible for management of solid waste generated in Los Angeles County. As such, the analysis does not take credit for that portion of solid waste that is exported out of Los Angeles County nor does it consider any capacity for imported solid waste to Los Angeles County. The data provided in Table 4-4 excludes quantities of inert solid waste disposed of at unclassified landfills for the reason listed below.

- The trend toward increased recycling of construction and demolition waste has and will continue to result in substantial reductions in the quantities of inert waste in need of landfill disposal.

- Higher tipping fees at Class III landfills compared to tipping fees at unclassified landfills have and will continue to reduce/eliminate disposal of inert waste at Class III landfills.

- Based on the study conducted as part of the preparation of the CSE, the remaining permitted combined unclassified landfill capacity as of January 1, 1996, is estimated at approximately 53.1 million tons (35.4 million cubic yards). Table 4-3 lists permitted unclassified landfills in Los Angeles County existing in 1995, and the quantities and rates of inert waste disposed at these facilities in 1995. At the 1995 average rate of disposal of 1,770 tons per day (six days/week) at **permitted** unclassified landfills, this capacity would be mathematically exhausted in approximately 96 years. Additionally, in 1996 the Nu-Way Live Oak Landfill became permitted in 1996, further increasing the permitted capacity available for disposal of inert waste. As such, it is believed (as it was believed in 1990), that Los Angeles County currently has adequate permitted unclassified landfill disposal capacity, and that no inert waste capacity crisis currently exists. Based on the foregoing, the CSE's projected disposal capacity need for each year of the 15-year planning period exclude the need for unclassified landfills.

4.5 ADEQUACY OF EXISTING REMAINING PERMITTED DISPOSAL CAPACITY

4.5.1 Transformation Facilities

As previously indicated, currently two waste-to-energy facilities with a combined permitted daily capacity of 1,977 tons (six days/week) operate in Los Angeles County. Based on information provided in Chapter 3, it is expected that these two facilities will operate at their current permitted daily capacity during the planning period 1996-2010. Currently, owners/operators of these facilities have indicated that there are no plans for any increase in permitted daily capacity of these facilities even though waste-to-energy facilities conserve the greatest amount of landfill capacity.

The successful operation of the two existing transformation facilities in Los Angeles County have proven waste-to-energy transformation technology to be commercially, technically, and environmentally feasible while at the same time meeting stringent air quality standards. However, the development of additional transformation facilities in Los Angeles County during the 1996-2010 planning period is unlikely due to the high capital costs involved in developing these facilities, uncertainty caused by deregulation of the energy industry, the current low prices for power, and the unavailability of power contracts (see Chapters 3 and 5 for additional discussions regarding transformation facilities and technologies).

As such, the CSE assumes that the two existing waste-to-energy facilities will provide approximately 1,977 tons per day, six days per week (their combined maximum permitted daily capacity, equivalent to 616,800 tons per year), of the Los Angeles County permitted daily disposal capacity needs through the 15-year planning period. The remaining permitted disposal needs must be handled by the in-County Class III landfills and/or out-of-County solid waste disposal facilities.

4.5.2 Class III Landfills

As indicated in Section 4.3, the remaining permitted Class III capacity in this County as of December 31, 1995, was estimated at 102.3 million tons (187.9 million cubic yards) (Table 4-3). This included the Sunshine Canyon Landfill's capacity of 16.9 million tons which was fully permitted but not yet operational as of January 1996. As shown in Table 4-4, the cumulative permitted Class III landfill disposal capacity needs of 104.2 million tons will exceed the existing remaining permitted Class III landfill capacity by the year 2007. However, as indicated below, this simple comparison does not accurately predict when a shortfall in daily permitted disposal capacity will be experienced. Rather, one must look at the **maximum permitted daily capacity** available and compare it with the County's daily disposal requirements, with full consideration of the facilities' constraints, to determine when the shortfall in permitted daily capacity and permitted landfill 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 in order to be able to project as to when a **Disposal Capacity Shortfall** may occur.

4.5.2.1 Understanding the Disposal Capacity Shortfall Analysis

As indicated in Section 4.3, the Los Angeles County Department of Public Works has established a process for tracking solid waste disposal quantities at landfills and transformation facilities which is based on the Solid Waste Disposal Quantity Reporting System and the monthly Solid Waste Management Fee invoices submitted to the Department of Public Works by landfill and transformation facility operators. Based on this information

and that available by other regulatory agencies (including Disposal Reporting System data from counties receiving Los Angeles County's waste exports), the Department of Public Works has a continuing process of projecting waste disposal demand and available capacity.

The dynamics of the existing solid waste management system in Los Angeles County also result in the projection process being very dynamic. Consequently, projections of waste disposal demand and available capacity are based on reasonable assumptions that reflect past experience, use a conservative approach, and project various scenarios.

4.5.2.2 Definition of Disposal Capacity Shortfall

"Disposal Capacity Shortfall " is defined as the amount of solid waste in need of disposal which exceeds the daily permitted capacity.

The Disposal Capacity Shortfall Analysis allows a comparison of the projected date of daily permitted disposal capacity shortfall with the date additional daily capacity can be permitted. Past experience has shown that it takes three to seven years (or more) to permit an expansion of an existing Class III landfill and between seven and ten years (or more) to site a new Class III landfill facility. Additionally, as discussed above in Subsection 4.5.1 and in Chapter 5, the development of new transformation facilities is a remote possibility at this time. Thus, when a shortfall in **permitted daily capacity** at Class III landfills is predicted to occur in less time than it takes to permit new capacity, immediate action is necessary to ensure disposal services continue to be provided to residents and businesses without interruption and at reasonable cost.

4.5.2.3 Disposal Facility Restrictions

Factors which severely hinder the accessibility of available Class III landfill permitted disposal capacity include: expiration of the Land Use Permit, Waste Discharge Requirements Permit, Solid Waste Facility Permit, air quality permits; restrictions on the acceptance of waste generated outside jurisdictional and/or wasteshed 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 jurisdictional restrictions on waste disposal. For example, as discussed in Chapter 3 and further summarized in Table 4-3, Savage Canyon (Whittier) 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 crews; ; Puente Hills and Spadra Landfills are prohibited from receiving any waste originating from the City of Los Angeles and Orange County. Also, Calabasas and Scholl Canyon Landfills only accept solid waste generated within their defined wastesheds, and Brand Park and San Clemente Landfills are not open to the public.

Other critical factors which greatly impact a landfill operation are the daily quantity of solid waste that a disposal facility can accept (permitted daily capacity), and permitted disposal capacity as established by local jurisdictions/regulatory agencies. For example, as listed in Chapter 3, Table 3-2 through 3-25, by the year 2000, five major landfills could be closed due to capacity limitations, expiration of land use permit, other operational permits, and/or Court decisions. Under these circumstances, if no expansions of existing facilities occur or no new disposal facilities are developed, the County will experience shortfalls in permitted daily disposal capacity.

4.5.2.4 Disposal Capacity Shortfall Analysis

The disposal capacity shortfall analysis is presented in Tables 4-5 through 4-14. The analysis takes into consideration factors listed in Subsection 4.5.2.3 and considers disposal capacity needs for the County as a whole. The analysis provided in the CSE differs from previous analyses by the Los Angeles County Department of Public Works and the County Sanitation Districts of Los Angeles County by considering total disposal capacity at all disposal facilities Countywide. Past analyses:

a) Excluded minor Class III landfills since, as stated previously, their disposal capacity is relatively small compared to major Class III landfills, their use is restricted to serving only the host jurisdictions' disposal needs and/or is limited due to geographic isolation.

b) Differentiated between the Metropolitan area and the Antelope Valley area needs. This differentiation was made due to the fact that, in the past, hauling costs traditionally made it economically unfeasible for waste haulers to transport waste from the metropolitan area to the Antelope Valley area. Also, the Antelope Valley and Lancaster Landfills have been able to provide adequate disposal capacity for the needs of the Antelope Valley. However, it is expected that as landfill capacity available in the metropolitan area continues to be exhausted and as disposal costs rise in this area, the geographic separation of the Antelope Valley area will become a less important factor in determining how much solid waste from the metropolitan area is disposed at Antelope Valley landfills. Thus, the current disposal capacity shortfall analysis incorporates available capacity at all permitted disposal facilities in Los Angeles County including all minor Class III landfills and the two landfills in the Antelope Valley area.

c) Not accounted for import/export quantities of waste, since those quantities were not considered significant in the past, were thought to be equivalent (i.e., they canceled each other), and there was no accurate means of quantifying them.

