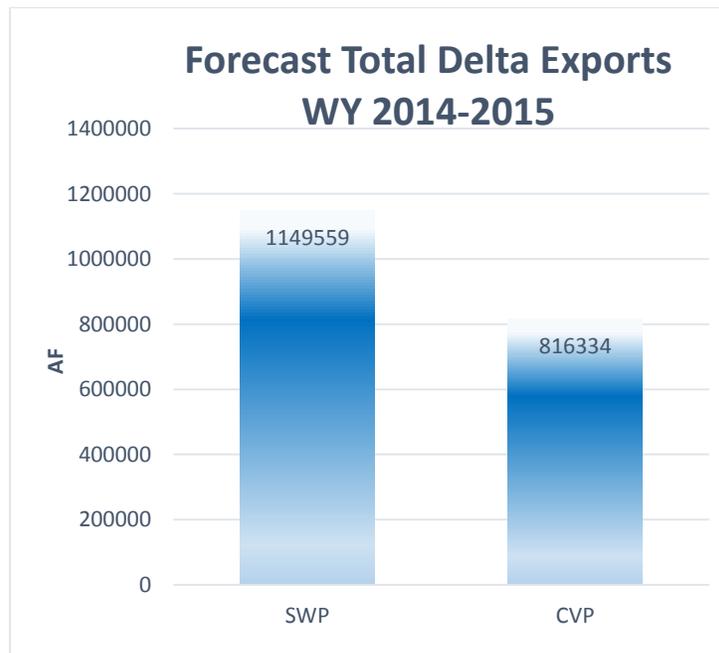
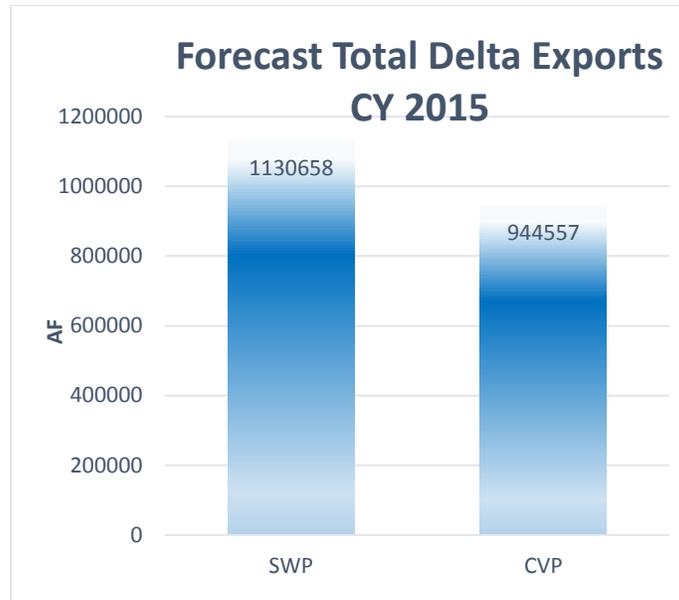


Urban Water Conservation
Essential for Preserving Storage in Reservoirs

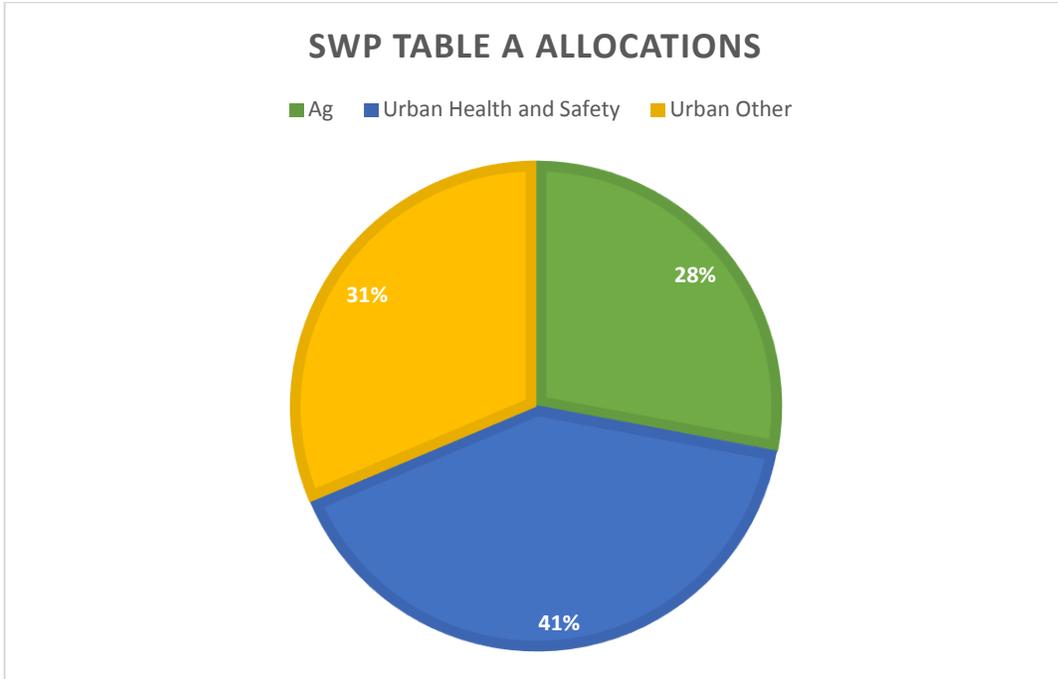
Deirdre Des Jardins
California Water Research

