

SOLID WASTE DISPOSAL FACILITIES

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COLLIER COUNTY LANDFILL DISPOSAL CAPACITY

Introduction:

The Public Utilities Division's 2012 AUIR submittals are based on "Collier County Peak Season Population Estimates and Projections" dated June 4, 2012, prepared by Collier County Comprehensive Planning Section. Populations are derived from data obtained from: 2010 Census; Bureau of Economic and Business Research (BEBR) population bulletins; Collier County Comprehensive Planning staff; and, Planning staff from Naples and Marco Island. FY 2035 - FY 2067 projected population based on average annual percentage increase for FY 2032 - FY 2034 (1.30%). There are two notable changes from the 2011 Collier County Landfill Disposal Capacity AUIR:

1. The 2012 Solid Waste AUIR projects that the Collier County Landfill will have zero capacity remaining in FY 2067, while the 2011 Solid Waste AUIR projected that the Collier County Landfill would have zero capacity remaining in FY 2042. The "gained" 25 years of capacity reflects both the positive impacts of the past and current solid waste management initiatives that have increased recycling and decreased disposal as well as the vertical expansion's increased permitted airspace usage estimates used to calculate the remaining disposal (airspace) capacity.
2. The projected Tons Per Capita Disposal Rate in the 2012 Solid Waste AUIR for 2013 forward is 0.52, which is a decrease from the projected Tons Per Capita Disposal Rate in the 2011 Solid Waste AUIR of 0.53. This is again reflective of the recycling and diversion initiatives evident in the previous eleven (11) years.

Recommendations:

The Public Utilities Division's staff recommends that the Collier County Board of County Commissioners approve the 2012 Collier County Landfill Disposal Capacity AUIR and continue to support the Integrated Solid Waste Management Strategy initiatives to recycle, divert recyclables, and divert hazardous waste from the Collier County Landfill.

Collier County Government
Public Utilities Division
2012 Annual Update and Inventory Report (AUIR)

Table 1: Collier County Landfill Disposal Capacity
Level of Service Standard: Ten Years of Permitted Landfill Capacity
at Previous Three Years Average Tons Per Capita Disposal Rate

July 26, 2012

1	2	3	4	5	6	7
Fiscal Year	Peak Population	Tons Per Capita Disposal Rate	Annual Tons Disposed	Total Landfill Capacity Balance (tons)	Next Ten Years Landfill Capacity Requirement (tons)	Ten Year Permitted Landfill Capacity Surplus or Deficiency (tons)
2000	309,511	1.23	381,499	4,537,914	2,851,851	1,686,063
2001	325,159	1.32	430,511	4,107,403	2,623,566	1,483,837
2002	341,954	1.07	366,547	3,740,856	2,460,370	1,280,486
2003	359,191	0.80	288,409	5,820,359	2,382,399	3,437,960
2004	374,384	0.78	291,903	9,130,976	2,303,833	6,827,143
2005	386,668	0.71	274,777	9,695,124	2,245,885	7,449,239
2006	396,310	0.70	278,384	9,920,278	2,188,432	7,731,846
2007	400,027	0.64	254,889	9,594,647	2,158,653	7,435,994
2008	399,532	0.61	241,816	9,282,412	2,146,207	7,136,205
2009	399,979	0.54	215,338	9,067,074	2,164,579	6,902,495
2010	387,183	0.54	209,277	8,857,797	2,193,187	6,664,610
2011	391,218	0.52	202,226	17,599,939	2,232,851	15,367,088
2012	396,608	0.51	203,351	17,396,588	2,275,463	15,121,125
2013	402,072	0.52	210,438	17,186,150	2,315,129	14,871,022
2014	407,612	0.52	213,337	16,972,813	2,356,106	14,616,708
2015	414,282	0.52	216,829	16,755,985	2,397,610	14,358,374
2016	422,121	0.52	220,931	16,535,054	2,438,834	14,096,220
2017	430,107	0.52	225,111	16,309,943	2,479,754	13,830,189
2018	438,245	0.52	229,370	16,080,573	2,520,350	13,560,223
2019	446,536	0.52	233,709	15,846,863	2,560,599	13,286,264
2020	454,514	0.52	237,885	15,608,978	2,600,482	13,008,496
2021	462,166	0.52	241,890	15,367,088	2,639,982	12,727,106
2022	469,947	0.52	245,963	15,121,125	2,679,077	12,442,048
2023	477,859	0.52	250,104	14,871,022	2,717,748	12,153,273
2024	485,904	0.52	254,314	14,616,708	2,755,974	11,860,734
2025	493,583	0.52	258,333	14,358,374	2,793,994	11,564,380
2026	500,883	0.52	262,154	14,096,220	2,832,058	11,264,162
2027	508,291	0.52	266,031	13,830,189	2,870,159	10,960,030
2028	515,809	0.52	269,966	13,560,223	2,908,290	10,651,933
2029	523,438	0.52	273,959	13,286,264	2,946,446	10,339,818
2030	530,717	0.52	277,768	13,008,496	2,984,861	10,023,635
2031	537,636	0.52	281,390	12,727,106	3,023,778	9,703,328
2032	544,645	0.52	285,058	12,442,048	3,063,202	9,378,846
2033	551,746	0.52	288,775	12,153,273	3,103,141	9,050,133
2034	558,939	0.52	292,540	11,860,734	3,143,600	8,717,134
2035	566,227	0.52	296,354	11,564,380	3,184,587	8,379,793
2036	573,610	0.52	300,218	11,264,162	3,226,108	8,038,054
2037	581,088	0.52	304,132	10,960,030	3,268,171	7,691,859
2038	588,665	0.52	308,097	10,651,933	3,310,782	7,341,151
2039	596,340	0.52	312,114	10,339,818	3,353,948	6,985,870
2040	604,115	0.52	316,184	10,023,635	3,397,678	6,625,957