The disposal capacity shortfall analysis considers five scenarios, which are briefly described below and are discussed in detail later in this section and in Section 4.6.3:

-- Scenario A. This scenario assumes that all Los Angeles County solid waste that must be disposed of will be managed at existing in-County permitted disposal facilities during the 15-year planning period. The analysis also assumes that no new transformation facilities, no new landfills, and no expansions of existing landfills will become operational within Los Angeles County during the planning period.

-- Scenario B. This scenario is similar to Scenario A, except that it considers the potential disposal capacity savings that may be realized at in-County landfills through the use of alternative daily cover materials.

-- Scenario C. This scenario considers use of existing in-County permitted disposal facilities and utilization of up to 6,000 tons per day of out-of-Los Angeles County landfills. The analysis also assumes that no new transformation facilities, no new landfills, and no expansions of existing landfills will become operational within Los Angeles County during the 15-year planning period.

-- Scenario D. This scenario assumes that all Los Angeles County solid waste that must be disposed of will be managed at existing in-County permitted disposal facilities during the 15-year planning period. Additionally, the scenario assumes that all proposed expansions of existing in-County landfills, as identified in Chapter 7, will be successfully permitted and developed to their full capacity, as proposed. This scenario also assumes that no new landfills will become operational during the 15-year planning period.

-- Scenario E. This scenario is similar to Scenario D, except that it assumes that all proposed new in-County landfills as identified in Chapter 7, in addition to the expansions of existing landfills, will be successfully permitted and developed to their full capacity, as proposed.

Scenarios A, B, and C are discussed in detail below and Scenarios D and E are discussed in detail in Section 4.6.3.

- **Scenario A -- No New Landfills or Expansion of Existing Landfills During the Planning Period**

  Scenario A, Table 4-5 provides a disposal capacity shortfall analysis for Los Angeles County based on the projected permitted Class III landfill capacity needs as shown in Table 4-4. This scenario assumes that all Los Angeles County solid waste that must be disposed of will be managed at existing in-County permitted disposal facilities during the 15-year planning period. The analysis also assumes that no new

TABLE 4-5
SCENARIO A
DISPOSAL CAPACITY SHORTFALL ANALYSIS
ASSUMING NO NEW OR EXPANDED LANDFILLS DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Daily Disposal Capacity Shortfall (Excess)
						Antelope Valley	Azusa	BKK	Bradley	Brand Park	Burbank	Calabasas	Chiquita	Lancaster	Lopez	Pebbly Beach	Puente Hills	San Clemente	Scholl	Spadra	Sunshine	Whittier	
										R	R	R			R		L	R	R	L		R	
						Expected daily tonnage 6 day average (tpd-6)																	
						Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)																		(tpd-6)
1995	49,133	25.00%	36,849			750	6,000	12,000	6,000	28	132	2,159	1,389	1,000	3,333	15	12,000	2	1,448	2,500	6,000	232	
						2.1	3.0	2.7	7.6	0.59	6.4	15	1.9	0.47	0.5	0.042	29.3	0.048	10.91	2.1	16.9	2.7	
1996	50,406	30.00%	35,285	1,977	33,308	1,400	6,000	12,000	6,000	27	129	2,107	1,389	1,000	3,333	15	12,000	2.0	1,413	2,500	6,000	227	(22,234)
						1.7	P	P	5.8	0.58	6.3	14.4	1.5	0.15	P	0.037	25.6	0.047	10.5	1.3	16.0	2.6	
1997	51,290	35.00%	33,339	1,977	31,362	1,400			6,000	26	125	2,039	1,389	1,000		15	12,000	1.9	1,367	2,500	6,000	219	(2,720)
						1.3			3.9	0.57	6.3	13.8	P	C		0.032	21.8	0.047	10.0	0.6	14.1	2.5	
1998	52,123	40.00%	31,274	1,977	29,297	1,400			6,000	25	121	1,970				15	12,000	1.9	1,321	2,500	6,000	212	(2,269)
						0.8			2.0	0.57	6.2	13.2				0.028	18.1	0.046	9.6	C	12.2	2.5	
1999	52,582	45.00%	28,920	1,977	26,943	1,400			6,000	24	116	1,889				15	12,000	1.8	1,266		6,000	203	(1,972)
						0.4			0.1	0.56	6.2	12.6				0.023	14.4	0.046	9.2		10.3	2.4	
2000	53,661	50.00%	26,830	1,977	24,853	1,400			C	24	112	1,833				15	12,000	1.7	1,229		6,000	197	2,042
						C				0.55	6.2	12.0				0.018	10.6	0.045	8.9		8.5	2.3	
2001	54,815	50.00%	27,407	1,977	25,430					24	115	1,872				15	12,000	1.8	1,256		6,000	201	3,946
										0.54	6.1	11.4				0.014	6.9	0.045	8.5		6.6	2.3	
2002	55,792	50.00%	27,896	1,977	25,919					25	117	1,906				15	12,000	1.8	1,278		6,000	205	4,372
										0.54	6.1	10.8				0.009	3.1	0.044	8.1		4.7	2.2	
2003	56,839	50.00%	28,420	1,977	26,443					25	119	1,941				15	12,000	1.8	1,302		6,000	209	4,830
										0.53	6.1	10.2				0.004	P	0.044	7.7		2.9	2.1	
2004	57,824	50.00%	28,912	1,977	26,935					25	121	1,975				15		1.9	1,325		6,000	212	17,260
										0.52	6.0	9.6				C		0.043	7.2		1.0	2.1	
2005	58,750	50.00%	29,375	1,977	27,398					26	123	2,007						1.9	1,346		6,000	216	17,679
										0.51	6.0	9.0						0.042	6.8		C	2.0	
2006	59,692	50.00%	29,846	1,977	27,869					26	125	2,039						1.9	1,367			219	24,090
										0.50	5.9	8.3						0.042	6.4			1.9	
2007	60,628	50.00%	30,314	1,977	28,337					27	127	2,071						1.9	1,389			223	24,499
										0.50	5.9	7.7						0.041	6.0			1.9	
2008	61,557	50.00%	30,778	1,977	28,801					27	129	2,103						2.0	1,410			226	24,905
										0.49	5.9	7.0						0.041	5.5			1.8	
2009	62,478	50.00%	31,239	1,977	29,262					27	131	2,134						2.0	1,431			229	25,307
										0.48	5.8	6.4						0.040	5.1			1.7	
2010	63,390	50.00%	31,695	1,977	29,718					28	133	2,165						2.0	1,452			233	25,705
										0.47	5.8	5.7						0.039	4.6			1.7	

ASSUMPTIONS:

1.- The Waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.
2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.
3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley. Azusa, BKK , Lancaster, Lopez Canyon, Pebbly Beach, Puente Hills, Spadra, and Sunshine landfills. The expected daily tonnage rate for Brand Park, Bradley, Burbank, Calabasas, Chiquita, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/95 to 12/31/95.
4.- On 10/3/96, the Azusa Land Reclamation Landfill ceased accepting non-inert solid waste for disposal, but continues to accept inert waste.
5.- "tpd-6": tons per day, 6 day per week average.

LEGEND:

C - Closed due to exhausted capacity
L - Does not accept waste from the city of Los Angeles and Orange County
P - Closed due to Permit Expiration
R - Restricted Wasteshed
CIWMB - County Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, February 1997.

transformation facilities, no new landfills, and no expansions of existing landfills will become operational within Los Angeles County during the 15-year planning period. Additionally, the analysis assumes full implementation of AB 939 waste diversion programs, and the achievement of the waste diversion mandates of 25 percent by 1995 and 50 percent by the year 2000 and thereafter through the year 2010. This last assumption is an important one whose implications must be clearly understood in the context of solid waste management planning. Jurisdictions in Los Angeles County are fully committed to achieving the 50 percent diversion goal by the year 2000. However, it is imperative to recognize the difficulty of achieving this goal. To date, no major city in the country has been documented to have achieved a diversion rate of 50 percent. Therefore, in planning solid waste disposal capacity, the goal should also be to provide reserve capacity to handle unanticipated disposal demands (which also include capacity to accommodate disaster-related waste).

Based on existing Class III landfills' permitted daily capacity (six days per week), average disposal rate in 1995 and factors discussed in Subsection 4.5.2.3, Table 4-5 (columns 1 through 17) lists how solid waste tonnages are distributed to each one of the 17 Class III landfills and the transformation facilities existing in 1995. The remaining permitted capacity at the end of each year of the planning period for each one of the Class III landfills is also shown in Columns 1 through 17 of Table 4-5. The 1995 remaining permitted capacity is based on data presented in Table 4-3. The last column in Table 4-5 shows projected daily disposal capacity shortfall (excess capacity is shown in parentheses). Table 4-6 provides a summary of Table 4-5, by excluding Columns 1 through 17.

