



RECYCLED WATER SURVEY RESULTS, NOVEMBER, 2011

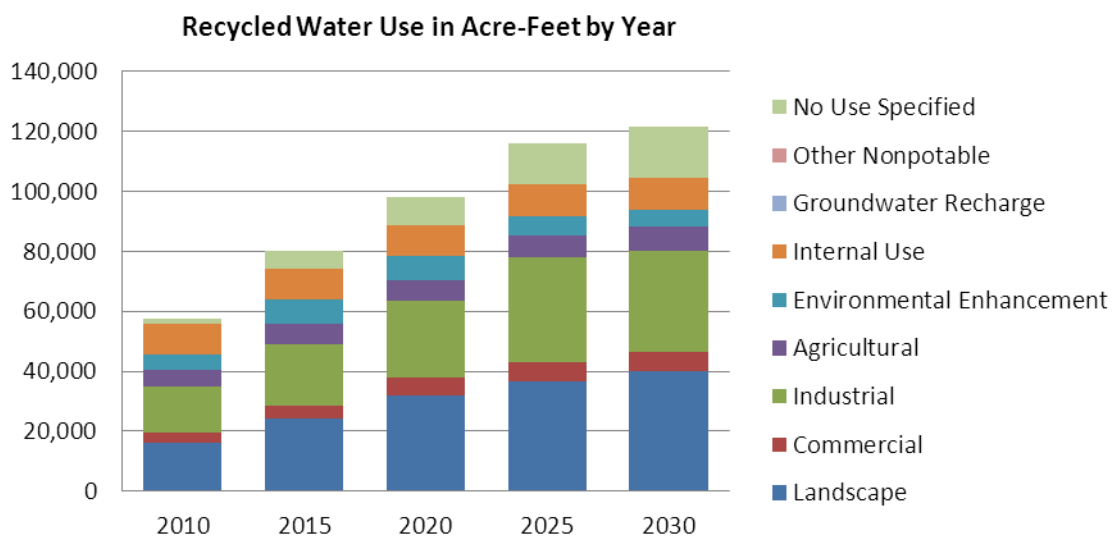
Between July and October of 2011, the Recycled Water Committee (RWC) of the Bay Area Clean Water Agencies (BACWA) surveyed San Francisco Bay area agencies about their current and projected production and use of recycled water. The purpose of the survey was to obtain a more accurate estimate of current production, to better understand trends in water recycled use, and to understand how those trends are anticipated to change with time. The RWC hopes to undertake this survey again in three to five years to determine how these results change with time.

In total, the RWC contacted thirty-eight agencies, and thirty-two responses were received. Based on a review of the agencies that did not respond, the RWC believes that the numbers below capture almost all of the water recycling occurring in the Bay Area.

Results

Table 1. Bay Area Recycled Water Production by Year and Use in Acre-Feet per Year (AFY)

	2010	2015	2020	2025	2030
Landscape	16,048	24,262	31,751	36,572	40,003
Commercial	3,716	4,273	6,058	6,464	6,562
Industrial	15,264	20,624	25,712	34,897	33,666
Agricultural	5,536	6,889	6,889	7,489	7,989
Environmental Enhancement	4,896	7,844	7,844	6,244	5,744
Internal Use	10,448	10,399	10,567	10,567	10,567
Groundwater Recharge	0	0	0	0	0
Other Nonpotable	0	31	96	127	157
No Use Specified	1,782	5,883	8,974	13,487	16,985
YEARLY TOTAL	57,690	80,205	97,891	115,847	121,673



Conclusions

- In 2010 the Bay Area recycled almost 10% of the effluent generated.¹
- The State Water Resources Control Board estimated that 29,100 AFY were produced in the San Francisco Bay region in the year 2000. The 2010 production was almost twice the amount produced in 2000.
- Recycled water production is expected to more than double over the next twenty years.
- The current and future predominate uses of recycled water are for landscape irrigation and industrial facilities (which includes boiler water washdown and cooling water use by oil refineries).
- The amount applied for internal uses – which includes water used for processes, sewer flushing, and washdown at wastewater treatment plants – is consistent over time and was likely maximized early in the development of recycled water.
- The relative allocation across uses is projected to stay the same over the next twenty years.

Use Definitions

Landscape Irrigation: All irrigation of landscape, including golf courses and playing/recreation fields.

Commercial: Dual plumbing, fountains and water features, and toilet flushing.

Industrial: All cooling water uses, all other energy uses and production support, car washes and other wash-down and manufacturing.

Agricultural: All irrigation of agricultural crops including grass or fodder, regardless of whether grass or fodder is used for grazing.

Environmental Enhancements: Wetlands, including fresh or brackish and seasonal, and other projects to support waterfowl and other wildlife.

Indirect Potable Reuse with Groundwater Recharge: Replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system, as defined in Section 116275 of the Health and Safety Code.

Internal Uses: Process water, sewer flushing or wash down at a municipal wastewater treatment plant, or on municipal streets.

Other Nonpotable: All other types of uses that did not specifically fit the use definitions listed above as determined by the water recycling utility (for example residential toilet flushing in condominiums).

¹ Assumes that the Bay Area produces 617 million gallons per day of effluent (SFEI, 2007 Pulse of the Estuary). Actual production is likely much lower due to conservation measures implemented in recent years.