

COUNTY WATER & SEWER DISTRICT – POTABLE WATER SYSTEM

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Collier County Government
Public Utilities Division
2013 ANNUAL UPDATE AND INVENTORY REPORT (AUIR)

COLLIER COUNTY WATER SEWER DISTRICT - POTABLE WATER SYSTEM

Introduction:

The Public Utilities Division's 2013 AUIR submittals are based on "Collier County Water & Sewer Districts Population Estimates and Projections" dated June 27, 2013, prepared by Collier County Comprehensive Planning Section. Populations are based on using Bureau of Economic and Business Research (BEBR) Medium Range growth rate through 2034. There are four notable changes from the 2012 Collier County Water-Sewer District (CCWSD) Potable Water System AUIR:

1. The Orange Tree Water Treatment Plant will be interconnected in 2014.
2. The Northeast Regional Water Treatment Plant (NERWTP) 10 MGD construction moved from 2023 to 2030.
3. The North County Regional Water Treatment Plant (NCRWTP) 2 MGD expansion construction, previously programmed for 2030, was removed.
4. The peak population used represents the actual served areas as represented on page W-5.

The 2013 potable water AUIR is presented as a snapshot of concurrency conditions. The CCWSD is in compliance with concurrency requirements for FY 2013 and FY 2014, as required by FS Section 163, the Collier County Comprehensive Plan and the Land Development Code

Recommendation:

The Public Utilities Division's staff recommends that the Collier County Board of County Commissioners approve the 2013 CCWSD Potable Water System AUIR.

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**POTABLE WATER SYSTEM - TREATMENT FACILITIES
LEVEL OF SERVICE STANDARDS (LOSS) ASSESSMENT FOR SERVICE AREA**

August 05, 2013

1	2	3	4	5	6	7	8	9
Fiscal Year	Population Served	Required Treatment Capacity @ 170 gpcd	Required Treatment Capacity Increase from Previous Year	Constructed Plant Capacity On-line	New Plant Capacity	Total Available Constructed Capacity	Retained/ (Deficit) Constructed System Capacity	Retained/ (Deficit) Constructed System Capacity Target Values
		MGD	MGD	MGD	MGD	MGD	MGD	MGD
2010	182,791	31.1		52.00		52.00	20.9	0.9 (Min) - 9.5 (Max)
2011	186,920	31.8	0.7	52.00		52.00	20.2	0.9 (Min) - 9.5 (Max)
2012	192,408	32.7	0.9	52.00		52.00	19.3	0.9 (Min) - 9.5 (Max)
2013	197,398	33.6	0.8	52.00		52.00	18.4	0.9 (Min) - 9.5 (Max)
2014	208,807	35.5	1.9	52.00	0.75 ¹	52.75	17.3	0.9 (Min) - 9.5 (Max)
2015	214,763	36.5	1.0	52.75		52.75	16.2	0.9 (Min) - 9.5 (Max)
2016	221,497	37.7	1.1	52.75		52.75	15.1	0.9 (Min) - 9.5 (Max)
2017	228,375	38.8	1.2	52.75		52.75	13.9	0.9 (Min) - 9.5 (Max)
2018	235,399	40.0	1.2	52.75		52.75	12.7	0.9 (Min) - 9.5 (Max)
2019	242,572	41.2	1.2	52.75		52.75	11.5	0.9 (Min) - 9.5 (Max)
2020	249,306	42.4	1.1	52.75		52.75	10.4	0.9 (Min) - 9.5 (Max)
2021	255,583	43.4	1.1	52.75		52.75	9.3	0.9 (Min) - 9.5 (Max)
2022	261,972	44.5	1.1	52.75		52.75	8.2	0.9 (Min) - 9.5 (Max)
2023	268,477	45.6	1.1	52.75		52.75	7.1	0.9 (Min) - 9.5 (Max)
2024	275,100	46.8	1.1	52.75		52.75	6.0	0.9 (Min) - 9.5 (Max)
2025	281,155	47.8	1.0	52.75		52.75	5.0	0.9 (Min) - 9.5 (Max)
2026	286,621	48.7	0.9	52.75		52.75	4.0	0.9 (Min) - 9.5 (Max)
2027	292,168	49.7	0.9	52.75		52.75	3.1	0.9 (Min) - 9.5 (Max)
2028	297,795	50.6	1.0	52.75		52.75	2.1	0.9 (Min) - 9.5 (Max)
2029	303,504	51.6	1.0	52.75		52.75	1.2	0.9 (Min) - 9.5 (Max)
2030	308,804	52.5	0.9	52.75	10.00	62.75	10.3	0.9 (Min) - 9.5 (Max)
2031	313,680	53.3	0.8	62.75	-0.75 ¹	62.00	8.7	0.9 (Min) - 9.5 (Max)
2032	318,611	54.2	0.8	62.00		62.00	7.8	0.9 (Min) - 9.5 (Max)
2033	323,596	55.0	0.8	62.00		62.00	7.0	0.9 (Min) - 9.5 (Max)
2034	328,648	55.9	0.9	62.00		62.00	6.1	0.9 (Min) - 9.5 (Max)

