CA biosolids use and disposal in 2013

Summary

1. Major counties where biosolids land applied (Class B and Class A except compost
2. Major counties where biosolids composted
3. Major counties where biosolids landfilled
4. Counties where biosolids surface disposed or otherwise used/disposed
5. Notes

Summary:

Land application:	402,000	dry metric tons
Class A compost:	185,000	
Class A other:	75,000	
Class B:	142,000	
Landfill:	235,000	
Alternative daily or final cover:	140,000	
Fill:	95,000	
Surface disposal:	22,000	
Incineration:	19,000	
Deep well injection:	10,000	
Cement kiln fuel:	3,000	
Placed in storage:	22,000	
In long-term treatment (i.e. wastewater lagoons):	10,000	
	723,000	dry metric tons

1. Major land application sites (other than compost) by county:

Yuma:	Class B: 64,000	Class A (heat dried, thermophilic): 3,000
Kern:	Class B: 8,000*	Class A (thermophilic): 48,000
Merced:	Class B: 33,000**	Class A (air-dried/Alt 4, thermophilic): 3,000
Sacramento	Class B: 23,000	Class A (heat dried, ATAD): 4,400
Sonoma	Class B: 5,000	Class A: 0
Solano:	Class B: 4,600	Class A: 0
San Bernardino:	Class B: 0	Class A: (air dried/Alt 4) 4,200
San Diego	Class B: 0	Class A (heat dried): 4,000
Stanislaus	Class B: 1,300*	Class A: 0
Napa:	Class B: 1,200	Class A: 0
Tulare:	Class B: 1,200	Class A: 0

*on city property only

**about 10,000 of this has been air dried to > 90% solids and is probably Class A

2. Compost sites by county:

Kern:	91,000 dmt*	(2 facilities)
San Bernardino:	54,000	(3 facilities)
La Paz, AZ:	20,000	(1 facility; only takes CA biosolids)
Merced:	13,000**	(1 facility)
Santa Barbara:	4,000	(1 facility)
Ventura:	3,100	(at 2 POTWs)
Douglas, NV	1,300	(1 facility; also takes NV biosolids)
Sonoma:	1,100	(at POTW)
Los Angeles:	600	(at zoo, also takes zoo manure)
Humboldt:	300	(at two POTWs)

Note: the figures represent the tonnages of biosolids that were received for composting. Ratios of bulking agents and other feedstocks vary widely, from < 10% to > 90% of the total mix. Final tonnages after composting vary considerably based on length of time in curing, amount of compost strained out and reused as cover or padding, etc.

*75% of biosolids from outside Central Valley, 25% from CV. About 60% of finished compost is used in Kings county.
** 2/3 of biosolids from Central Valley, 1/3 from Bay Area

Major landfill disposal or reuse as ADC landfills by county:

Santa Clara:	65,000	(ADC)
Los Angeles:	36,000*	(fill)
San Diego:	28,000	(mostly ADC)
Solano	28,000	(mostly ADC)
Ventura:	14,000	(a portion heat dried and used as ADC)
Kern:	10,000	(fill; filling former gypsum mine)
Alameda:	8,000	(mostly ADC)
Monterey:	6,000	(fill)
San Joaquin:	3,000	(fill)
Marin:	3,000	(mostly ADC)
Contra Costa:	3,000	(mostly ADC)
Yuba:	3,000	(fill)
Orange:	2,400	(fill)

*landfill has now shut down

Surface disposal sites by county:

Sacramento:	19,000
Alameda:	1,200 (demonstrated as Class A)
Marin:	1,200
Riverside:	300
Santa Clara:	50

Incineration by county:

Contra Costa: 12,000
Santa Clara: 7,000

Deep well injection:

Los Angeles: 10,000 (2 POTWs)

Use as cement kiln fuel:

San Bernardino: 3,000 (2 POTWs)