Preserving Storage in State Water Project Reservoirs



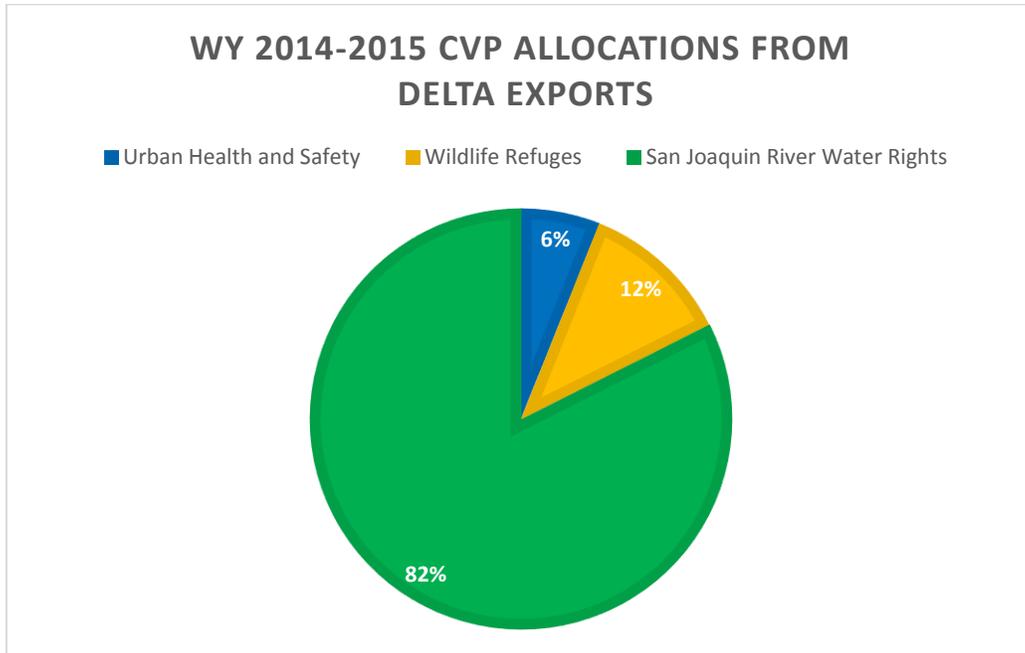
The State Water Project provides allocations by calendar year, and the CVP provides exports by water year (Oct 1 2014 – Sept 30 2015). CVP allocations are reduced by their contract obligations of 2.1 million acre feet to the Sacramento Settlement Contractors. Contract deliveries to the Settlement Contractors are expected to be 75% for the 2014-2015 water year.

Urban Landscaping and “Other” Uses a Significant Component of Demand on SWP



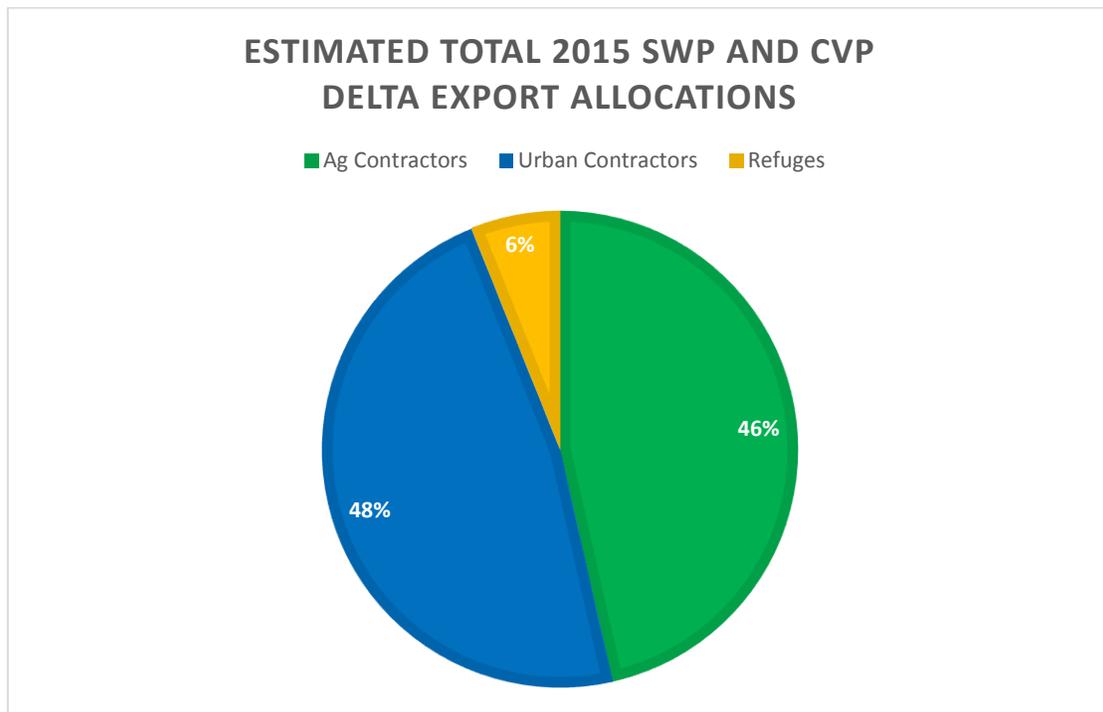
Estimates based on dominant uses by SWP water contractors, and January 2015 estimate of 330,000 acre feet needed for Health and Safety. Almost one third of SWP Table A Allocations are going to fulfill urban demand in excess of health and safety needs.

