

2006 Annual Report

Countywide Summary Plan and Siting Element



*“Our **purpose** is to improve the quality of life in Los Angeles County by providing responsive, efficient and high quality public services that promote the self-sufficiency, well-being and prosperity of individuals, families, businesses and communities.”*

~Los Angeles County Vision Statement

Martin Aiyetiwa
County of Los Angeles, Department of Public Works
November 2008

Role of Public Works

- Advise Board of Supervisors on waste management issues
- Develop and administer the Countywide Siting Element (Disposal Plan)
 - o Plan for Countywide disposal needs (15 years)
 - o Analyze annual disposal capacity need



Solid Waste Management Planning

Countywide Siting Element Goals and Policies

- Support in-County disposal capacity
- Use out-of-County disposal capacity
- Support in-County infrastructure for exporting solid waste (transfer & rail loading)
- Promote alternatives to landfilling and incineration



Sunshine Canyon Landfill

2006 Annual Report Overview

Section 1: Countywide Summary Plan Assessment

- Revisions to Summary Plan
- Regional Issues

Section 2: Countywide Siting Element Assessment

- Changes in Permitted Capacity
- Strategy for Maintaining Adequate Disposal Capacity
- Waste Plan Conformance

Countywide Summary Plan Assessment

Revisions to the Summary Plan

- Changes in goals and policies
- Update on Countywide programs
- Changes in the Countywide solid waste management system
- Summary Plan is currently being updated



Countywide Summary Plan Assessment

Regional Issues

- Solid waste management
- Processing capacity
- Markets for recovered materials



Countywide Summary Plan Assessment

Regional Issues Continued

- State Disposal Reporting System
- AB 939 compliance
- Waste reduction



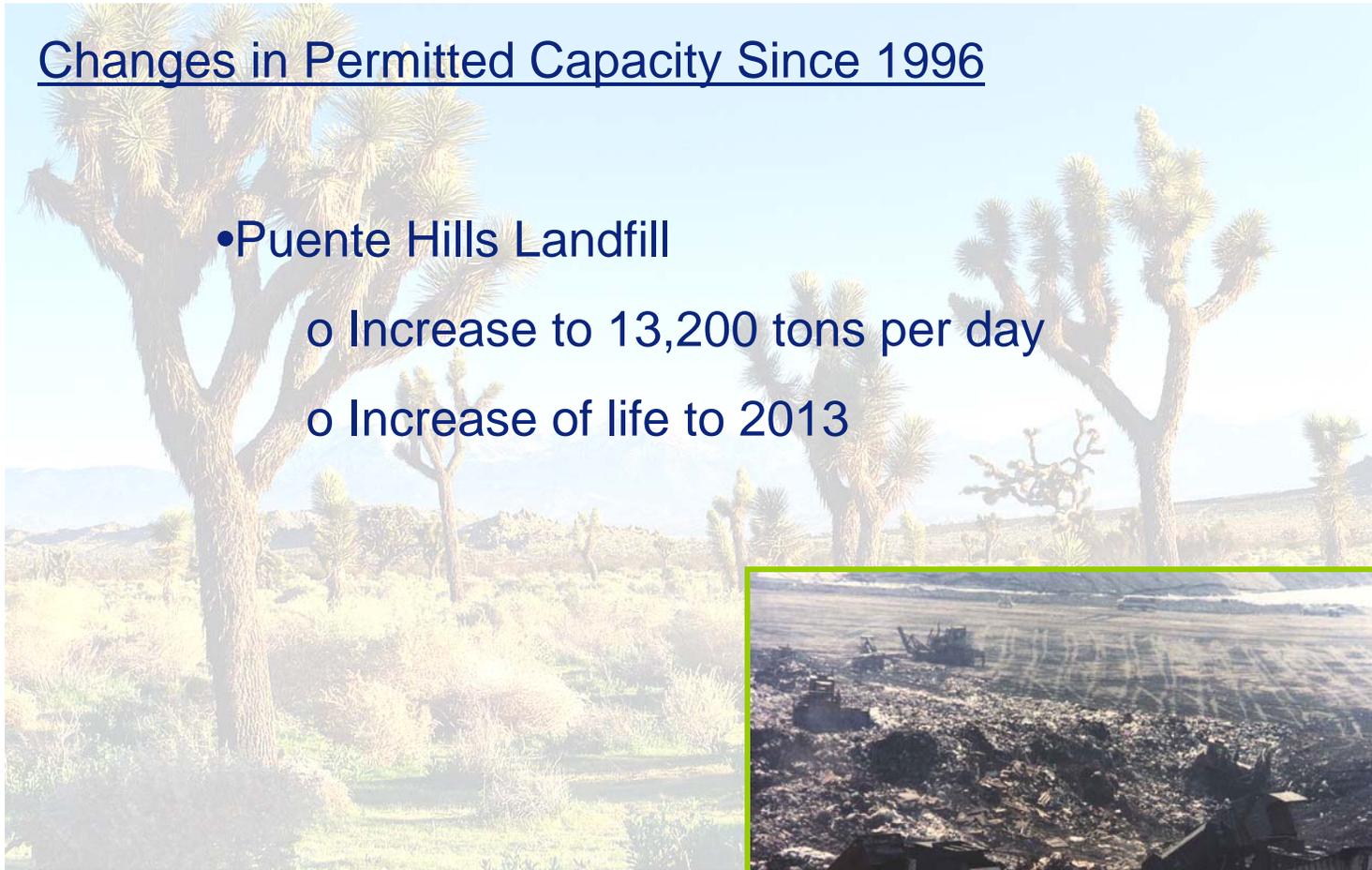
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Countywide Siting Element Assessment

Changes in Permitted Capacity Since 1996

- Puente Hills Landfill
 - o Increase to 13,200 tons per day
 - o Increase of life to 2013



Countywide Siting Element Assessment

Changes in Permitted Capacity Since 1996

- Sunshine Canyon Landfill
- Lancaster Landfill & Recycling Center
- Antelope Valley Landfill
- Bradley Landfill
- Peck Road Gravel Pit



Maintaining Adequate Disposal Capacity

Goals and Policies

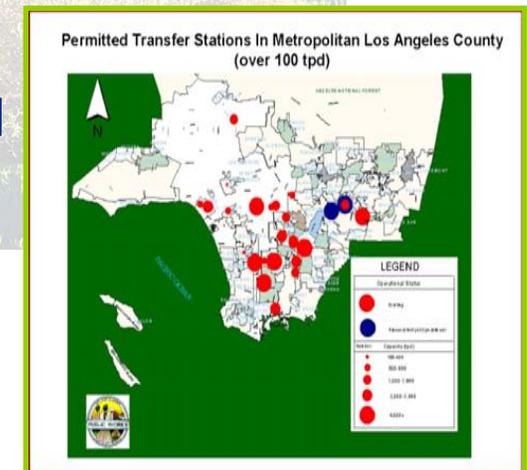
- Expand in-County capacity
- Facilitate the use of out-of-County/remote disposal facilities
- Foster development of transformation facilities & alternative solid waste disposal technologies



2006 Countywide Disposal Capacity & Need

Transfer Station/Materials Recovery Facilities (MRFs)

- 29 Permitted larger-volume transfer stations/MRFs (>100 tpd)
 - 5 Permitted large-volume City maintenance yards (> 100 tpd)
- Numerous small-volume transfer stations (< 100 tpd)
- Total available transfer processing capacity is approximately 59,000 tpd
- 2006 average daily tonnage is 21,175 tpd