Collier County Government
Public Utilities Division
2012 Annual Update and Inventory Report (AUIR)

**Table 1: Collier County Landfill Disposal Capacity
Level of Service Standard: Ten Years of Permitted Landfill Capacity
at Previous Three Years Average Tons Per Capita Disposal Rate**

July 26, 2012

1	2	3	4	5	6	7
Fiscal Year	Peak Population	Tons Per Capita Disposal Rate	Annual Tons Disposed	Total Landfill Capacity Balance (tons)	Next Ten Years Landfill Capacity Requirement (tons)	Ten Year Permitted Landfill Capacity Surplus or Deficiency (tons)
2041	611,992	0.52	320,306	9,703,328	3,441,977	6,261,351
2042	619,971	0.52	324,482	9,378,846	3,486,854	5,891,991
2043	628,054	0.52	328,713	9,050,133	3,532,317	5,517,816
2044	636,243	0.52	332,999	8,717,134	3,578,372	5,138,762
2045	644,538	0.52	337,341	8,379,793	3,625,027	4,754,766
2046	652,942	0.52	341,739	8,038,054	3,672,291	4,365,763
2047	661,455	0.52	346,195	7,691,859	3,720,171	3,971,688
2048	670,079	0.52	350,708	7,341,151	3,768,675	3,572,476
2049	678,816	0.52	355,281	6,985,870	3,817,812	3,168,058
2050	687,667	0.52	359,913	6,625,957	3,867,589	2,758,368
2051	696,632	0.52	364,606	6,261,351	3,918,016	2,343,335
2052	705,715	0.52	369,360	5,891,991	3,969,100	1,922,892
2053	714,917	0.52	374,175	5,517,816	4,020,849	1,496,967
2054	724,238	0.52	379,054	5,138,762	4,073,274	1,065,488
2055	733,680	0.52	383,996	4,754,766	4,126,382	628,384
2056	743,246	0.52	389,003	4,365,763	4,180,183	185,581
2057	752,937	0.52	394,075	3,971,688	4,234,685	(262,996)
2058	762,754	0.52	399,213	3,572,476	N/A	N/A
2059	772,699	0.52	404,418	3,168,058	N/A	N/A
2060	782,773	0.52	409,691	2,758,368	N/A	N/A
2061	792,979	0.52	415,032	2,343,335	N/A	N/A
2062	803,318	0.52	420,443	1,922,892	N/A	N/A
2063	813,792	0.52	425,925	1,496,967	N/A	N/A
2064	824,403	0.52	431,479	1,065,488	N/A	N/A
2065	835,151	0.52	437,104	628,384	N/A	N/A
2066	846,040	0.52	442,803	185,581	N/A	N/A
2067	857,071	0.52	448,577	(262,996)	N/A	N/A