CVP Urban Allocations Limited by Senior Water Rights



CVP allocations for urban uses are reduced by allocations for the San Joaquin River Exchange Contractors, who have water rights senior to the CVP. As a result, urban contractors are getting only 25% of their historical allocations in WY 2014-2015, or Health and Safety needs, whichever is greater. This chart assumes that all urban allocations are for Health and Safety.

Urban Use a Major Component of Total Delta Exports



Although the SWP and CVP use different periods for their allocations, one can get a reasonable estimate of use of Delta exports by summing the allocations and calculating the percentages. This estimate shows that urban use is a significant percentage of Delta exports, and may even be higher than agricultural use.

Conclusion:

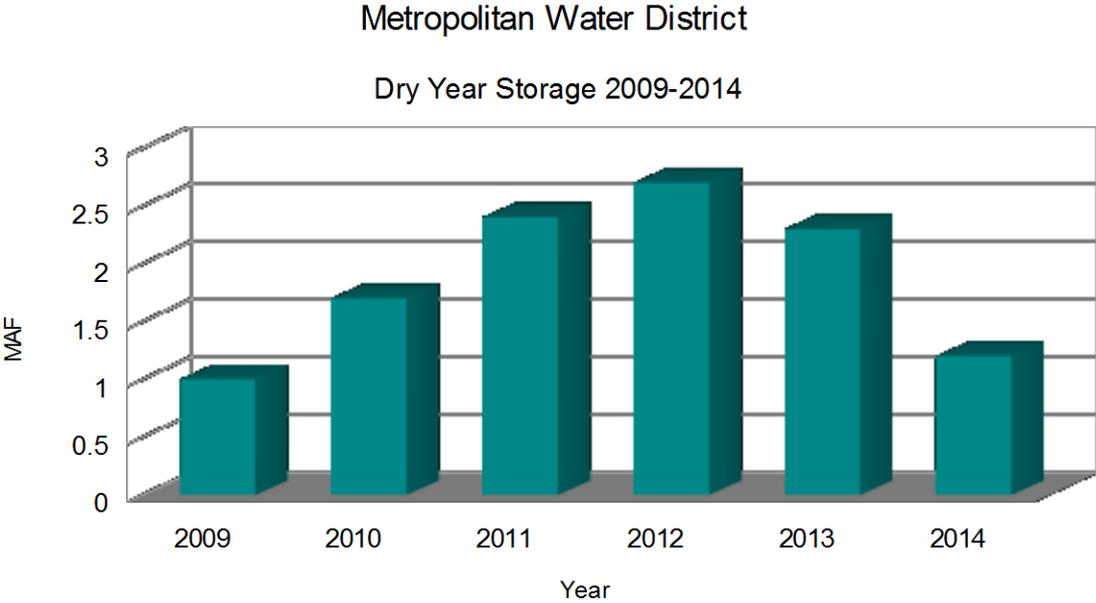
A 25% reduction in urban demand in SWP service areas will help significantly in reducing demand on the Delta, and on SWP reservoirs.

To protect the public trust, the State of California needs to take a demand-side approach to conserving water in reservoirs, as well as a supply-side approach (i.e., the TUCP.)