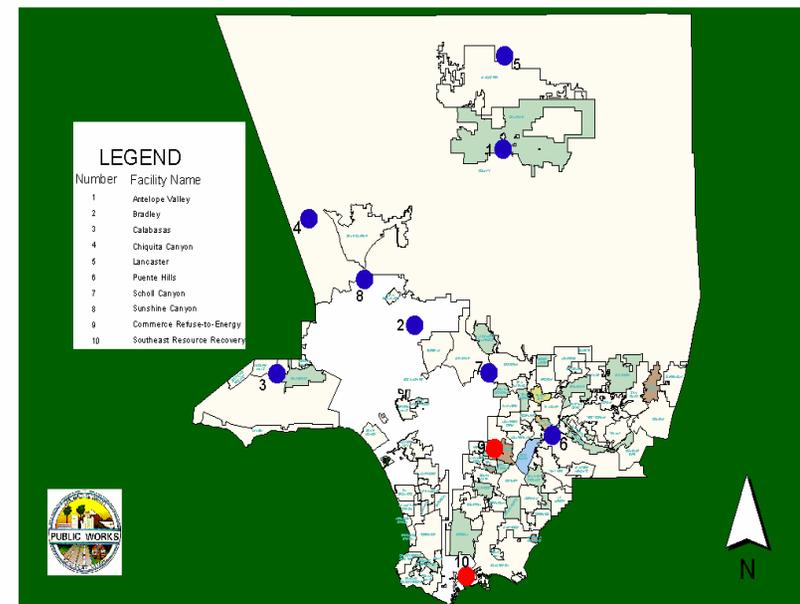


2006 Countywide Disposal Capacity & Need

Existing Facilities

- 8 Major solid waste landfills
- 4 Small solid waste landfills
- 2 Waste-to-energy facilities

Major Permitted Disposal Facilities in Los Angeles County



2006 Countywide Disposal Capacity & Need

Remaining Permitted Landfill Capacity (as of 1/1/07)

Landfill	2006 Disposal Rate (tons/day)	Capacity (million tons)	Life (years)
Antelope Valley	979	9.19	30
Bradley	1,452	0.09	0.20
Calabasas	1,623	7.89	16
Chiquita Canyon	4,933	11.05	7
Lancaster	1,243	13.48	5
Puente Hills	12,253	26.60	7
Scholl Canyon	1,431	6.40	14
Sunshine Canyon County	2,693	1.38	2
Sunshine Canyon City	4,118	4.26	3
Total	30,725	80.34	

2006 Countywide Disposal Capacity & Need

2006 Disposal Quantities (All Jurisdictions in LA County)

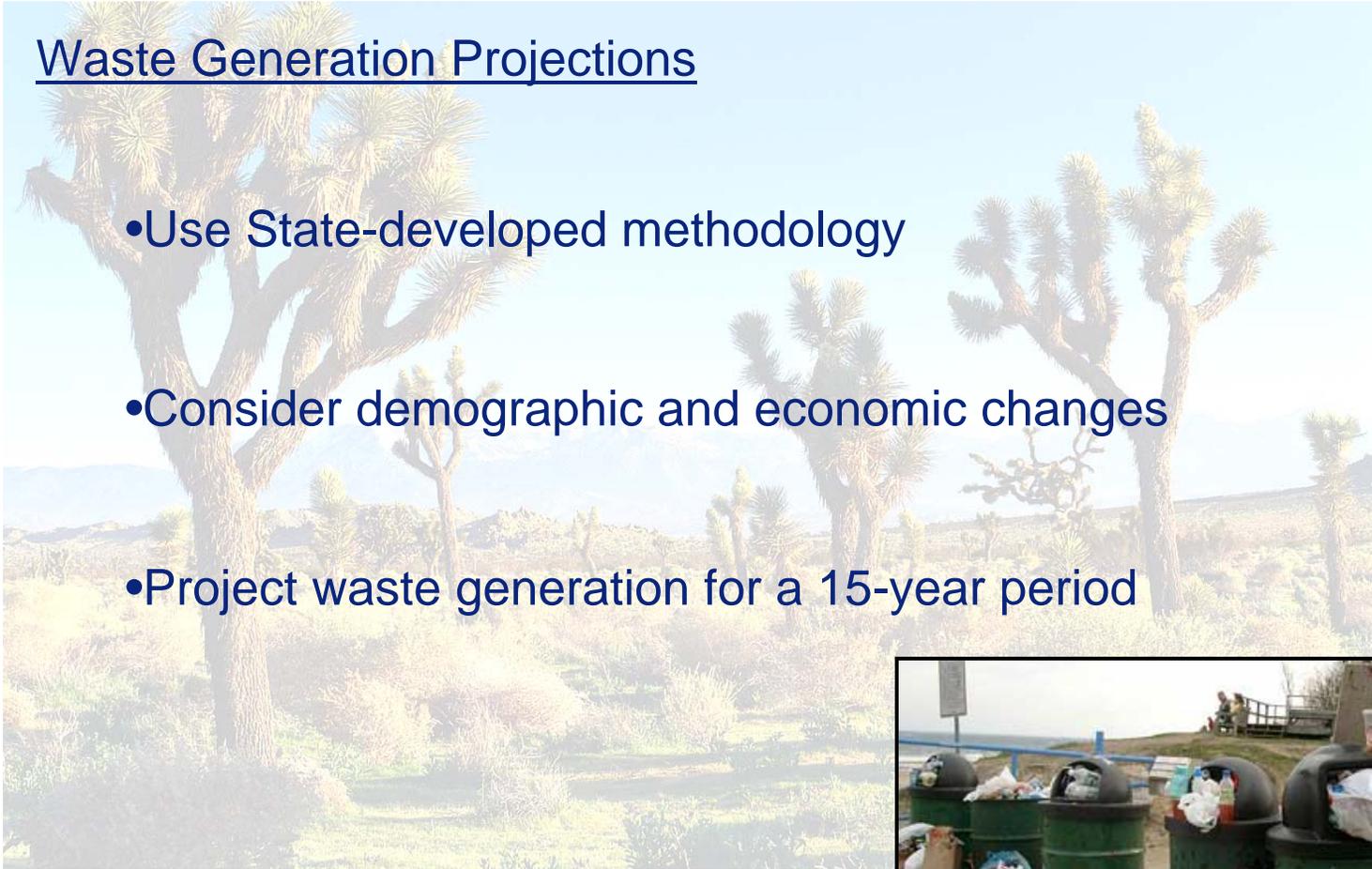
Los Angeles County	Tons/Year (millions)	Tons/Day
In-County Solid Waste Landfills	9.7	31,100
Waste-to-Energy Facilities	0.6	1,600
Exports to Out-of-County Solid Waste Landfills	1.8	5,800
Total	12.1	38,500

Note: Imported waste to various types of disposal facilities – 450 tpd
Permitted unclassified landfills – 100,000 tons (320 tpd)