Collier County Government
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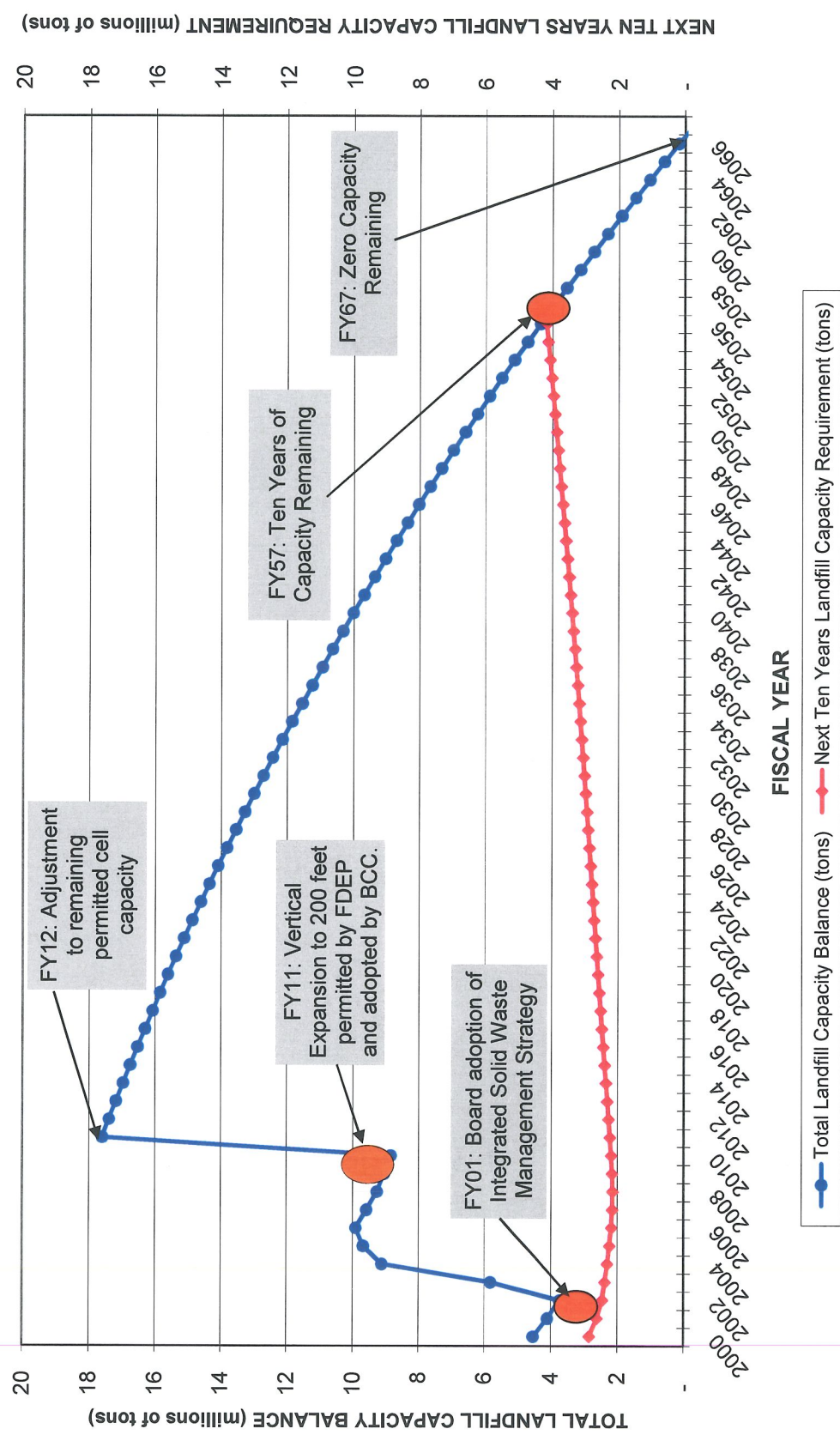
**Table 1: Collier County Landfill Disposal Capacity
Level of Service Standard: Ten Years of Permitted Landfill Capacity
at Previous Three Years Average Tons Per Capita Disposal Rate**

July 26, 2012

NOTES: (References are to the column numbers on previous page)