The disposal capacity shortfall analysis as provided in Scenario A, Table 4-5, and Table 4-6, Summary, considers full use of the permitted capacity available at the recently approved expansion of the Sunshine Canyon Landfill for the second half of 1996 and thereafter.

Based on the Scenario A, Table 4-5 (or Table 4-6, Summary) analysis, a daily disposal capacity shortfall of approximately 2,000 tons per day (six days per week) will be experienced by 2000. After the year 2000, the shortfall increases gradually to over 4,800 tons per day (six days per week) by the year 2003. The shortfall would increase to over 17,000 tons per day in the year 2004 due to the expiration of the Puente Hills Landfill conditional use permit in November 2003.

It is important to note that reserve (excess) daily capacity of 22,200 tons in 1996 (shown in the right column of Table 4-5 and Table 4-6, Summary, as a number in parenthesis) would decrease to under 3,000 tons per day (six days per week) by 1997, which is substantially less than the minimum reserve daily capacity of 12,000 tons per day (equivalent to the largest single permitted facility) which is necessary to maintain a reliable and economical solid waste disposal system. It is also important

TABLE 4-6, SUMMARY
SCENARIO A
DISPOSAL CAPACITY SHORTFALL ANALYSIS
ASSUMING NO NEW OR EXPANDED LANDFILLS DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Landfill Disposal Need	Daily Disposal Capacity Shortfall (Excess)
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
1995	49,133	25.00%	36,849			
1996	50,406	30.00%	35,285	1,977	33,308	(22,234)
1997	51,290	35.00%	33,339	1,977	31,362	(2,720)
1998	52,123	40.00%	31,274	1,977	29,297	(2,269)
1999	52,582	45.00%	28,920	1,977	26,943	(1,972)
2000	53,661	50.00%	26,830	1,977	24,853	2,042
2001	54,815	50.00%	27,407	1,977	25,430	3,946
2002	55,792	50.00%	27,896	1,977	25,919	4,372
2003	56,839	50.00%	28,420	1,977	26,443	4,830
2004	57,824	50.00%	28,912	1,977	26,935	17,260
2005	58,750	50.00%	29,375	1,977	27,398	17,679
2006	59,692	50.00%	29,846	1,977	27,869	24,090
2007	60,628	50.00%	30,314	1,977	28,337	24,499
2008	61,557	50.00%	30,778	1,977	28,801	24,905
2009	62,478	50.00%	31,239	1,977	29,262	25,307
2010	63,390	50.00%	31,695	1,977	29,718	25,705

ASSUMPTIONS:

1.- The waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.
2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.

NOTES:

1.- The 1995 Disposal Tonnage Rates are based on permitted daily capacity and on the average daily tonnages for the period of 1/1/95 to 12/31/95.
2.- "tpd-6": tons per day, 6 day per week average.

Source: Los Angeles County Department of Public Works, February 1997.

to note that in the event that the Puente Hills and/or Sunshine Canyon Landfill expansions (with maximum permitted daily capacities of 12,000 and 6,000 tons per day-six days per week, respectively) had not occurred, a disposal capacity shortfall would have been expected in Los Angeles County as early as 1997.

- **Scenario B -- No New Landfills or Expansion of Existing Landfills During the Planning Period and Potential Alternative Daily Cover Capacity Savings**

Scenario B assumes that all Los Angeles County solid waste that must be disposed of will be managed at existing in-County permitted disposal facilities during the 15-year planning period, and that no new transformation facilities, no new landfills, and no expansions of existing landfills will become operational within Los Angeles County during this planning period. Additionally, the analysis considers disposal capacity savings that may be realized at in-County landfills through the use of alternative daily cover materials such as tarps and foams. The analysis is similar to Scenario A, and presented in Tables 4-7 and 4-8, Summary, in the same format as Tables 4-5 and 4-6, Summary, respectively.

The analysis assumes a 10 percent increase (see Chapter 5, Section 5.4.1 for detailed discussion) in the remaining permitted disposal capacity, beginning January 1, 1998, at all landfills in operation in Los Angeles County (except the Calabasas, Puente Hills, Scholl Canyon and Spadra Landfills, where green waste is currently being used as an alternative daily cover material). However, it should be noted that actual savings may be less than those assumed under this scenario, since currently the Antelope Valley, Bradley, Lancaster, and Savage Canyon landfills are using some sort of alternative daily cover material. Additionally, the use of alternative daily cover materials will provide no benefits for those landfills whose remaining permitted disposal capacity is controlled by the expiration of their land use permits and/or which would be expected to close before 1998 if no expansions are permitted. That is the case of the Chiquita Canyon and Puente Hills Landfills, whose land use permits will expire in November 1997 and November 2003, respectively.

Furthermore, the analysis recognizes that a majority of the permitted Class III landfills in Los Angeles County have permit limitations on the quantities of solid waste they can receive on a daily or weekly basis. Therefore, while the use of alternative daily cover materials will increase available disposal capacity in the long term, it would not cause an increase in the permitted daily disposal capacity.

The remaining permitted disposal capacities at the Calabasas, Puente Hills, Scholl Canyon and Spadra Landfills were not increased since those facilities currently have approved green waste alternative daily cover programs. These facilities are assumed to continue this program during the planning period. Due to the current lack of

adequate composting capacity within Los Angeles County and the need to create markets compost materials, the use of tarps and foams as alternative daily cover materials in-lieu-of green waste at these facilities may result in the disposal of some of the green waste thereby offsetting any potential capacity savings.

Table 4-7 and Table 4-8, Summary, present a disposal capacity shortfall analysis based on this scenario. The analysis considers achievement of the AB 939 waste diversion mandates of 25 percent by 1995 and 50 percent by the year 2000 and thereafter through the year 2010. This analysis also considers use of permitted available capacity at Sunshine Canyon Landfill expansion for the second half of 1996 and thereafter.

Based on this analysis, a permitted daily capacity shortfall of approximately 2,000 tons per day (six days per week) would occur by the year 2000. The shortfall would increase to 4,800 tons per day (six days per week) by 2003, and to over 17,000 tons per day by 2004, due to the November 2003 expiration of the conditional use permit for the Puente Hills Landfill. It should also be noted that under this scenario reserve daily capacity would fall below 3,000 tons per day (six days per week) by 1997.

A comparison of Table 4-5 and Table 4-7 indicates no major change between Scenarios A and B. The reason for this, as discussed above, is that the use of alternative daily cover materials will increase available disposal capacity in the long term, but it will not cause an increase in the permitted daily disposal capacity due to existing landfill waste shed boundaries, daily capacity limits, and other restrictions imposed by the facility owners/operators.

- **Scenario C -- No New Landfills or Expansion of Existing Landfills During the Planning Period and Utilization of Out-of-County Disposal Capacity**

Scenario C considers use of existing in-County permitted disposal facilities and utilization of up to 6,000 tons per day of out-of-Los Angeles County landfills. The analysis also assumes that no new transformation facilities, no new landfills, and no expansions of existing landfills will become operational within Los Angeles County during the 15-year planning period. The analysis is similar to Scenario A, and presented in Tables 4-9 and 4-10, Summary, in the same format as Tables 4-5 and 4-6, Summary, respectively. The analysis makes the following assumptions with respect to solid waste imports and exports:

TABLE 4-7
SCENARIO B
DISPOSAL CAPACITY SHORTFALL ANALYSIS
ASSUMING NO NEW OR EXPANDED IN-COUNTY LANDFILLS AND
ALTERNATIVE DAILY COVER CAPACITY SAVINGS DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and
assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Landfill Disposal Need	1	2	3	4	5 R	6 R	7 R	8	9	10 R	11	12 L	13 R	14 R	15 L	16	17 R	Daily Disposal Capacity Shortfall (Excess)
						Antelope Valley	Azusa	BKK	Bradley	Brand Park	Burbank	Calabasas	Chiquita	Lancaster	Lopez	Pebbly Beach	Puente Hills	San Clemente	Scholl	Spadra	Sunshine	Whittier	
						Expected daily tonnage 6 day average (tpd-6)																	
						Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)																		(tpd-6)
1995	49,133	25.00%	36,849			750	6,000	12,000	6,000	28	132	2,159	1,389	1,000	3,333	15	12,000	2	1,448	2,500	6,000	232	
						2.1	3.0	2.7	7.6	0.59	6.4	15	1.9	0.47	0.5	0.042	29.3	0.048	10.91	2.1	16.9	2.7	
1996	50,408	30.00%	35,285	1,977	33,308	1,400	6,000	12,000	6,000	27	129	2,107	1,389	1,000	3,333	15	12,000	2.0	1,413	2,500	6,000	227	(22,234)
						1.7	P	P	5.8	0.58	6.3	14.4	1.5	0.15	P	0.037	25.6	0.047	10.5	1.3	16.0	2.6	
1997	51,290	35.00%	33,339	1,977	31,362	1,400			6,000	26	125	2,039	1,389	1,000		15	12,000	1.9	1,367	2,500	6,000	219	(2,720)
						1.4			4.3	0.63	6.91	13.8	P	C		0.04	21.8	0.05	10.0	0.6	15.50	2.8	
1998	52,123	40.00%	31,274	1,977	29,297	1,400			6,000	25	121	1,970				15	12,000	1.9	1,321	2,500	6,000	212	(2,269)
						0.9			2.4	0.62	6.9	13.2				0.031	18.1	0.051	9.6	C	13.6	2.7	
1999	52,562	45.00%	28,920	1,977	26,943	1,400			6,000	24	116	1,889				15	12,000	1.8	1,266		6,000	203	(1,972)
						0.5			0.5	0.62	6.8	12.6				0.026	14.4	0.050	9.2		11.8	2.6	
2000	53,661	50.00%	26,830	1,977	24,853	1,400			C	24	112	1,833				15	12,000	1.7	1,229		6,000	197	2,042
						0.1				0.61	6.8	12.0				0.022	10.6	0.050	8.9		9.9	2.6	
2001	54,815	50.00%	27,407	1,977	25,430	C				24	115	1,872				15	12,000	1.8	1,256		6,000	201	3,946
										0.60	6.8	11.4				0.017	6.9	0.049	8.5		8.0	2.5	
2002	55,792	50.00%	27,896	1,977	25,919					25	117	1,906				15	12,000	1.8	1,278		6,000	205	4,372
										0.59	6.7	10.8				0.012	3.1	0.049	8.1		6.1	2.5	
2003	56,839	50.00%	28,420	1,977	26,443					25	119	1,941				15	12,000	1.8	1,302		6,000	209	4,830
										0.59	6.7	10.2				0.008	P	0.048	7.7		4.3	2.4	
2004	57,824	50.00%	28,912	1,977	26,935					25	121	1,975				15		1.9	1,325		6,000	212	17,260
										0.58	6.7	9.6				0.003		0.048	7.2		2.4	2.3	
2005	58,750	50.00%	29,375	1,977	27,398					26	123	2,007				15		1.9	1,346		6,000	216	17,664
										0.57	6.6	9.0				C		0.047	6.8		0.5	2.3	
2006	59,692	50.00%	29,846	1,977	27,869					26	125	2,039						1.9	1,367		C	219	24,090
										0.56	6.6	8.3						0.046	6.4			2.2	
2007	60,628	50.00%	30,314	1,977	28,337					27	127	2,071						1.9	1,389			223	24,499
										0.55	6.5	7.7						0.046	6.0			2.1	
2008	61,557	50.00%	30,778	1,977	28,801					27	129	2,103						2.0	1,410			226	24,905
										0.55	6.5	7.0						0.045	5.5			2.0	
2009	62,478	50.00%	31,239	1,977	29,262					27	131	2,134						2.0	1,431			229	25,307
										0.54	6.5	6.4						0.045	5.1			2.0	
2010	63,390	50.00%	31,695	1,977	29,718					28	133	2,165						2.0	1,452			233	25,705
										0.53	6.4	5.7						0.044	4.6			1.9	

ASSUMPTIONS:

1.- The Waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.
2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.
3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Azusa, BKK , Lancaster, Lopez Canyon, Pebbly Beach, Puente Hills, Spadra, and Sunshine landfills. The expected daily tonnage rate for Brand Park, Bradley, Burbank, Calabasas, Chiquita, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/95 to 12/31/95.
4.- On 10/3/96, the Azusa Land Reclamation Landfill ceased accepting non-inert solid waste for disposal, but continues to accept inert waste.
5.- The remaining permitted disposal capacities at the Antelope Valley, Bradley, Brand Park, Burbank, Pebbly Beach, San Clemente, Sunshine Canyon and Whittier Landfills were increased by 10 percent beginning January 1, 1998, on the assumption that these facilities will fully utilize ADC materials. The remaining permitted disposal capacities at the Calabasas, Puente Hills, Scholl and Spadra Landfills were not increased due to the existing use of green waste ADC materials at those Landfills.

Source: Los Angeles County Department of Public Works, February 1997.

LEGEND:

C - Closed due to exhausted capacity
L - Does not accept waste from the city of Los Angeles and Orange County
P - Closed due to Permit Expiration
R - Restricted Wasteshed
ADC - Alternative Daily Cover
CIWMB - County Integrated Waste Management Board
tpd-6 - tons per day, 6 day per week average.

TABLE 4-8, SUMMARY
SCENARIO B
DISPOSAL CAPACITY SHORTFALL ANALYSIS
ASSUMING NO NEW OR EXPANDED IN-COUNTY LANDFILLS AND
ALTERNATIVE DAILY COVER CAPACITY SAVINGS DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Landfill Disposal Need	Daily Disposal Capacity Shortfall (Excess)
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
1995	49,133	25.00%	36,849			
1996	50,406	30.00%	35,285	1,977	33,308	(22,234)
1997	51,290	35.00%	33,339	1,977	31,362	(2,720)
1998	52,123	40.00%	31,274	1,977	29,297	(2,269)
1999	52,582	45.00%	28,920	1,977	26,943	(1,972)
2000	53,661	50.00%	26,830	1,977	24,853	2,042
2001	54,815	50.00%	27,407	1,977	25,430	3,946
2002	55,792	50.00%	27,896	1,977	25,919	4,372
2003	56,839	50.00%	28,420	1,977	26,443	4,830
2004	57,824	50.00%	28,912	1,977	26,935	17,260
2005	58,750	50.00%	29,375	1,977	27,398	17,664
2006	59,692	50.00%	29,846	1,977	27,869	24,090
2007	60,628	50.00%	30,314	1,977	28,337	24,499
2008	61,557	50.00%	30,778	1,977	28,801	24,905
2009	62,478	50.00%	31,239	1,977	29,262	25,307
2010	63,390	50.00%	31,695	1,977	29,718	25,705

ASSUMPTIONS:

1.- The waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.
2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.
3.- The remaining permitted disposal capacity at some of the Landfills was increased by 10% beginning 1/1/98, on the assumption that these facilities will fully utilize ADC materials.

NOTES:

1.- The 1995 Disposal Tonnage Rates are based on permitted daily capacity and on the average daily tonnages for the period of 1/1/95 to 12/31/95.
2.- "tpd-6": tons per day, 6 day per week average.

Source: Los Angeles County Department of Public Works, February 1997.

a) Solid Waste Imports - The analysis assumes waste imports averaging 2,400 tons per day (six days/week) for 1996, which is an estimate based on disposal quantities for the first three quarters of 1996 averaging 2,620 tons per day and assumes substantially lower import quantities for the fourth quarter of 1996. The import quantities are assumed to decrease to 1,500 tons per day by 1997, and are gradually phased out to zero by the year 2000 and thereafter. It should be noted that, in reality, waste imports may never reach this level during the planning period since certain areas of Ventura County which are within the Calabasas Landfill waste shed have traditionally disposed from 200 to over 400 tons per day at the Landfill, and other facilities in the County may continue to receive some waste imports in the future.

b) Solid Waste Exports - The analysis assumes that waste exports to out-of-County facilities will increase from an average of under 170 tons per day (six days per week) in 1995 to an average of 2,000 tons per day by 1996, and to 3,500 tons per day for 1997 through the year 2003. Upon the expiration of the Puente Hills Landfill's conditional use permit in November 2003, waste exports are assumed to increase to 6,000 tons per day and are maintained at that level through the end of the planning period (the year 2010).

Table 4-9 or Table 4-10, Summary, present a disposal capacity shortfall analysis based on this scenario. The analysis considers achievement of the AB 939 waste diversion mandates of 25 percent by 1995 and 50 percent by the year 2000 and thereafter through the year 2010. This analysis also considers use of permitted available capacity at Sunshine Canyon Landfill expansion for the second half of 1996 and thereafter. Assumed quantities of imported waste are shown in the fifth column (from left to right) of Table 4-9, and export quantities are shown on the sixth column. As in the other scenarios, transformation facilities are assumed to operate at their maximum permitted daily capacity, and their combined capacity is shown in the seventh column of Table 4-9. The resulting in-County Class III landfill disposal need and disposal capacity shortfall (excess), once all of the above factors have been taken into account, are shown in the eighth and last columns of Table 4-9, respectively.

Based on this analysis, a daily disposal capacity shortfall of approximately 450 tons per day (six days per week) will be experienced by 2001. The shortfall would increase to 1,300 tons per day by 2003, and to over 11,000 tons per day by 2004 due to the expiration of the Puente Hills Landfill's conditional use permit in November 2003. It should be noted that under this scenario, reserve daily disposal capacity would fall below 5,000 tons per day by 1997.