2006 Countywide Disposal Capacity & Need

Waste Generation Projections

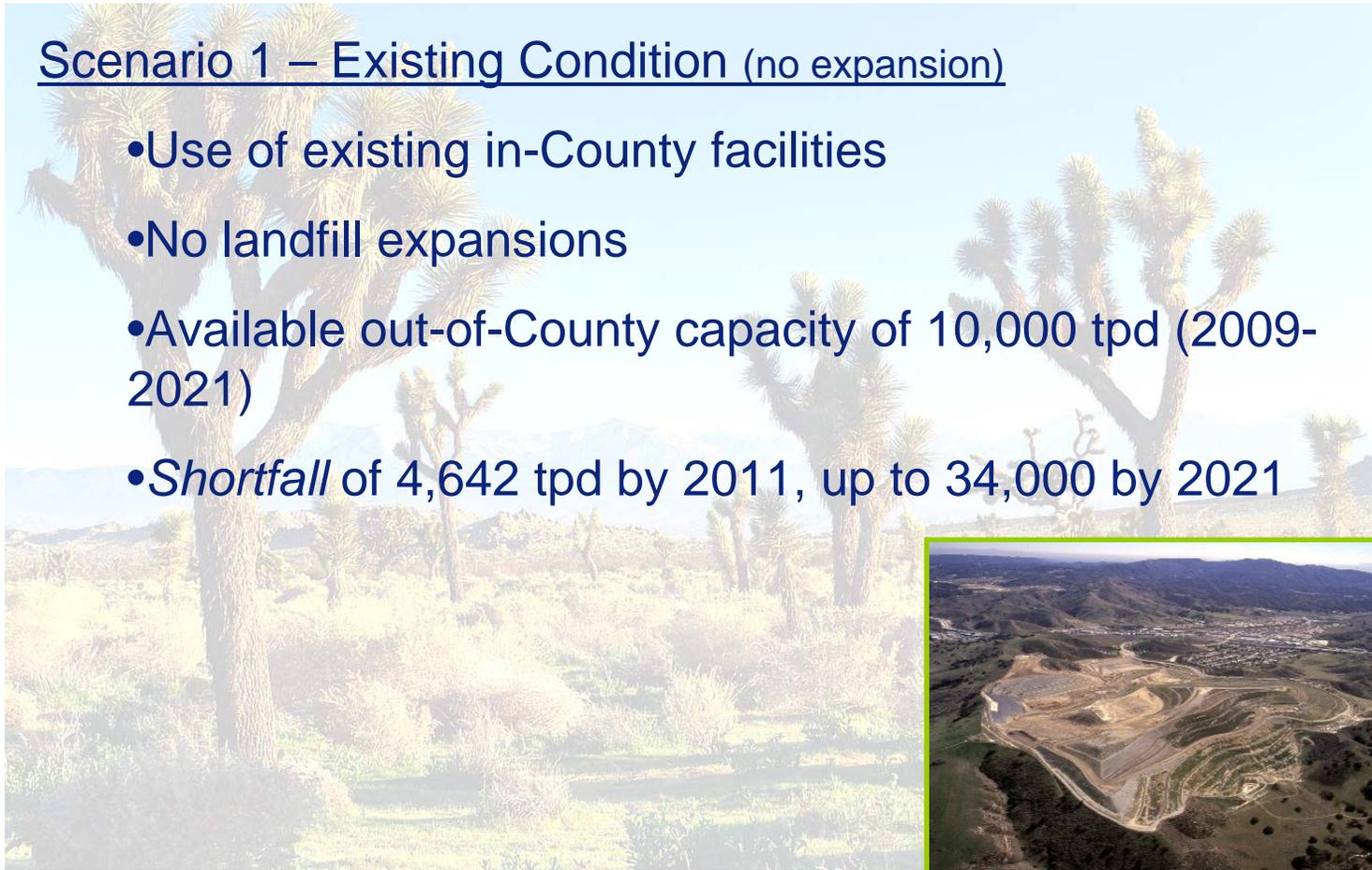
- Use State-developed methodology
- Consider demographic and economic changes
- Project waste generation for a 15-year period



Disposal Capacity Need Analysis: Scenarios

Scenario 1 – Existing Condition (no expansion)

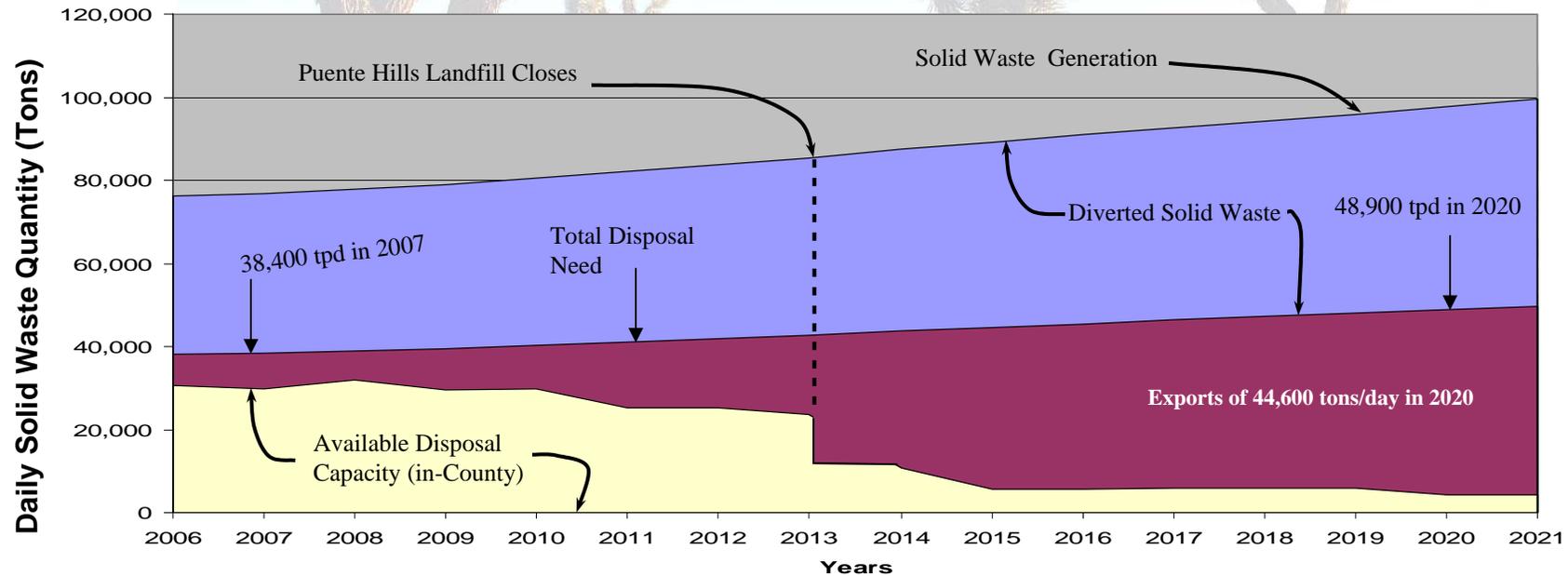
- Use of existing in-County facilities
- No landfill expansions
- Available out-of-County capacity of 10,000 tpd (2009-2021)
- *Shortfall* of 4,642 tpd by 2011, up to 34,000 by 2021



Disposal Capacity Need Analysis: Scenarios

Scenario 1 – Existing Condition (assumes 50% Countywide recycling rate, no landfill expansions, and no conversion technology, full reliance on in-County landfills)