Conservation Regulations:

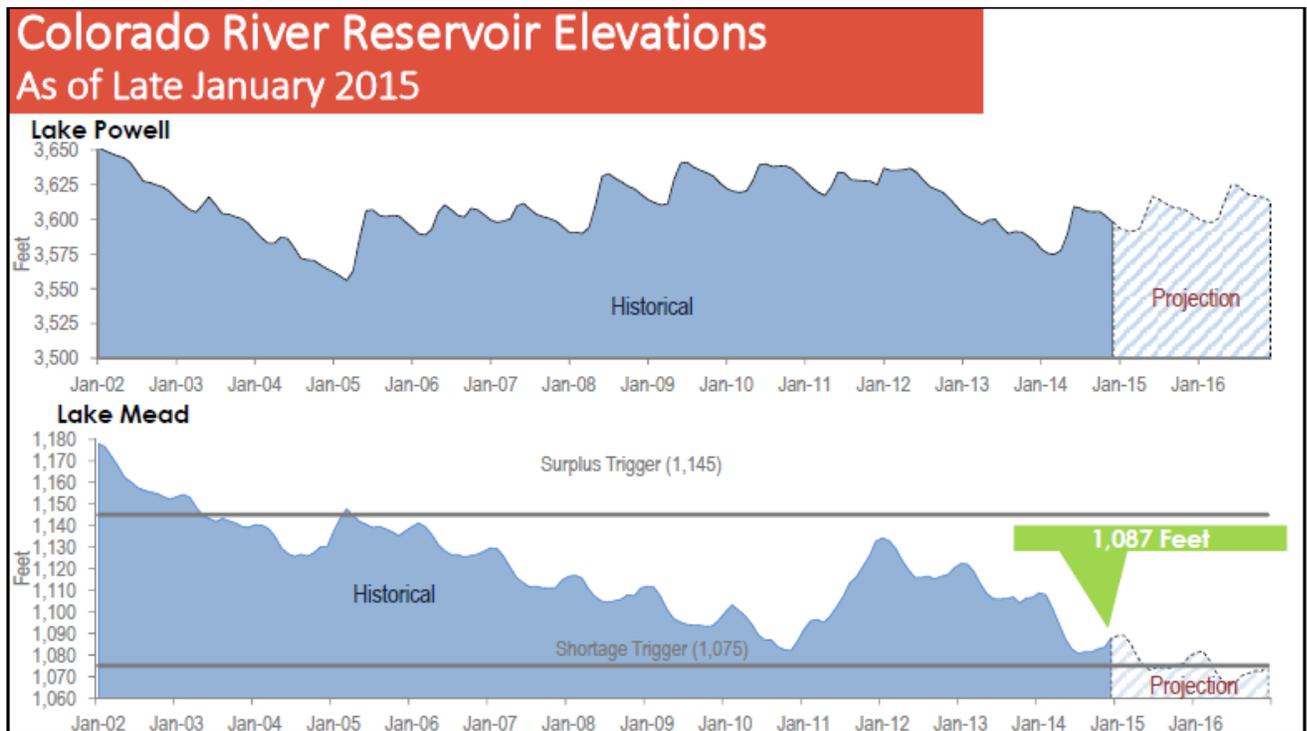
The State Water Resources Control Board should assure that a minimum of 25% conservation is achieved for the SWP export service areas, including coastal and inland Southern California, and the Santa Clara Valley.

Preserving Storage in Local Reservoirs: MWD



End of Period Storage in Metropolitan Water District reservoirs. Storage is significantly decreased.

Colorado River Storage Being Drawn Down



Source: Metropolitan Water District of Orange County

The Colorado River basin is also in a drought. Storage in Lake Mead is at historic lows. MWD is relying on Colorado River allocations to make up for shortages of Delta Exports from the State Water Project.

Conclusion: Achieving a minimum of 25% conservation targets in MWD service areas is essential to conserve remaining local storage and minimize potential economic disruption from the drought.

Preserving Groundwater Storage in Urban Water Districts

Table 1-2.4 Water Shortage Contingency Plan Action Levels

	Stage	Title	Projected End-of-Year Groundwater Storage (Acre-Feet)	Suggested Short-Term Reduction in Water Use
	1	Normal	Above 300,000	None
December 2014*	2	Alert	250,000 to 300,000	0 – 10%
Early 2014 Projection*	3	Severe	200,000 to 250,000	10 – 20%
	4	Critical	150,000 to 200,000	20 – 40%
	5	Emergency	Less than 150,000	Up to 50%

*In February 2014, the Board adopted a resolution calling for a 20% countywide water use reduction based on projected severe conditions if short-term water saving measures were not implemented (lower arrow). The estimated December 2014 storage accounts for the 13% countywide reduction achieved in calendar year 2014 (upper arrow).

Santa Clara Valley Water District has experienced a major drawdown of groundwater storage in its service area. Santa Clara also gets Delta exports, and asked for an increased Health and Safety allocation from the Bureau to preserve groundwater.

Conclusion: Achieving a minimum demand reduction of 25% in the Santa Clara Valley Water District Service Area is essential.