TABLE 4-9
SCENARIO C
DISPOSAL CAPACITY SHORTFALL ANALYSIS
ASSUMING NO NEW OR EXPANDED IN-COUNTY LANDFILLS AND
UTILIZATION OF OUT-OF-COUNTY DISPOSAL FACILITIES DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and
assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total L. A. Co. Disposal Need	Imported Waste	Waste Exports to Out-of County Landfills	Maximum Daily Transformation Capacity	Total In-County Class III Landfill Disposal Need	1	2	3	4	5 R	6 R	7 R	8	9	10 R	11	12 L	13 R	14 R	15 L	16	17 R	Daily Disposal Capacity Shortfall (Excess)
								Antelope Valley	Azusa	BKK	Bradley	Brand Park	Burbank	Calabasas	Chiquita	Lancaster	Lopez	Pebbly Beach	Puente Hills	San Clemente	Scholl	Spadra	Sunshine	Whittier	
								Expected daily tonnage 6 day average (tpd-6)																	
								Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)																		(tpd-6)
1995	49,133	25.00%	36,849	2,481	167	1,835	37,328	750	6,000	12,000	6,000	28	132	2,159	1,389	1,000	3,333	15	12,000	2	1,448	2,500	6,000	232	
								2.1	3.0	2.7	7.6	0.59	6.4	15	1.9	0.47	0.5	0.042	29.3	0.048	10.91	2.1	16.9	2.7	
1996	50,406	30.00%	35,285	2,400	2,000	1,977	33,708	1,400	6,000	12,000	6,000	27	129	2,107	1,389	1,000	3,333	15	12,000	2.0	1,413	2,500	6,000	227	(21,834)
								1.7	P	P	5.8	0.58	6.3	14.4	1.5	0.15	P	0.037	25.6	0.047	10.5	1.3	16.0	2.6	
1997	51,290	35.00%	33,339	1,500	3,500	1,977	29,362	1,400			6,000	26	125	2,039	1,389	1,000		15	12,000	1.9	1,367	2,500	6,000	219	(4,720)
								1.3			3.9	0.57	6.3	13.8	P	C		0.032	21.8	0.047	10.0	0.6	14.1	2.5	
1998	52,123	40.00%	31,274	1,000	3,500	1,977	26,797	1,400			6,000	25	121	1,970				15	12,000	1.9	1,321	2,500	6,000	212	(4,769)
								0.8			2.0	0.57	6.2	13.2				0.028	18.1	0.046	9.6	C	12.2	2.5	
1999	52,582	45.00%	28,920	500	3,500	1,977	23,943	1,400			6,000	24	116	1,889				15	12,000	1.8	1,266		6,000	203	(4,972)
								0.4			0.1	0.56	6.2	12.6				0.023	14.4	0.046	9.2		10.3	2.4	
2000	53,661	50.00%	26,830	0	3,500	1,977	21,353	1,400			C	24	112	1,833				15	12,000	1.7	1,229		6,000	197	(1,456)
								C				0.55	6.2	12.0				0.018	10.6	0.045	8.9		8.5	2.3	
2001	54,815	50.00%	27,407	0	3,500	1,977	21,930					24	115	1,872				15	12,000	1.8	1,256		6,000	201	446
												0.54	6.1	11.4				0.014	6.9	0.045	8.5		6.6	2.3	
2002	55,792	50.00%	27,896	0	3,500	1,977	22,419					25	117	1,906				15	12,000	1.8	1,278		6,000	205	872
												0.54	6.1	10.8				0.009	3.1	0.044	8.1		4.7	2.2	
2003	56,839	50.00%	28,420	0	3,500	1,977	22,943					25	119	1,941				15	12,000	1.8	1,302		6,000	209	1,330
												0.53	6.1	10.2				0.004	P	0.044	7.7		2.9	2.1	
2004	57,824	50.00%	28,912	0	6,000	1,977	20,935					25	121	1,975				15		1.9	1,325		6,000	212	11,260
												0.52	6.0	9.6				C		0.043	7.2		1.0	2.1	
2005	58,750	50.00%	29,375	0	6,000	1,977	21,398					26	123	2,007						1.9	1,346		6,000	216	11,679
												0.51	6.0	9.0						0.042	6.8		C	2.0	
2006	59,692	50.00%	29,846	0	6,000	1,977	21,869					26	125	2,039						1.9	1,367			219	18,090
												0.50	5.9	8.3						0.042	6.4			1.9	
2007	60,628	50.00%	30,314	0	6,000	1,977	22,337					27	127	2,071						1.9	1,389			223	18,499
												0.50	5.9	7.7						0.041	6.0			1.9	
2008	61,557	50.00%	30,778	0	6,000	1,977	22,801					27	129	2,103						2.0	1,410			226	18,905
												0.49	5.9	7.0						0.041	5.5			1.8	
2009	62,478	50.00%	31,239	0	6,000	1,977	23,262					27	131	2,134						2.0	1,431			229	19,307
												0.48	5.8	6.4						0.040	5.1			1.7	
2010	63,390	50.00%	31,695	0	6,000	1,977	23,718					28	133	2,165						2.0	1,452			233	19,705
												0.47	5.8	5.7						0.039	4.6			1.7	

ASSUMPTIONS:

1.- The Waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.
2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.
3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Azusa, BKK , Lancaster, Lopez Canyon, Pebbly Beach, Puente Hills, Spadra, and Sunshine Landfills. The expected daily tonnage rate for Brand Park, Bradley, Burbank, Calabasas, Chiquita, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/95 to 12/31/95.
4.- On 10/3/96, the Azusa Land Reclamation Landfill cease accepting non-inert solid waste for disposal, but continues to accept inert waste.
5.- "tpd-6": tons per day, 6 day per week average.
6.- Import quantities for 1996 and beyond are assumed.
7.- Export quantities for 1996 and beyond are assumed.

LEGEND:

C - Closed due to exhausted capacity
L - Does not accept waste from the city of Los Angeles and Orange County
P - Closed due to Permit Expiration
R - Restricted Wasteshed
CIWMB - County Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, February, 1997.

TABLE 4-10, SUMMARY
SCENARIO C
DISPOSAL CAPACITY SHORTFALL ANALYSIS
ASSUMING NO NEW OR EXPANDED IN-COUNTY LANDFILLS AND UTILIZATION OF OUT-OF-COUNTY DISPOSAL FACILITIES DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total L. A. Co. Disposal Need	Imported Waste	Waste Exports to Out-of County Landfills	Maximum Daily Transformation Capacity	Landfill Disposal Need	Daily Disposal Capacity Shortfall (Excess)
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
1995	49,133	25.00%	36,849	2,481	167	1,835	37,328	
1996	50,406	30.00%	35,285	2,400	2,000	1,977	33,708	(21,834)
1997	51,290	35.00%	33,339	1,500	3,500	1,977	29,362	(4,720)
1998	52,123	40.00%	31,274	1,000	3,500	1,977	26,797	(4,769)
1999	52,582	45.00%	28,920	500	3,500	1,977	23,943	(4,972)
2000	53,661	50.00%	26,830	0	3,500	1,977	21,353	(1,458)
2001	54,815	50.00%	27,407	0	3,500	1,977	21,930	446
2002	55,792	50.00%	27,896	0	3,500	1,977	22,419	872
2003	56,839	50.00%	28,420	0	3,500	1,977	22,943	1,330
2004	57,824	50.00%	28,912	0	6,000	1,977	20,935	11,260
2005	58,750	50.00%	29,375	0	6,000	1,977	21,398	11,679
2006	59,692	50.00%	29,846	0	6,000	1,977	21,869	18,090
2007	60,628	50.00%	30,314	0	6,000	1,977	22,337	18,499
2008	61,557	50.00%	30,778	0	6,000	1,977	22,801	18,905
2009	62,478	50.00%	31,239	0	6,000	1,977	23,262	19,307
2010	63,390	50.00%	31,695	0	6,000	1,977	23,718	19,705

ASSUMPTIONS:

1.- The waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.
2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.
3.- Import and Export quantities for 1996 and beyond are assumed.

NOTES:

1.- The 1995 Disposal Tonnage Rates are based on permitted daily capacity and on the average daily tonnages for the period of January 1, 1995 to December 31, 1995.
2.- "tpd-6": tons per day, 6 day per week average.

Source: Los Angeles County Department of Public Works, February 1997.

Based on the preceding analysis, Scenarios A, B, and C, a shortfall in daily permitted disposal capacity would occur prior to the year 2010. Therefore, in order to satisfy the disposal capacity requirements of AB 939 for the 15-year planning period, additional disposal capacity must be identified.