Disposal Need Analysis



Disposal Capacity Need Analysis: Scenarios

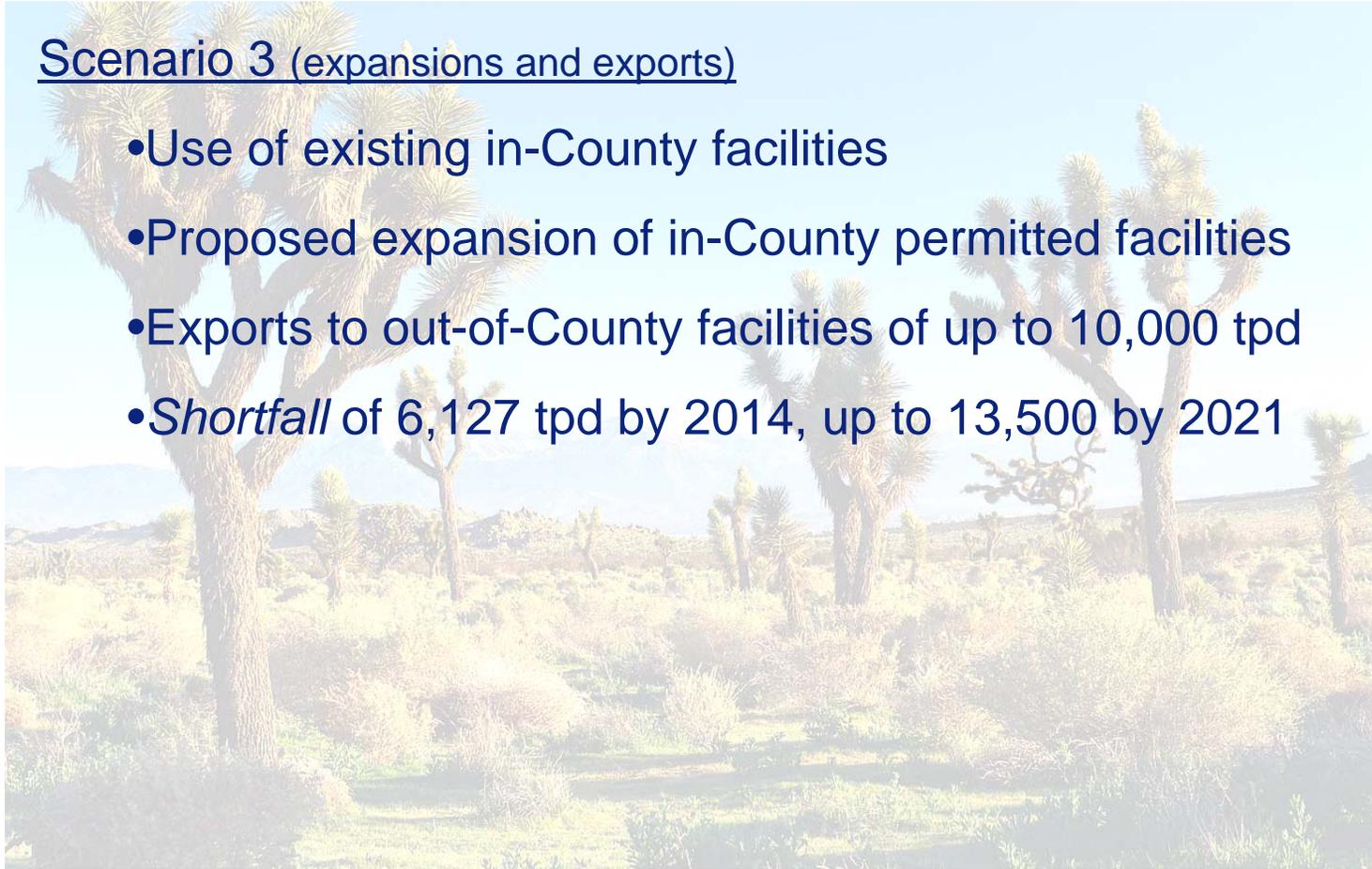
Scenario 2 (no exports)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- No out-of-County facilities would be used
- *Shortfall* by 2007 of 4,668 tpd. The shortfall would temporarily disappear upon the expansion of the Sunshine Canyon Landfill. By 2012, there will be a shortfall of 375 tpd increasing to 22,626 tpd by 2021.

Disposal Capacity Need Analysis: Scenarios

Scenario 3 (expansions and exports)

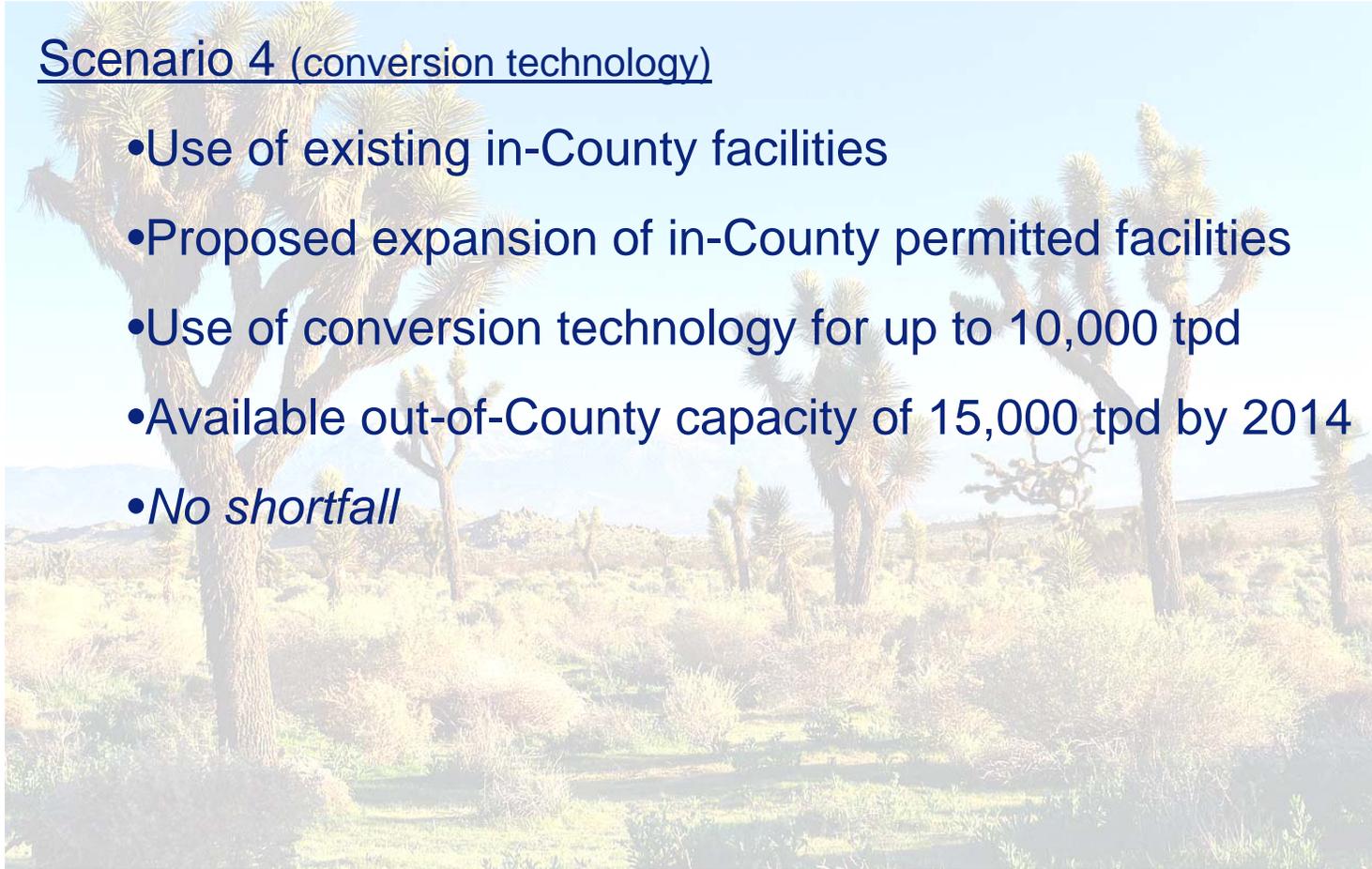
- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Exports to out-of-County facilities of up to 10,000 tpd
- *Shortfall* of 6,127 tpd by 2014, up to 13,500 by 2021