1. Fiscal Year starts October 1 and ends September 30.
2. Peak Population. Estimates and projections for the existing service area are based on "Collier County Peak Season Population Estimates and Projections" dated June 4, 2012, prepared by Collier County Comprehensive Planning Section. Populations are derived from data obtained from: 2010 Census; Bureau of Economic and Business Research (BEBR) population bulletins; Collier County Comprehensive Planning staff; and, Planning staff from Naples and Marco Island. FY 2035 - FY 2067 projected based on average annual percentage increase for FY 2032 - FY 2034 (1.30%).
3. Tons Per Capita Disposal Rate for FY 2011 and FY 2012 is calculated by dividing the actual Annual Tons Disposed (column 4) by the Peak Population (column 2). FY 2013 forward is the average Tons Per Capita Disposal Rate (column 3) of FY 2010, FY 2011, and FY 2012.
4. Annual Tons Disposed for FY 2011 is actual tonnage amount buried at the Collier County Landfill. FY 2012 reflects the projected tons disposed from the current year forecast. FY 2013 forward are derived from Peak Population (column 2) multiplied by the Tons Per Capita Disposal Rate (column 3).
5. Total Landfill Capacity Balance (tons) is the previous years Total Landfill Capacity Balance (column 5) minus Annual Tons Disposed (column 4) at the Collier County Landfill. The bolded value in the Total Landfill Capacity Balance (column 5) is from Waste Management, Inc. of Florida's (WMIF) Annual Estimate of Remaining Life and Capacity Letter that includes the Board approved and FDEP permitted vertical expansion plus 930,000 tons of contracted disposal capacity at the Okeechobee Landfill. See graph on page SW-5.
6. Next Ten Years Landfill Capacity Requirement (tons) is the sum of the next ten years of Annual Tons Disposed (column 4) at the Collier County Landfill. See graph on page SW-5.
7. Ten Year Permitted Landfill Capacity Surplus or Deficiency (tons) is the Total Landfill Capacity Balance (column 5) minus the Next Ten Years Landfill Capacity Requirement (column 6).

CHART 1: TEN YEARS OF PERMITTED LANDFILL CAPACITY
 Level of Service Standard = Ten Years of Permitted Landfill Capacity at Previous Three Years Average Tons Per Capita Disposal Rate
 July 26, 2012



Collier County Government
Public Utilities Division
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**Table 2: Collier County Landfill Disposal Capacity
Level of Service Standard: Two Years of Lined Cell Capacity
at Previous Three Years Average Tons Per Capita Disposal Rate**

July 26, 2012

1	2	3	4	5	6	7
Fiscal Year	Peak Population	Tons Per Capita Disposal Rate	Annual Tons Disposed	Lined Cell Capacity Balance (tons)	Next Two Years Lined Cell Capacity Requirement (tons)	Projected Lined Cell Capacity Surplus or Deficiency (tons)
2000	309,511	1.23	381,499	1,019,063	797,058	222,005
2001	325,159	1.32	430,511	588,552	654,956	(66,404)
2002	341,954	1.07	366,547	2,325,580	580,312	1,745,268
2003	359,191	0.80	288,409	2,037,171	566,680	1,470,491
2004	374,384	0.78	291,903	1,745,268	553,161	1,192,107
2005	386,668	0.71	274,777	1,470,491	533,273	937,218
2006	396,310	0.70	278,384	1,973,878	496,705	1,477,173
2007	400,027	0.64	254,889	1,718,989	457,154	1,261,835
2008	399,532	0.61	241,816	1,477,173	424,615	1,052,558
2009	399,979	0.54	215,338	2,107,085	411,503	1,695,582
2010	387,183	0.54	209,277	2,027,287	405,577	1,621,710
2011	391,218	0.52	202,226	1,825,061	413,789	1,411,272
2012	396,608	0.51	203,351	2,446,710	423,775	2,022,935
2013	402,072	0.52	210,438	2,236,272	430,166	1,806,107
2014	407,612	0.52	213,337	2,022,935	437,759	1,585,176
2015	414,282	0.52	216,829	3,186,107	446,042	2,740,065
2016	422,121	0.52	220,931	2,965,176	454,481	2,510,695
2017	430,107	0.52	225,111	16,309,943	463,079	15,846,863
2018	438,245	0.52	229,370	16,080,573	471,595	15,608,978
2019	446,536	0.52	233,709	15,846,863	479,775	15,367,088
2020	454,514	0.52	237,885	15,608,978	487,853	15,121,125
2021	462,166	0.52	241,890	15,367,088	496,066	14,871,022
2022	469,947	0.52	245,963	15,121,125	504,418	14,616,708
2023	477,859	0.52	250,104	14,871,022	512,647	14,358,374
2024	485,904	0.52	254,314	14,616,708	520,487	14,096,220
2025	493,583	0.52	258,333	14,358,374	528,185	13,830,189
2026	500,883	0.52	262,154	14,096,220	535,997	13,560,223
2027	508,291	0.52	266,031	13,830,189	543,924	13,286,264
2028	515,809	0.52	269,966	13,560,223	551,727	13,008,496
2029	523,438	0.52	273,959	13,286,264	559,158	12,727,106
2030	530,717	0.52	277,768	13,008,496	566,448	12,442,048
2031	537,636	0.52	281,390	12,727,106	573,833	12,153,273
2032	544,645	0.52	285,058	12,442,048	581,314	11,860,734
2033	551,746	0.52	288,775	12,153,273	588,893	11,564,380
2034	558,939	0.52	292,540	11,860,734	596,572	11,264,162
2035	566,227	0.52	296,354	11,564,380	604,350	10,960,030
2036	573,610	0.52	300,218	11,264,162	612,229	10,651,933
2037	581,088	0.52	304,132	10,960,030	620,212	10,339,818
2038	588,665	0.52	308,097	10,651,933	628,298	10,023,635
2039	596,340	0.52	312,114	10,339,818	636,490	9,703,328
2040	604,115	0.52	316,184	10,023,635	644,789	9,378,846
2041	611,992	0.52	320,306	9,703,328	653,196	9,050,133