Chapter 7 describes the site identification process and provides a detailed description of in-County potential landfill expansions and potential new landfill sites which are necessary to meet the disposal capacity requirements. The adequacy of the additional disposal capacity identified in Chapter 7 is discussed in detail in the following section. In addition to in-County potential Class III landfill capacity identified in Chapter 7 and discussed in Section 4.6 of this chapter, Chapter 9 of the CSE describes out-of-County disposal facilities (existing and potential) that can be used by jurisdictions in Los Angeles County during the 15-year planning period.

4.6 ADEQUACY OF PROPOSED IN-COUNTY CLASS III LANDFILL DISPOSAL CAPACITY

4.6.1 Introduction

As discussed in Chapter 1, Subsection 1.4.2, in the mid-1980s, Los Angeles County experienced unprecedented population growth and associated increases in waste generation. This together with the lack of development of those transformation (waste-to-energy) facilities identified in the CoSWMP, caused a rapid depletion of available landfill disposal capacity. This situation prompted the Los Angeles County Board of Supervisors to initiate a major Countywide planning effort to avert a "garbage crisis", which culminated with the adoption of the Los Angeles County Solid Waste Management Action Plan in April 1988. The Action Plan is an integrated regional approach to managing solid waste, incorporating source reduction, recycling, composting, household hazardous waste, and public education/awareness programs. The Action Plan also recognized that landfilling would be an essential component of an integrated solid waste management system in the foreseeable future since the disposal of solid wastes which cannot be diverted is an essential public service. The Action Plan provides a long-range solution to the solid waste disposal capacity needs of Los Angeles County through the following goals:

- Develop 50 years of permitted in-County solid waste disposal capacity to be held in public ownership, with appropriate land use protections for use through public, private, or public/private joint venture operation.

- Perform detailed environmental studies on six identified potential new landfill sites.

- Support expansion of existing landfills provided it is technically and environmentally feasible.

The alternative faced by Los Angeles County Board of Supervisors at the time was to shift the responsibility for protection of public health and safety by providing adequate solid waste disposal capacity to neighboring counties and states. The situation currently facing the County is, in essence, no different today than it was in 1988. To ensure protection of public health and safety, the jurisdictions in Los Angeles County must strive to provide for the disposal needs of their residents through in-County disposal facilities, if environmentally safe and technically feasible. Failing to do this would constitute delegation of this essential public service to adjacent counties and states.

The enactment of the California Integrated Waste Management Act together with its requirement to address the disposal needs of Los Angeles County for a 15-year planning period, has underscored the importance of disposal capacity as an essential component of an integrated waste management system.

4.6.2 Out-of-County Disposal

While the goal of jurisdictions in Los Angeles County is to provide in-County disposal capacity to serve the needs of their residents, past and current experience in siting new landfills and/or expansions of existing landfills underscores the magnitude of the challenge facing Los Angeles County. Delays associated with the environmental review process and litigation (which has become an inevitable component of the planning process) have increased the time required to permit a landfill expansion, in excess of seven years, and more than ten years to permit a new landfill. Thus, more than ten years advance planning is required to maintain appropriate disposal capacity in the County, as well as maximizing all available disposal options 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 Los Angeles County have recognized the need for out-of-County disposal capacity to supplement and extend the life of in-County disposal capacity. In fact, it appears that out-of-County disposal will be necessary to supplement Los Angeles County's 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. For this reason, Los Angeles County considers interjurisdictional flow control measures and/or laws to be detrimental to its efforts to provide for the long-term disposal needs of its residents.

4.6.3 Adequacy of Potential in-County Disposal Capacity

As indicated in Subsection 4.6.1, the CSE's primary goal is to secure in-County disposal capacity, if feasible. A number of scenarios can be considered to determine how Los Angeles County can meet its solid waste disposal needs for the 15-year planning period. For the purpose of the CSE, Scenarios D and E provide alternative analyses as to whether Los Angeles County can provide for its State-mandated 15-years disposal capacity by

utilizing existing in-County disposal facilities, developing new in-County disposal facilities, and/or expanding existing facilities as identified in Chapter 7.

- **Scenario D - Existing In-County Capacity and Landfill Expansions Only - No New Landfills**

  Scenario D assumes that all Los Angeles County solid waste that must be disposed of will be managed at existing in-County permitted disposal facilities during the 15-year planning period. The scenario also assumes that all proposed expansions of existing in-County landfills as identified in Chapter 7 will be successfully permitted and developed to their full capacity, as proposed. Additionally, the analysis assumes that no new in-County Class III landfills will become operational during the 15-year planning period. The analysis is similar to Scenario A, and presented in Tables 4-11 and 4-12, Summary, in the same format as Tables 4-5 and 4-6, Summary, respectively. In the analysis, best judgment was used to project when additional disposal capacity would be made available based on information provided in Chapter 7, Tables 7-5 through 7-10.

  Table 4-11 and Table 4-12, Summary, present a Disposal Capacity Shortfall analysis based on this scenario. The analysis considers achievement of the AB 939 waste diversion mandates of 25 percent by 1995 and 50 percent by the year 2000 and thereafter through the year 2010. This analysis also considers use of permitted available capacity at the Sunshine Canyon Landfill County expansion beginning the second half of 1996 and thereafter. Additionally, the analysis assumes that the proposed Chiquita Canyon and Lancaster Landfill expansions will receive approval and will become operational in 1997, and that the City of Los Angeles will approve the proposed City/County expansion of the Sunshine Canyon Landfill and the expanded facility will become operational in 1999.

  Based on this analysis, no permitted daily capacity shortfall would occur within the 15-year planning period. However, it should be noted that under this scenario, reserve daily disposal capacity would fall from about 10,000 tons per day (six days per week) in the year 2000 to less than 1,000 tons per day (six days per week) by 2010.

  It should also be noted that the potential expansion of the Scholl Canyon Landfill described in Chapter 7 does not appear in Table 4-11 since the existing remaining permitted disposal capacity at the facility is not expected to be exhausted within the CSE's 15-year planning period.