1. The Orange Tree Utility Water Treatment Plant may be decommissioned any time after transition.

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**POTABLE WATER SYSTEM - TREATMENT FACILITIES
LEVEL OF SERVICE STANDARDS (LOSS) ASSESSMENT FOR SERVICE AREA**

August 05, 2013

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

1. Fiscal Year starts October 1 and ends September 30.
2. Population Served. Estimates and projections for the served area are based on "Collier County Water & Sewer Districts Population Estimates and Projections" dated June 27, 2013, prepared by Collier County Comprehensive Planning Section. Populations are based on using Bureau of Economic and Business Research (BEBR) Medium Range growth rate through 2034. The peak population projections include the Orange Tree service area beginning in FY 2014.
3. Required Treatment Capacity @ 170 gpcd is obtained by multiplying the Peak Population (Column 2) times 170 gallons per capita per day (gpcd). 170 gpcd is the established Level of Service Standard (LOSS) as adopted in the 2008 Water Master Plan Update approved by the Board of County Commissioners on June 24, 2008. See graph on page W-4.
4. Required Treatment Capacity Increase from Previous Year is the increase of the Required Treatment Capacity @ 170 gpcd (Column 3) for the year listed from the previous year.
5. Constructed Plant Capacity On-line is the total finished water treatment capacity at the beginning of the Fiscal Year in Million Gallons per Day (MGD). All plant capacities are stated in Maximum Month Daily Demand (MMDD).
6. New Plant Capacity schedule is as follows:

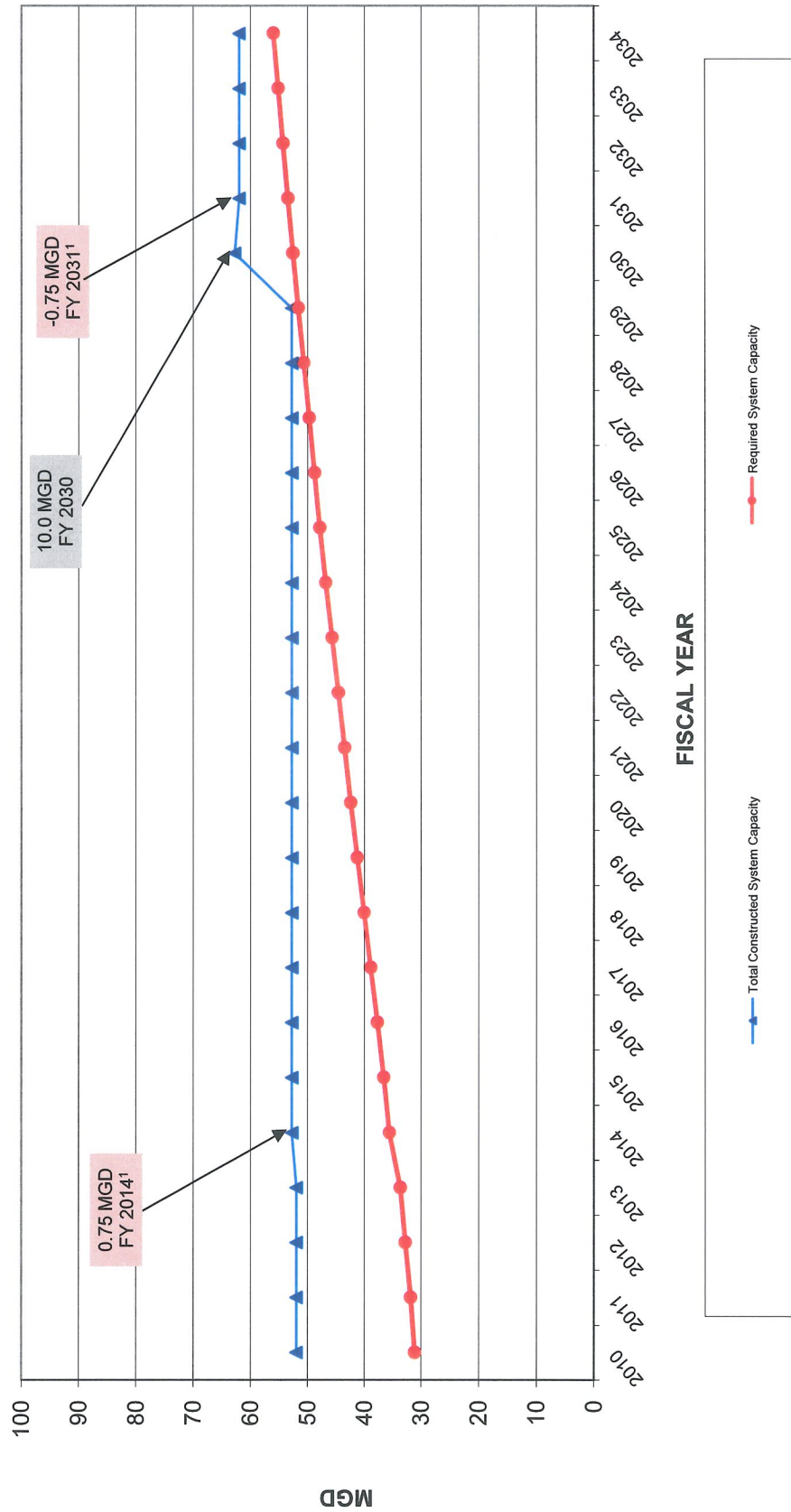
Fiscal year	New Plant Constructed Capacity	Description	Source of Information
2014	0.75 MGD	Interconnect with Orange Tree Water Treatment Plant (OTWTP).	Recommended based on June 7, 2013 Comprehensive Planning Section population projections.
2030	10.0 MGD	New Northeast Regional Water Treatment Plant (NERWTP).	Recommended based on June 7, 2013 Comprehensive Planning Section population projections.
2031	-0.75 MGD	Decommission the OTWTP when the new NERWTP is operational.*	Recommended based on June 7, 2013 Comprehensive Planning Section population projections.

* The Orange Tree Utility Water Treatment Plant may be decommissioned any time after transition.

7. Total Available Constructed Capacity is total of Total Constructed Plant Capacity On-line (Column 5) plus New Plant Constructed Capacity (Column 6). See graph on page W-4.
8. Retained/(Deficit) Constructed System Capacity is the difference between Total Constructed Plant Capacity (Column 7) and Constructed Treatment Capacity (Column 3).
9. Retained/(Deficit) Constructed System Capacity Target Values for planning purposes are 0.9 MGD minimum and 9.5 MGD maximum through FY 2034. The target minimum capacities represent the projected increase in the next year's demand and the target maximum capacities represent the projected increase in demand for the next eight years.