Disposal Capacity Need Analysis: Scenarios

Scenario 4 (conversion technology)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Use of conversion technology for up to 10,000 tpd
- Available out-of-County capacity of 15,000 tpd by 2014
- *No shortfall*



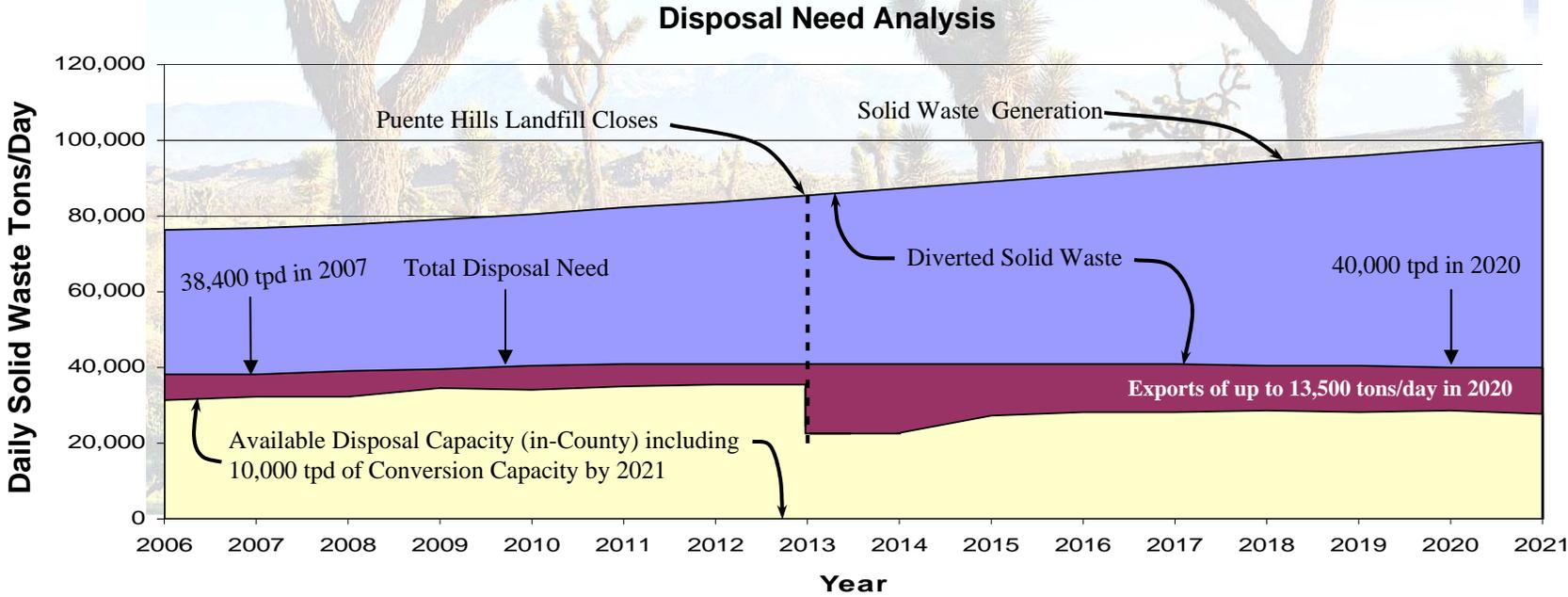
Disposal Capacity Need Analysis: Scenarios

Scenario 4 – Alternate, Best Case Scenario (conversion technology and increased diversion)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Use of conversion technology beginning 2010 with 1,000 tpd, up to 10,000 tpd by 2021
- Available out-of-County capacity of 15,000 tpd by 2014 through 2021
- Increase in diversion at the rate of 1% per year beginning in 2011, up to 60% by 2020
- *No shortfall*

Disposal Capacity Need Analysis: Scenarios

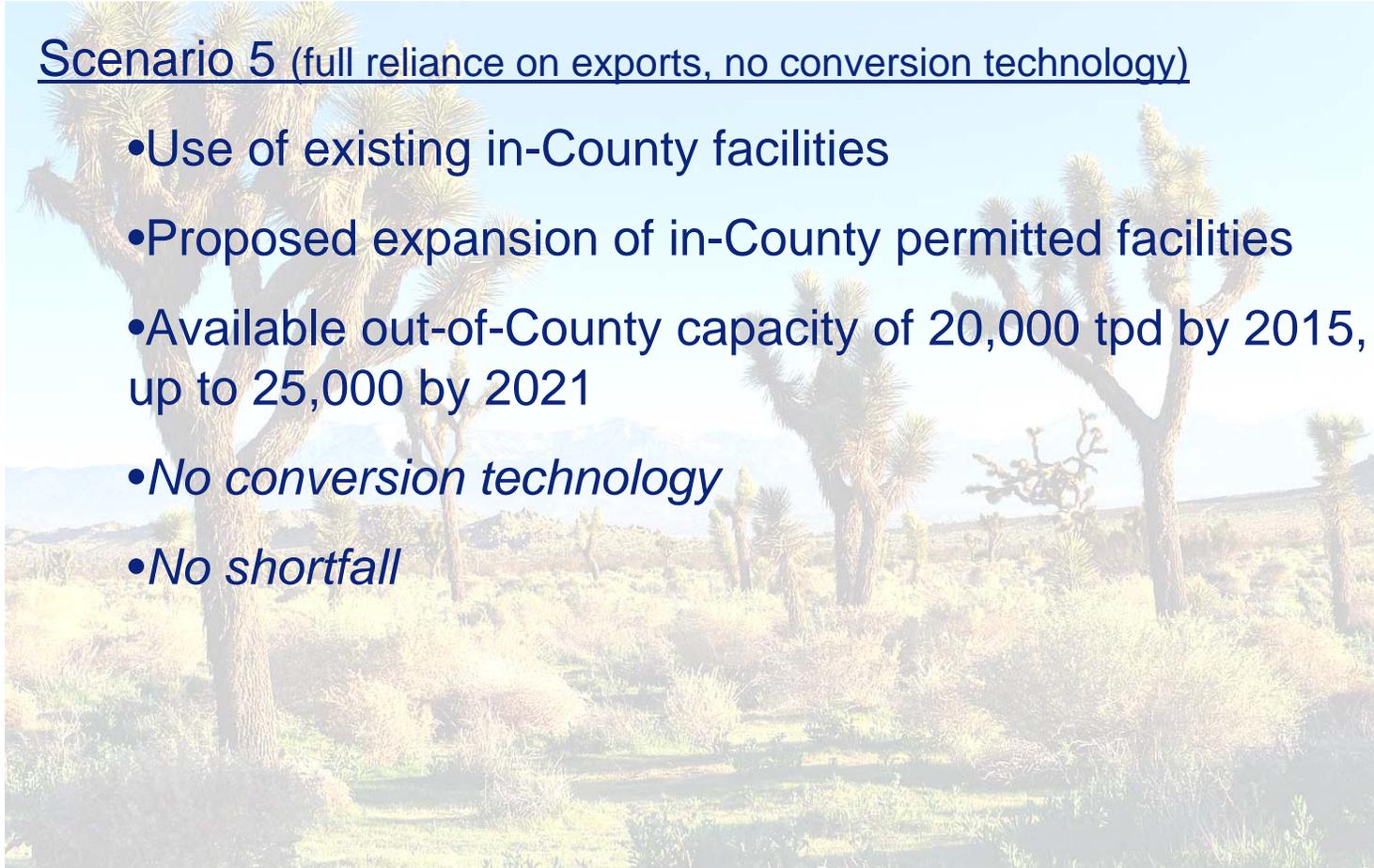
Scenario 4 – Alternate, Best Case Scenario (assumes 60% Countywide diversion rate by 2021; development of conversion technology up to 10,000 tpd by 2021, expansion of all in-County landfills, and use of out-of-County facilities of up to 15,000 tons/day by 2014)