TABLE 4-11
SCENARIO D
DISPOSAL CAPACITY SHORTFALL ANALYSIS
UTILIZING EXISTING LANDFILLS , AND ASSUMING DEVELOPMENT OF ALL PROPOSED EXPANSIONS DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and
assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Daily Disposal Capacity Shortfall (Excess)
										R	R	R			R		L	R	R	L		R	
						Antelope Valley	Azusa	BKK	Bradley	Brand Park	Burbank	Calabasas	Chiquita*	Lancaster*	Lopez	Pebbly Beach	Puente Hills*	San Clemente	Scholl	Spadra	Sunshine	Whittier	
						Expected daily tonnage 6 day average (tpd-6)																	
						Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)																		(tpd-6)
1995	49,133	25.00%	36,849			750	6,000	12,000	6,000	28	132	2,159	1,389	1,000	3,333	15	12,000	2	1,448	2,500	6,000	232	
						2.1	3.0	2.7	7.6	0.59	6.4	15	1.9	0.47	0.5	0.042	29.3	0.048	10.91	2.1	16.9	2.7	
1996	50,406	30.00%	35,285	1,977	33,308	1,400	6,000	12,000	6,000	27	129	2,107	1,389	1,000	3,333	15	12,000	2.0	1,413	2,500	6,000	227	(22,234)
						1.7	1.1	P	5.8	0.58	6.3	14.4	1.5	0.15	P	0.037	25.6	0.047	10.5	1.3	16.0	2.6	
1997	51,290	35.00%	33,339	1,977	31,362	1,400	6,000		6,000	26	125	2,039	1,389	1,700		15	12,000	1.9	1,367	2,500	6,000	219	(9,420)
						1.3	C		3.9	0.57	6.3	13.8	E 19.4	E 10.12		0.032	21.8	0.047	10.0	0.6	14.1	2.5	
1998	52,123	40.00%	31,274	1,977	29,297	1,400			6,000	25	121	1,970	5,000	1,700		15	12,000	1.9	1,321	2,500	6,000	212	(8,969)
						0.8			2.0	0.57	6.2	13.2	17.8	9.59		0.028	18.1	0.046	9.6	C	12.2	2.5	
1999	52,582	45.00%	28,920	1,977	26,943	1,400			6,000	24	116	1,889	5,000	1,700		15	12,000	1.8	1,266		11,000	203	(13,672)
						E 0.4			0.1	0.56	6.2	12.6	16.2	9.06		0.023	14.4	0.046	9.2		E 83.8	2.4	
2000	53,661	50.00%	26,830	1,977	24,853	1,800			C	24	112	1,833	5,000	1,700		15	12,000	1.7	1,229		11,000	197	(10,058)
						6.2				0.55	6.2	12.0	14.7	8.53		0.018	10.6	0.045	8.9		80.4	2.3	
2001	54,815	50.00%	27,407	1,977	25,430	1,800				24	115	1,872	5,000	1,700		15	12,000	1.8	1,256		11,000	201	(9,554)
						5.7				0.54	6.1	11.4	13.1	8.00		0.014	6.9	0.045	8.5		76.9	2.3	
2002	55,792	50.00%	27,896	1,977	25,919	1,800				25	117	1,906	5,000	1,700		15	12,000	1.8	1,278		11,000	205	(9,128)
						5.1				0.54	6.1	10.8	11.6	7.47		0.009	3.1	0.044	8.1		73.5	2.2	
2003	56,839	50.00%	28,420	1,977	26,443	1,800				25	119	1,941	5,000	1,700		15	12,000	1.8	1,302		11,000	209	(8,670)
						4.5				0.53	6.1	10.2	10.0	6.94		0.004	E 37.0	0.044	7.7		70.1	2.1	
2004	57,824	50.00%	28,912	1,977	26,935	1,800				25	121	1,975	5,000	1,700		15	12,000	1.9	1,325		11,000	212	(8,240)
						4.0				0.52	6.0	9.6	8.4	6.41		C	33.3	0.043	7.2		66.6	2.1	
2005	58,750	50.00%	29,375	1,977	27,398	1,800				26	123	2,007	5,000	1,700			12,000	1.9	1,346		11,000	216	(7,821)
						3.4				0.51	6.0	9.0	6.9	5.88			29.5	0.042	6.8		63.2	2.0	
2006	59,692	50.00%	29,846	1,977	27,869	1,800				26	125	2,039	5,000	1,700			12,000	1.9	1,367		11,000	219	(7,410)
						2.8				0.50	5.9	8.3	5.3	5.35			25.8	0.042	6.4		59.8	1.9	
2007	60,628	50.00%	30,314	1,977	28,337	1,800				27	127	2,071	5,000	1,700			12,000	1.9	1,389		11,000	223	(7,001)
						2.3				0.50	5.9	7.7	3.8	4.82			22.0	0.041	6.0		56.3	1.9	
2008	61,557	50.00%	30,778	1,977	28,801	1,800				27	129	2,103	5,000	1,700			12,000	2.0	1,410		11,000	226	(6,595)
						1.7				0.49	5.9	7.0	2.2	4.29			18.3	0.041	5.5		52.9	1.8	
2009	62,478	50.00%	31,239	1,977	29,262	1,800				27	131	2,134	5,000	1,700			12,000	2.0	1,431		11,000	229	(6,193)
						1.2				0.48	5.8	6.4	0.6	3.76			14.5	0.040	5.1		49.5	1.7	
2010	63,390	50.00%	31,695	1,977	29,718	1,800				28	133	2,165	C	1,700			12,000	2.0	1,452		11,000	233	(795)
						0.6				0.47	5.8	5.7		3.23			10.8	0.039	4.6		46.0	1.7	

ASSUMPTIONS:

1.- The Waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.
2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.
3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Azusa, BKK , Lancaster, Lopez Canyon, Pebbly Beach, Puente Hills, Spadra, and Sunshine landfills. The expected daily tonnage rate for Brand Park, Bradley, Burbank, Calabasas, Chiquita, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/95 to 12/31/95.
4.- On 10/3/96, the Azusa Land Reclamation Landfill ceased accepting non-inert solid, but continues to accept inert waste.
5.- "tpd-6": tons per day, 6 day per week average.

LEGEND:

C - Closed due to exhausted capacity
E - Expansion becomes effective
L - Does not accept waste from the city of Los Angeles and Orange County
P - Closed due to Permit Expiration
R - Restricted Wasteshed
CIWMB - County Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, February 1997.

TABLE 4-12, SUMMARY
SCENARIO D
DISPOSAL CAPACITY SHORTFALL ANALYSIS
UTILIZING EXISTING LANDFILLS, AND ASSUMING DEVELOPMENT OF ALL PROPOSED EXPANSIONS DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Landfill Disposal Need	Daily Disposal Capacity Shortfall (Excess)
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
1995	49,133	25.00%	36,849			
1996	50,406	30.00%	35,285	1,977	33,308	(22,234)
1997	51,290	35.00%	33,339	1,977	31,362	(9,420)
1998	52,123	40.00%	31,274	1,977	29,297	(8,969)
1999	52,582	45.00%	28,920	1,977	26,943	(13,672)
2000	53,661	50.00%	26,830	1,977	24,853	(10,058)
2001	54,815	50.00%	27,407	1,977	25,430	(9,554)
2002	55,792	50.00%	27,896	1,977	25,919	(9,128)
2003	56,839	50.00%	28,420	1,977	26,443	(8,670)
2004	57,824	50.00%	28,912	1,977	26,935	(8,240)
2005	58,750	50.00%	29,375	1,977	27,398	(7,821)
2006	59,692	50.00%	29,846	1,977	27,869	(7,410)
2007	60,628	50.00%	30,314	1,977	28,337	(7,001)
2008	61,557	50.00%	30,778	1,977	28,801	(6,595)
2009	62,478	50.00%	31,239	1,977	29,262	(6,193)
2010	63,390	50.00%	31,695	1,977	29,718	(795)

ASSUMPTIONS:

1.- The waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.

2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.

NOTES:

1.- The 1995 Disposal Tonnage Rates are based on permitted daily capacity and on the average daily tonnages for the period of 1/1/95 to 12/31/95.

2.- "tpd-6": tons per day, 6 day per week average.

Source: Los Angeles County Department of Public Works, February 1997.

- **Scenario E - All Proposed Landfill Expansions and New Landfills Become Operational**

Scenario E assumes that all Los Angeles County solid waste that must be disposed of will be managed at existing in-County permitted disposal facilities during the 15-year planning period. Additionally, the scenario assumes the successful permitting and development of all in-County landfill expansions and new landfill sites as identified in Chapter 7. The analysis is similar to Scenario A, and presented in Tables 4-13 and 4-14, Summary, in the same format as Tables 4-5 and 4-6, Summary, respectively. In the analysis, best judgment was used to project when additional disposal capacity would be made available based on information provided in Chapter 7, Tables 7-2 through 7-9.

Table 4-13 and Table 4-14, Summary, present a Disposal Capacity Shortfall analysis based on this scenario. The analysis considers achievement of the AB 939 waste diversion mandates of 25 percent by 1995 and 50 percent by the year 2000 and thereafter through the year 2010.

Based on this analysis, no permitted daily capacity shortfall would occur within the 15-year planning period. Under this scenario, adequate reserve daily disposal capacity is provided during the planning period, with the proposed landfill expansions adequately meeting the Class III disposal needs of Los Angeles County in the short term and proposed new landfills meeting the projected disposal needs in the long term.

4.7 CONCLUSIONS

The preceding discussions have demonstrated that the potential expansion of existing landfills and the potential new landfills identified in Chapter 7 address the disposal need requirements of the jurisdictions in Los Angeles County for the 15-year planning period.

However, based on past and current experience in siting new or expanded capacity, it must be recognized that many (or all) of the sites may encounter strong opposition during the permitting process, and that not all of the sites may be approved. Even if a site is successfully permitted, the total approved capacity and daily capacity may be substantially less than requested by the project proponent.

Therefore, based on the Disposal Capacity Shortfall analyses and the foregoing discussion, the following can be concluded:

TABLE 4-13
SCENARIO E
DISPOSAL CAPACITY SHORTFALL ANALYSIS
UTILIZING EXISTING LANDFILLS, AND ASSUMING DEVELOPMENT OF ALL PROPOSED EXPANSIONS, AND PROPOSED NEW SITES DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and
assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Daily Disposal Capacity Shortfall (Excess)
						EXISTING LANDFILLS																	POTENTIAL NEW LANDFILLS		
						Antelope* Valley	Azusa	BKK	Bradley	R Brand Park	R Burbank	R Calabasas	Chiquita*	Lancaster*	R Lopez*	Pebbly Beach	L Puente Hills*	R San Clemente	R Scholl	L Spadra	Sunshine*	R Whittier	Blind	Elsmere	
						Expected daily tonnage 6 day average (tpd-6)																			
						Remaining permitted landfill capacity at year's end, Million Tons																			
1995	49,133	25.00%	36,849			750	6,000	12,000	6,000	28	132	2,159	1,389	1,000	3,333	15	12,000	2	1,448	2,500	6,000	232			
						2.1	3.0	2.7	7.6	0.59	6.4	15	1.9	0.47	0.5	0.042	29.3	0.048	10.91	2.1	16.9	2.7			
1996	50,406	30.00%	35,285	1,977	33,308	1,400	6,000	12,000	6,000	27	129	2,107	1,389	1,000	3,333	15	12,000	2.0	1,413	2,500	6,000	227			(22,234)
						1.7	1.1	P	5.8	0.58	6.3	14.4	1.5	0.15	P	0.037	25.6	0.047	10.5	1.4	16.0	2.6			
1997	51,290	35.00%	33,339	1,977	31,362	1,400	6,000		6,000	26	125	2,039	1,389 E	1,700 E		15	12,000	1.9	1,367	2,500	6,000	219			(9,420)
						1.3	C		3.9	0.58	6.3	13.8	19.4	10.12		0.032	21.8	0.047	10.0	0.6	14.1	2.5			
1998	52,123	40.00%	31,274	1,977	29,297	1,400			6,000	25	121	1,970	5,000	1,700		15	12,000	1.9	1,321	2,500	6,000	212			(8,969)
						0.8			2.0	0.57	6.2	13.2	17.8	9.59		0.028	18.1	0.046	9.6	C	12.2	2.5			
1999	52,582	45.00%	28,920	1,977	26,943	1,400			6,000	24	116	1,889	5,000	1,700		15	12,000	1.8	1,266		11,000 E	203			(13,672)
						0.4			0.1	0.56	6.2	12.6	16.2	9.06		0.023	14.4	0.046	9.2		83.8	2.4		80	
2000	53,661	50.00%	26,830	1,977	24,853	1,800 E			C	24	112	1,833	5,000	1,700		15	12,000	1.7	1,229		11,000	197		16,500	(26,558)
						6.2				0.55	6.2	12.0	14.7	8.533		0.018	10.6	0.045	8.9		80.4	2.3		74.9	
2001	54,815	50.00%	27,407	1,977	25,430	1,800				24	115	1,872	5,000	1,700		15	12,000	1.8	1,255		11,000	201		16,500	(26,054)
						5.7				0.55	6.1	11.4	13.1	8.00		0.014	6.9	0.045	8.5		76.9	2.3		69.7	
2002	55,792	50.00%	27,896	1,977	25,919	1,800				25	117	1,906	5,000	1,700		15	12,000	1.8	1,278		11,000	205		16,500	(25,628)
						5.1				0.54	6.1	10.8	11.6	7.47		0.009	3.1	0.044	8.1		73.5	2.2		64.6	
2003	56,839	50.00%	28,420	1,977	26,443	1,800				25	119	1,941	5,000	1,700		15	12,000 E	1.8	1,302		11,000	209		16,500	(25,170)
						4.5				0.53	6.1	10.2	10.0	6.94		0.004	37.0	0.044	7.7		70.1	2.1		59.4	
2004	57,824	50.00%	28,912	1,977	26,935	1,800				25	121	1,975	5,000	1,700		15	12,000	1.9	1,325		11,000	212		16,500	(24,740)
						4.0				0.52	6.0	9.6	8.4	6.41		C	33.3	0.043	7.2		66.6	2.1	130	54.3	
2005	58,750	50.00%	29,375	1,977	27,398	1,800				26	123	2,007	5,000	1,700			12,000	1.9	1,346		11,000	216	16,500	16,500	(40,821)
						3.4				0.51	6.0	9.0	6.9	5.88			29.5	0.042	6.8		63.2	2.0	124.9	49.1	
2006	59,692	50.00%	29,846	1,977	27,869	1,800				26	125	2,039	5,000	1,700			12,000	1.9	1,367		11,000	219	16,500	16,500	(40,410)
						2.9				0.51	5.9	8.3	5.3	5.35			25.8	0.042	6.4		59.8	1.9	119.7	44.0	
2007	60,628	50.00%	30,314	1,977	28,337	1,800				27	127	2,071	5,000	1,700			12,000	1.9	1,389		11,000	223	16,500	16,500	(40,001)
						2.3				0.50	5.9	7.7	3.8	4.82			22.0	0.041	6.0		56.3	1.9	114.6	38.8	
2008	61,557	50.00%	30,778	1,977	28,801	1,800				27	129	2,103	5,000	1,700			12,000	2.0	1,410		11,000	226	16,500	16,500	(39,595)
						1.7				0.49	5.9	7.0	2.2	4.29			18.3	0.041	5.5		52.9	1.8	109.4	33.7	
2009	62,478	50.00%	31,239	1,977	29,262	1,800				27	131	2,134	5,000	1,700			12,000	2.0	1,431		11,000	229	16,500	16,500	(39,193)
						1.2				0.48	5.8	6.4	0.6	3.76			14.5	0.040	5.1		49.5	1.7	104.3	28.5	
2010	63,390	50.00%	31,695	1,977	29,718	1,800				28	133	2,165	C	1,700			12,000	2.0	1,452		11,000	233	16,500	16,500	(33,795)
						0.6				0.47	5.8	5.7		3.23			10.8	0.039	4.6		46.0	1.7	99.1	23.4	

ASSUMPTIONS:

1.- The Waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.
2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.
3.- Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Azusa, BKK , Lancaster, Lopez Canyon, Pebbly Beach, Puente Hills, Spadra, and Sunshine landfills. The expected daily tonnage rate for Brand Park, Bradley, Burbank, Calabasas, Chiquita, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/95 to 12/31/95.
4.- On 10/3/96, the Azusa Land Reclamation Landfill ceased accepting non-inert solid, but continues to accept iner waste.
5.- "tpd-6": tons per day, 6 day per week average.

LEGEND:

C - Closed due to exhausted capacity
E - Expansion becomes effective
L - Does not accept waste from the city of Los Angeles and Orange County
P - Closed due to Permit Expiration
R - Restricted Wasteshed
CIWMB - County Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, February 1997.

TABLE 4-14, SUMMARY
SCENARIO E
DISPOSAL CAPACITY SHORTFALL ANALYSIS
UTILIZING EXISTING LANDFILLS, AND ASSUMING DEVELOPMENT OF ALL PROPOSED EXPANSIONS AND PROPOSED NEW SITES DURING THE PLANNING PERIOD
Based on January 1, 1995 through December 31, 1995 six-day average tonnages and assuming AB 939 diversion is fully implemented
Los Angeles County Countywide Siting Element

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Landfill Disposal Need	Daily Disposal Capacity Shortfall (Excess)
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
1995	49,133	25.00%	36,849			
1996	50,406	30.00%	35,285	1,977	33,308	(22,234)
1997	51,290	35.00%	33,339	1,977	31,362	(9,420)
1998	52,123	40.00%	31,274	1,977	29,297	(8,969)
1999	52,582	45.00%	28,920	1,977	26,943	(13,672)
2000	53,661	50.00%	26,830	1,977	24,853	(26,558)
2001	54,815	50.00%	27,407	1,977	25,430	(26,054)
2002	55,792	50.00%	27,896	1,977	25,919	(25,628)
2003	56,839	50.00%	28,420	1,977	26,443	(25,170)
2004	57,824	50.00%	28,912	1,977	26,935	(24,740)
2005	58,750	50.00%	29,375	1,977	27,398	(40,821)
2006	59,692	50.00%	29,846	1,977	27,869	(40,410)
2007	60,628	50.00%	30,314	1,977	28,337	(40,001)
2008	61,557	50.00%	30,778	1,977	28,801	(39,595)
2009	62,478	50.00%	31,239	1,977	29,262	(39,193)
2010	63,390	50.00%	31,695	1,977	29,718	(33,795)

ASSUMPTIONS:

1.- The waste Generation Rate was estimated using the CIWMB's adjustment methodology, utilizing population and economic projections available from the State Department of Finance and the Southern California Association of Governments.
2.- Diversion Rate 25% in 1995, increase to 50% by 2000 and thereafter.

NOTES:

1.- The 1995 Disposal Tonnage Rates are based on permitted daily capacity and on the average daily tonnages for the period of 1/1/95 to 12/31/95.
2.- "tpd-6": tons per day, 6 day per week average.

Source: Los Angeles County Department of Public Works, February 1997.

- 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 insure that the provision of solid waste disposal services remain uninterrupted during the planning period and beyond. This may include development of transformation facilities, increased recycling and other diversion efforts, and development of the infrastructure necessary for access to out-of-County disposal facilities.

- The anticipated disposal needs of Los Angeles County cannot be met by pursuing a single alternative (i.e., landfill expansions, new landfills, transformation technologies out-of-County disposal, etc.). Jurisdictions in Los Angeles must work on all fronts simultaneously in order to avert daily disposal capacity shortfalls in the medium and long term. As a part of this effort, economic incentives must be formulated to promote development of transformation facilities, a viable alternative to landfill technology.

- Since it takes up to 10 years or more to permit new or expanded capacity, 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 Los Angeles County.