Collier County Government
Public Utilities Division
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Table 2: Collier County Landfill Disposal Capacity
Level of Service Standard: Two Years of Lined Cell Capacity
at Previous Three Years Average Tons Per Capita Disposal Rate

July 26, 2012

1	2	3	4	5	6	7
Fiscal Year	Peak Population	Tons Per Capita Disposal Rate	Annual Tons Disposed	Lined Cell Capacity Balance (tons)	Next Two Years Lined Cell Capacity Requirement (tons)	Projected Lined Cell Capacity Surplus or Deficiency (tons)
2042	619,971	0.52	324,482	9,378,846	661,712	8,717,134
2043	628,054	0.52	328,713	9,050,133	670,340	8,379,793
2044	636,243	0.52	332,999	8,717,134	679,080	8,038,054
2045	644,538	0.52	337,341	8,379,793	687,934	7,691,859
2046	652,942	0.52	341,739	8,038,054	696,903	7,341,151
2047	661,455	0.52	346,195	7,691,859	705,989	6,985,870
2048	670,079	0.52	350,708	7,341,151	715,194	6,625,957
2049	678,816	0.52	355,281	6,985,870	724,519	6,261,351
2050	687,667	0.52	359,913	6,625,957	733,965	5,891,991
2051	696,632	0.52	364,606	6,261,351	743,535	5,517,816
2052	705,715	0.52	369,360	5,891,991	753,229	5,138,762
2053	714,917	0.52	374,175	5,517,816	763,050	4,754,766
2054	724,238	0.52	379,054	5,138,762	772,999	4,365,763
2055	733,680	0.52	383,996	4,754,766	783,077	3,971,688
2056	743,246	0.52	389,003	4,365,763	793,287	3,572,476
2057	752,937	0.52	394,075	3,971,688	803,630	3,168,058
2058	762,754	0.52	399,213	3,572,476	814,108	2,758,368
2059	772,699	0.52	404,418	3,168,058	824,723	2,343,335
2060	782,773	0.52	409,691	2,758,368	835,476	1,922,892
2061	792,979	0.52	415,032	2,343,335	846,369	1,496,967
2062	803,318	0.52	420,443	1,922,892	857,404	1,065,488
2063	813,792	0.52	425,925	1,496,967	868,583	628,384
2064	824,403	0.52	431,479	1,065,488	879,908	185,581
2065	835,151	0.52	437,104	628,384	891,380	(262,996)
2066	846,040	0.52	442,803	185,581	N/A	N/A
2067	857,071	0.52	448,577	(262,996)	N/A	N/A

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Public Utilities Division
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**Table 2: Collier County Landfill Disposal Capacity
Level of Service Standard: Two Years of Lined Cell Capacity
at Previous Three Years Average Tons Per Capita Disposal Rate**