Disposal Capacity Need Analysis: Scenarios

Scenario 5 (full reliance on exports, no conversion technology)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Available out-of-County capacity of 20,000 tpd by 2015, up to 25,000 by 2021
- *No conversion technology*
- *No shortfall*



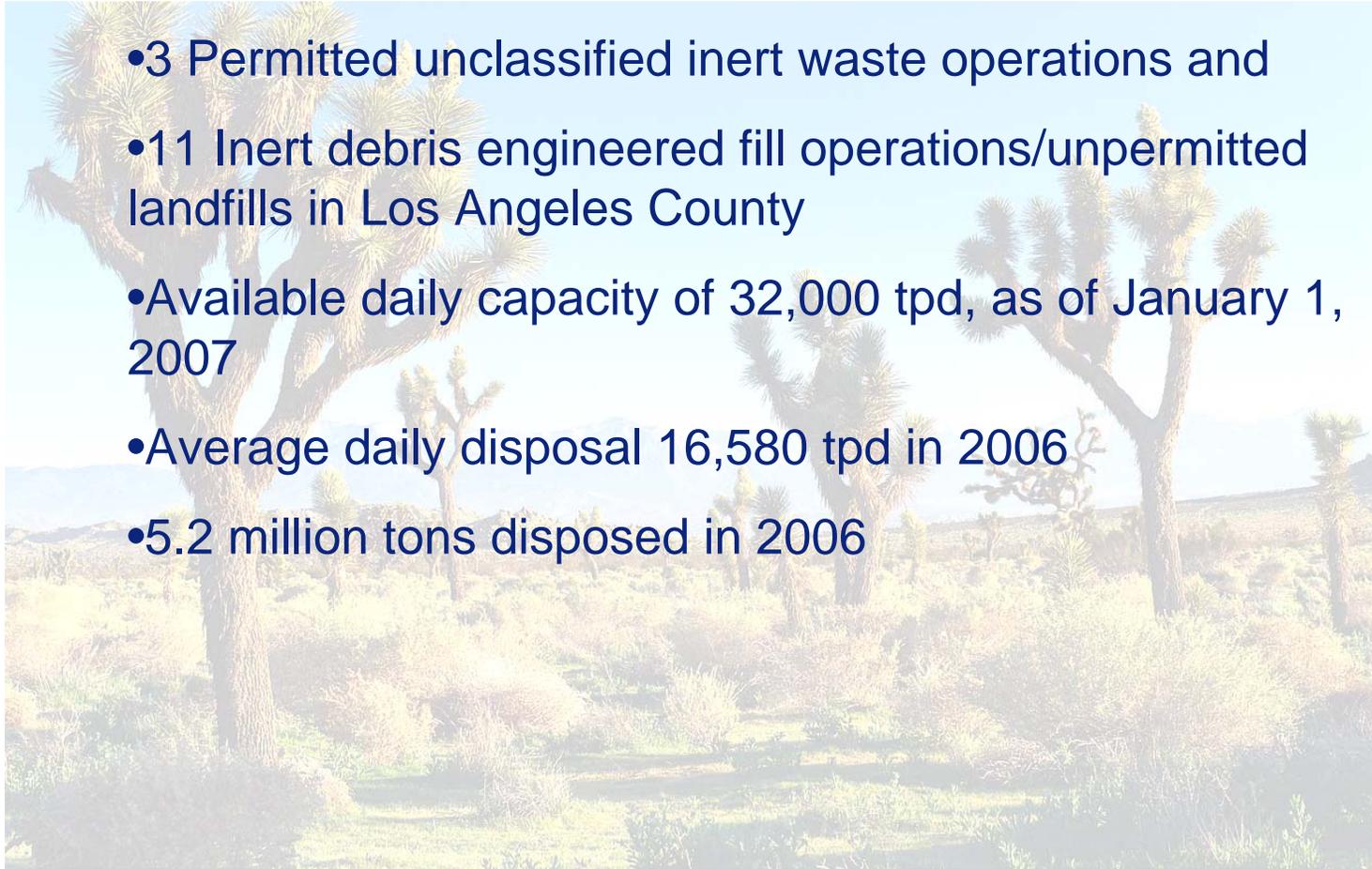
Disposal Capacity Need Analysis: Scenarios

Scenario 5 – Alternate (expansions, increased diversion, exports, no conversion technology)

- Use of existing in-County facilities
- Proposed expansion of in-County permitted facilities
- Available out-of-County capacity of 20,000 tpd by 2015, up to 25,000 by 2021
- Increase in diversion at the rate of 1% per year beginning in 2011, up to 60% by 2021
- *No conversion technology*
- *No shortfall*

Disposal Capacity of Unclassified Inert Debris/Engineered Fill Disposal Sites in Los Angeles County

- 3 Permitted unclassified inert waste operations and
- 11 Inert debris engineered fill operations/unpermitted landfills in Los Angeles County
- Available daily capacity of 32,000 tpd, as of January 1, 2007
- Average daily disposal 16,580 tpd in 2006
- 5.2 million tons disposed in 2006



Summary of Out-of-County Landfills

Landfill	2006 Exported Quantity (tpd)	Anticipated Max. Exports from LA County	Capacity (million tons)	Remaining Life (years)
El Sobrante	2,397	4,000	115	40
Frank R. Bowerman	823	1,500	40.3	16
Olinda Alpha	1,360	1,500	18.9	7
Prima Desecha	326	1,500	80	60
Simi Valley	522	1,000	18	26
Mesquite Regional*	-	15,000	600	100
Eagle Mountain**	-	15,000	708	100

Note: * Expected to be operational by 2009

** Currently not operational and remains in litigation since 1999

2007 MSW Disposal Quantities

(All Jurisdictions in LA County)

<u>Los Angeles County</u>	<u>2007 Disposal Rate Tons/Year</u>	<u>2007 Disposal Rate Tons/Day</u>	<u>% of Total</u>
In-County Solid Waste Landfills	8.9 million	28,500	78%
Waste-to-Energy Facilities	0.5 million	1,700	4.5%
Exports to Out-of-County Solid Waste Landfills	2.0 million	6,350	17.5%
Total Disposal	11.4 million	36,550	
Notes: Tons/Day = 6-day/week Imported waste to various types of disposal facilities – 580 tpd Permitted unclassified landfills – 124,000 tons (400 tpd)			