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POTABLE WATER SYSTEM
Level of Service Standard: 170 gpcd

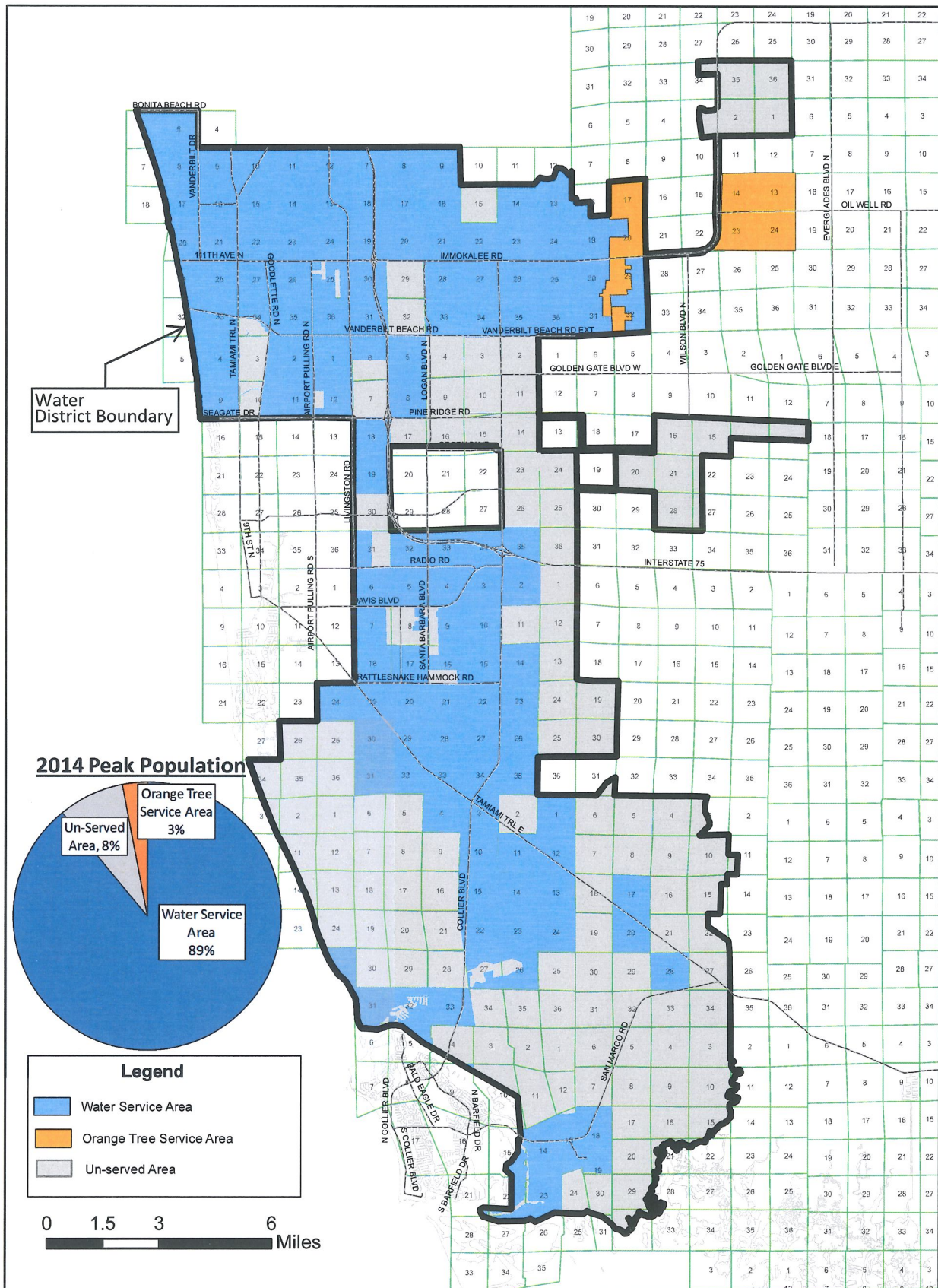
August 05, 2013



1. The Orange Tree Utility Water Treatment Plant may be decommissioned any time after transition.

Existing and Future Water Service Areas

2013 Water AUIR



W-5