July 26, 2012

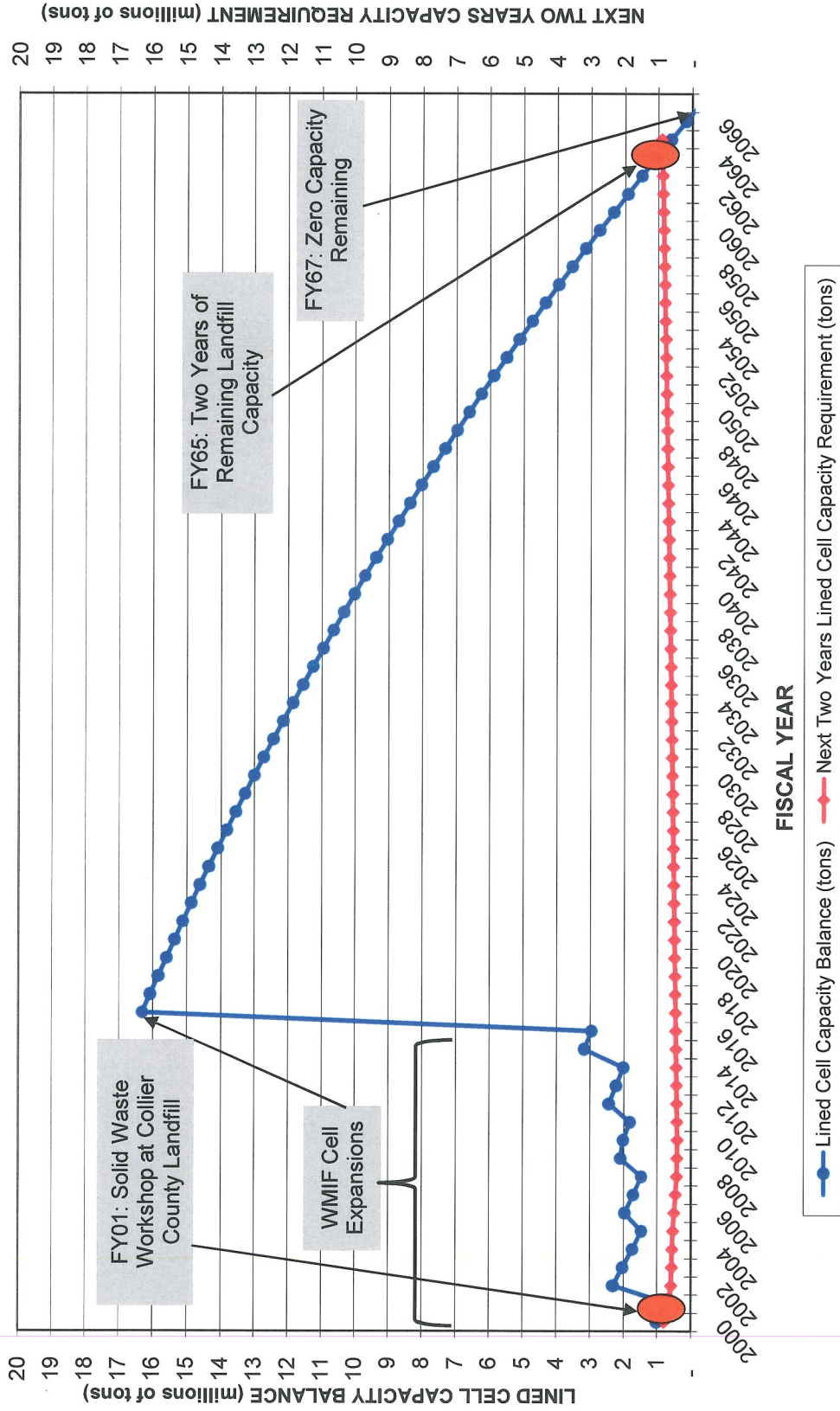
NOTES: (References are to the column numbers on previous page)