Remaining Permitted Capacity for In-County Landfills as of January 1, 2008

<u>Landfill</u>	<u>2007 Disposal Rate (tons/day)</u>	<u>Remaining Capacity (millions tons)</u>	<u>Remaining Life (years)</u>
Puente Hills	12,040	22.8	6
Chiquita Canyon	4,950	9.5	6
Sunshine Canyon (City)**	2,000	3.6	6*
Sunshine Canyon (County)	3,740	0.21	<1*
Calabasas	1,490	7.4	16
Scholl	1,280	6.0	15
Lancaster***	1,340	13.1	5
Antelope Valley	1130	8.8	25
Bradley****	530	0.0	0

Total Disposal

28,500

71.4

* On 2/6/07, the Board of Supervisors approved a new CUP establishing a 30-year life. Provided certain conditions are met, the total available capacity of the combined landfills is 74.3 million tons

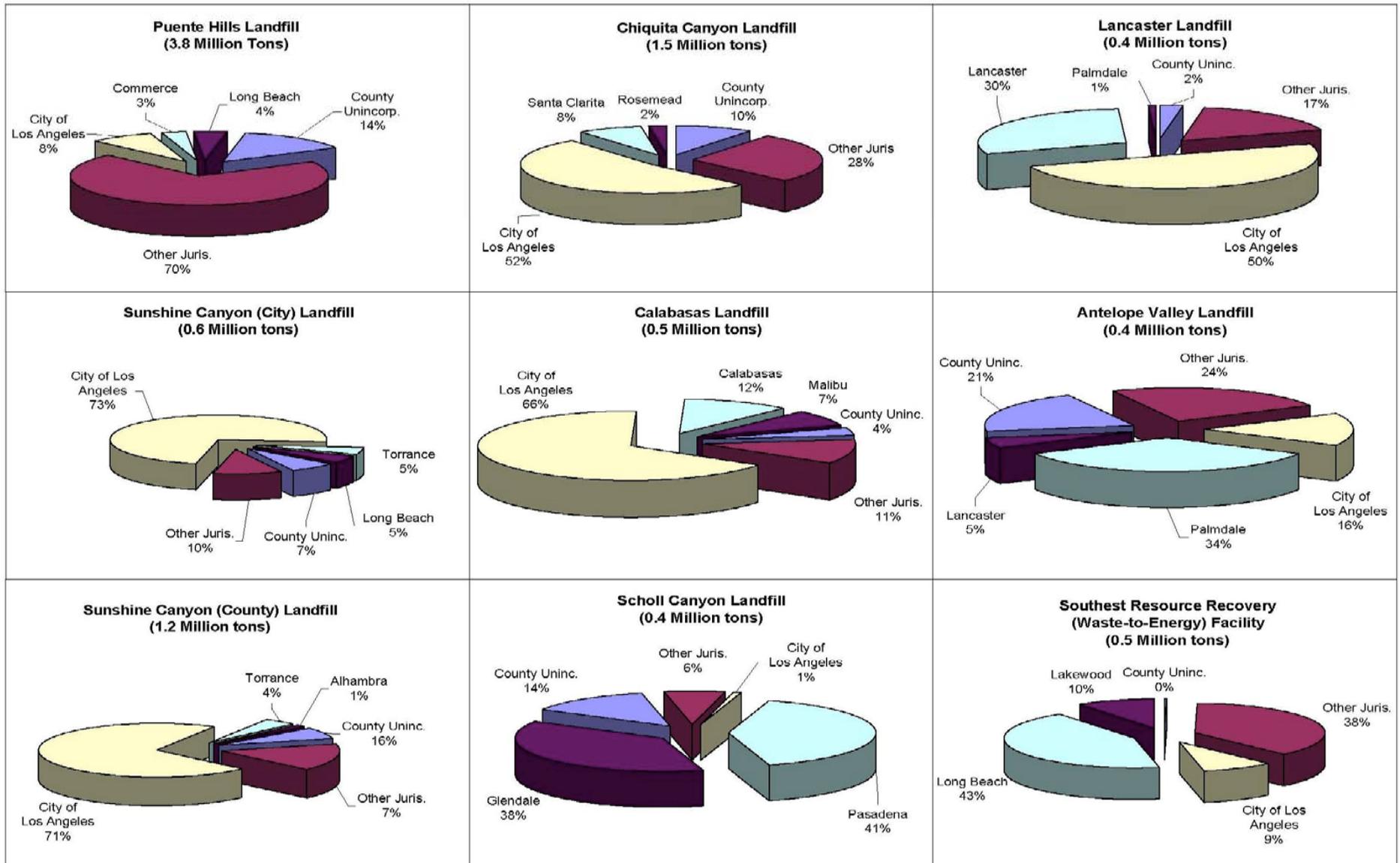
** City of LA portion opened July 2005, currently operating at 4,400 tons per day

*** Lancaster Landfill's current CUP expires August 2012

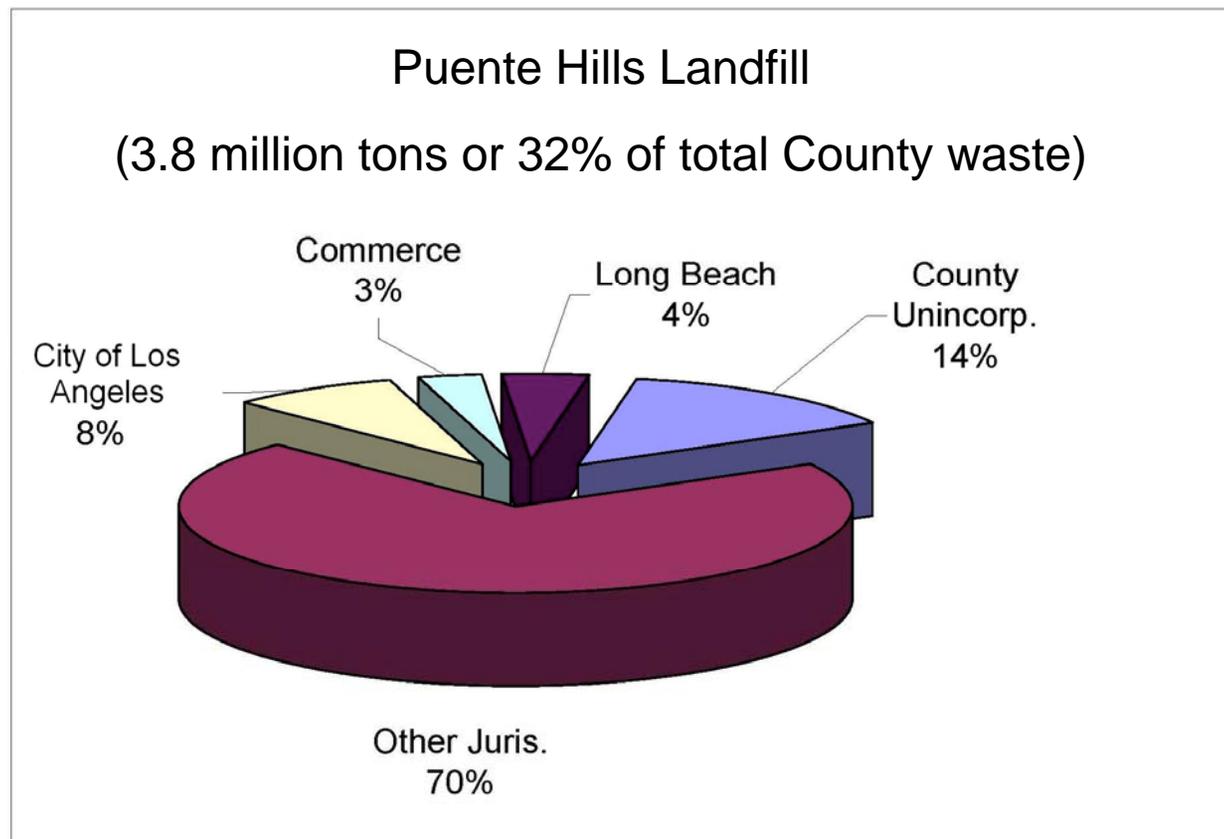
******Bradley Landfill closed April 2007**