1. Fiscal Year starts October 1 and ends September 30.
2. Peak Population. Estimates and projections for the existing service area are based on "Collier County Peak Season Population Estimates and Projections" dated June 4, 2012, prepared by Collier County Comprehensive Planning Section. Populations are derived from data obtained from: 2010 Census; Bureau of Economic and Business Research (BEBR) population bulletins; Collier County Comprehensive Planning staff; and, Planning staff from Naples and Marco Island. FY 2035 - FY 2067 projected based on average annual percentage increase for FY 2032 - FY 2034 (1.30%).
3. Tons Per Capita Disposal Rate for FY 2000 - FY 2012 is calculated by dividing the actual Annual Tons Disposed (column 4) by the Peak Population (column 2). FY 2013 forward is the average Tons Per Capita Disposal Rate (column 3) of FY 2010, FY 2011, and FY 2012.
4. Annual Tons Disposed for FY 2000 - FY 2011 are actual tonnage amounts buried at the Collier County Landfill. FY 2012 reflects the projected tons disposed from the current year forecast. FY 2013 forward are derived from Peak Population (column 2) multiplied by the Tons Per Capita Disposal Rate (column 3).
5. Lined Cell Capacity Balance (tons) is the previous years Lined Cell Capacity Balance (column 5) minus Annual Tons Disposed (column 4) at the Collier County Landfill. See below for explanations of the bolded values in the Lined Cell Capacity Balance (column 5). Also see graph on page SW-9.

Fiscal Year	New Capacity (tons)	Description	Source of Information
2002	930,000	Contracted disposal capacity at the Okeechobee Landfill.	June 12, 2001 Disposal Capacity Agreement, as amended.
2002	1,173,575	Lined Cell Expansion	Complete.
2006	911,250	Lined Cell Expansion	Complete.
2009	845,250	Lined Cell Expansion	Complete.
2012	825,000	Lined Cell Expansion	Waste Management, Inc. of Florida (WMIF) 5-year Cell Development Schedule received 02/21/12.
2015	1,380,000	Lined Cell Expansion	WMIF 5-year Cell Development Schedule dated 02/21/12.
2018	13,569,878	Total remaining permitted capacity of landfill added. Lined cells will be constructed in future but have not been scheduled by WMIF.	WMIF Annual Estimate of Remaining Life and Capacity Letter, dated 02-02-12, less completed and 5-year Scheduled Cell Development Expansions.

6. Next Two Years Lined Cell Capacity Requirement (tons) is the sum of the next two years of Annual Tons Disposed (column 4) at the Collier County Landfill. See graph on page SW-9.
7. Projected Lined Cell Capacity Surplus or Deficiency (tons) is the Lined Cell Capacity Balance (column 5) minus the Next Two Years Lined Cell Capacity Requirement (column 6).

CHART 2: TWO YEARS OF LINED CELL CAPACITY
 Level of Service Standard = Two Years of Lined Cell Capacity at Previous Three Years Average Tons Per Capita Disposal Rate
 July 26, 2012



Collier County Government
Public Utilities Division
2012 Annual Update and Inventory Report (AUIR)

CHANGES FROM 2011 AUIR

July 26, 2012

2012 AUIR Column Number and Category	2011 AUIR	2012 AUIR	Reason for Change
BOTTOM LINE: Zero Disposal (airspace) Capacity	FY42	FY67	Two factors contributed to the extension of the Zero Disposal Capacity. First, the permitted airspace was increased from the previous year. Second, the Tons Per Capita Disposal Rate is reduced from the previous year.
(2) Peak Population	FY12: 402,679	FY12: 396,608	The Collier County Peak Population Projections decreased from the previous year.
(3) Tons Per Capita Disposal Rate	FY13: 0.53 tons/ capita/yr	FY13: 0.52 tons/ capita/yr	Increased recycling lowered the two previous years' average Tons Per Capita Disposal Rate.
(4) Annual Tons Disposed	FY13: 216,776 tons	FY13: 210,438 tons	Each year the Annual Tons Disposed for that year is the actual amount for that year. Future years Annual Tons Disposed are based on the three year average Tons Per Capita Disposal Rate.
(5) Total Landfill Capacity Balance, Table 1	FY10 and forward	FY11 and forward	The 2012 AUIR was updated to reflect the actual remaining disposal (airspace) capacity data available from Waste Management Inc., of Florida (WMIF), which includes their updated Annual Estimate of Remaining Life and Capacity letter and the increased value includes the 930,000 tons of contingency disposal capacity at Okeechobee Landfill.
(5) Lined Cell Capacity Balance, Table 2	FY10 and forward	FY11 and forward	The 2012 AUIR was updated to reflect the actual remaining disposal (airspace) capacity data available from Waste Management Inc., of Florida (WMIF), which includes their updated cell development schedule for the next five years and the increased value includes the 930,000 tons of contingency disposal capacity at Okeechobee Landfill.