Remaining capacity is based on annual landfill operator survey and other info on file with Public Works

2007 Solid Waste Disposal by Jurisdiction of Origin for Major Landfills and Waste-to-Energy Facilities



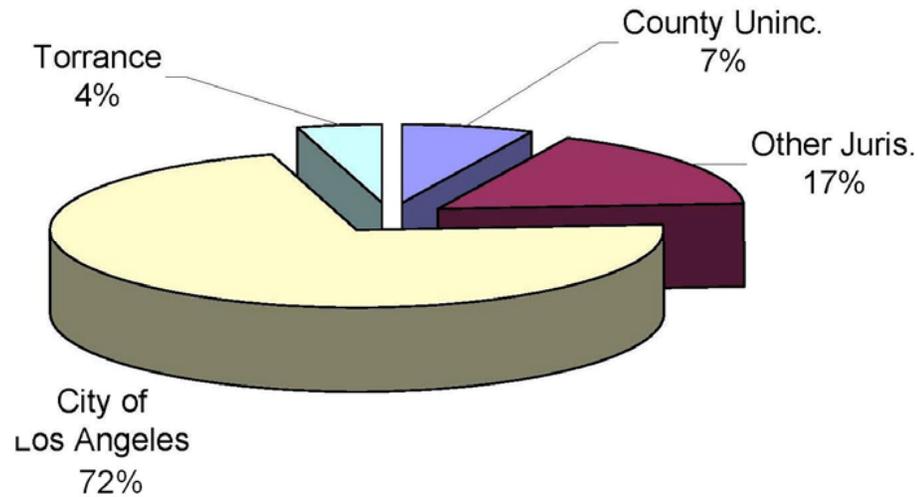
2007 Solid Waste Disposal by Jurisdiction of Origin for Puente Hills Landfill



Note: Puente Hills Landfill accepts approximately 244,000 tons/year or about 44% of the County's green waste for cover material

2007 Solid Waste Disposal by Jurisdiction of Origin for Sunshine City and County Landfills

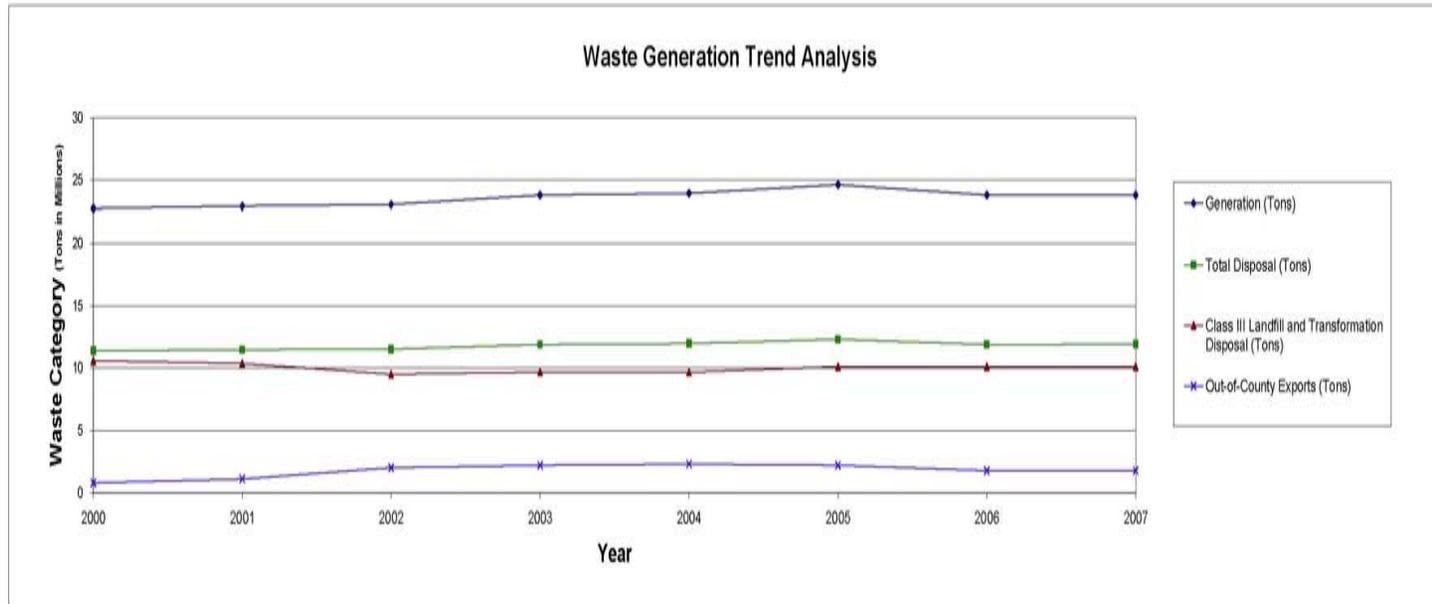
Sunshine Canyon City and County Landfills
(1.8 Million Tons or 15% of total County waste)



Waste Generation Trend Analysis for Los Angeles County from 2000-2007

As of January 1, 2008

Year	Generation (Tons)	Total Disposal (Tons)	Class III Landfill and Transformation Disposal (Tons)	Out-of-County Exports (Tons)
2000	22,759,234.46	11,379,617.23	10,588,629.06	790,988.17
2001	22,937,069.94	11,468,534.97	10,372,823.51	1,095,711.46
2002	23,046,608.72	11,523,304.36	9,513,296.55	2,010,007.81
2003	23,798,794.40	11,899,397.20	9,691,524.26	2,207,872.94
2004	23,933,734.82	11,966,867.41	9,658,546.13	2,308,321.28
2005	24,623,752.80	12,311,876.40	10,109,297.48	2,202,578.92
2006	23,793,917.26	11,896,958.63	10,120,959.92	1,775,998.71
2007	23,807,137.00	11,903,568.50	10,120,959.92	1,782,608.58



Note: Assumes 50% Countywide diversion rate in calculating generation rate.

Disposal Capacity Need Analysis: In Conclusion

What's Needed

- Maximize waste reduction efforts
- Maximize the use of in-County disposal capacity
- Use out-of-County disposal capacity



Disposal Capacity Need Analysis: In Conclusion

What's Needed

- Develop in-County infrastructure to facilitate exportation of waste to out-of-County facilities (transfer & rail loading)
- Expand efforts to encourage development of alternatives to landfilling, e.g. conversion technologies



Questions?



For more information on solid waste management in Los Angeles County or a copy of 2006 Annual Report, please visit www.SolidwasteDRS.org.