



# Addendum to 2015 Urban Water Management Plan (Draft)

Sweetwater Authority  
*Chula Vista, California*

**April 13, 2021**



# Appendix H. Reduced Delta Reliance



## Background

An urban water supplier that anticipates participating in or receiving water from a proposed project, such as a multiyear water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Sacramento-San Joaquin Delta (Delta), should provide information in their 2015 and 2020 UWMPs that can then be used in the certification of consistency process to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Regulations, Title 23, §5003).

Delta Plan Policy WR P1 is one of fourteen regulatory policies in the Delta Plan. The Delta Plan is a comprehensive, long-term, legally enforceable plan guiding how federal, state, and local agencies manage the Delta's water and environmental resources. The Delta Plan was adopted in 2013 by the Delta Stewardship Council (DSC). Delta Plan Policy WR P1 identifies urban water management plans (UWMP) as the tool to demonstrate consistency with the state policy that suppliers that carry out or take part in covered actions must reduce their reliance on the Delta.

Sweetwater Authority's (Authority) information on its reduced reliance on the Delta is documented below and can be used in future certifications of consistency with WR P1 for potential future water supply covered actions in the Delta.

## 1 Process to Demonstrate Reduced Reliance on Delta

Consistent with Appendix C in the California Department of Water Resource's Draft UWMP Guidebook 2020 (DWR Guidebook), the Authority's analysis followed Steps 1 through 4 in the DWR Guidebook to document consistency with WR P1 and produce data and information covering the Authority's 2015 and 2020 UWMPs as noted below.

- 1) Quantify the water use efficiency supply volume
- 2) Quantify total water supplies;
- 3) Quantify water supplies that contribute to regional self-reliance; and
- 4) Demonstrate reduced reliance on water supplies from the Delta watershed.

## 2 Quantifying Total Water Supplies

To demonstrate reduced reliance on the Delta, the Authority compared its projected Delta water use against a baseline. The baseline, shown in Table C-1, was determined as the 2010 water demand.

### 3 Quantifying Water Supplies that Contribute to Regional Self-Reliance

To demonstrate consistency with the Delta Plan, WR P1 subsection (c)(1)(C) states that water suppliers must report in their UWMP the expected outcome for measurable improvement in regional self-reliance as a reduction in water used from the Delta watershed. To determine whether there is an increase in regional self-reliance, the baseline calculated in Table C-1 is used to compare against the water supplies listed in Table C-3 that contribute to regional self-reliance. The comparison is done over five-year periods, from 2015 through 2045, to calculate how regional self-reliance will change over time.

Table C-3 lists the sources of water supplies and volumes that contribute to regional self-reliance. As shown in the table, the Authority's reliance on the Delta watershed has decreased compared to the baseline as the percent of local water supplies that contribute to regional self-reliance increases. The volumes of the individual supplies that contribute to regional self-reliance can be found in Section 4 of the Authority's 2010 UWMP, Section 5 of the Authority's 2015 UWMP, and Section 6 of the Authority's 2020 UWMPs.

The water supplies included in Table C-3 that contribute to regional self-reliance are represent the Authority's verifiable supplies from groundwater, surface water, and desalinated water production within the "Local and Regional Water Supply and Storage Projects" category. Imported water supplies from San Diego County Water Authority (SDCWA), and indirectly the Metropolitan Water District of Southern California (Metropolitan), may include a percentage of water from the Delta watershed, and SDCWA imported supplies are excluded from the list of supplies that contribute to regional self-reliance in the San Diego region.

### 4 Reduced Reliance on Water Supplies from the Delta Watershed

WR P1 subdivision (c)(1)(C) requires water suppliers to report on the expected outcomes for measurable reductions in water supplies from the Delta watershed. The Authority purchases water from SDCWA, and the only potential source of water from the Delta watershed is water imported from SDCWA and Metropolitan. Because water provided by Metropolitan to SDCWA can include supplies that comingle Delta watershed and Colorado River supplies, SDCWA had incorporated Metropolitan's forecast as a reasonable methodology to forecast the percent of Metropolitan water supply from the Delta watershed and the Colorado River, at least until Metropolitan provides the methodology approved by the Delta Stewardship Council as anticipated. Accordingly, the Authority presented its report of reduced reliance on the Delta watershed conservatively assuming all of SDCWA's supplies to the Authority include Delta watershed and Colorado River supplies. Additional information on SDCWA's methodology can be found in Appendix M of SDCWA's Draft 2020 UWMP

## Reduced Reliance Calculation

**Table C-1: Optional Calculation of Water Use Efficiency -To be completed if Water Supplier does not specifically estimate Water Use Efficiency as a supply**

Service Area Water Use Efficiency Demands (Acre-Feet)		Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For		19,982	19,232	16,941	21,104	21,581	22,057	23,031	23,659
Non-Potable Water Demands		-	-	-	-	-	-	-	-
Potable Service Area Demands with Water Use Efficiency Accounted For		19,982	19,232	16,941	21,104	21,581	22,057	23,031	23,659

  

Total Service Area Population		Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Population		177,288	188,296	201,792	209,322	214,059	218,774	228,433	234,668

  

Water Use Efficiency Since Baseline (Acre-Feet)		Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Per Capita Water Use (GPCD)		101	91	75	90	90	90	90	90
Change in Per Capita Water Use from Baseline (GPCD)			(9)	(26)	(11)	(11)	(11)	(11)	(11)
Estimated Water Use Efficiency Since Baseline			1,991	5,803	2,489	2,545	2,601	2,716	2,790

**Table C-2: Calculation of Service Area Water Demands Without Water Use Efficiency**

Total Service Area Water Demands (Acre-Feet)		Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For		19,982	19,232	16,941	21,104	21,581	22,057	23,031	23,659
Reported Water Use Efficiency or Estimated Water Use Efficiency Since Baseline									
Service Area Water Demands without Water Use Efficiency Accounted For		19,982	19,232	16,941	21,104	21,581	22,057	23,031	23,659

**Table C-3: Calculation of Supplies Contributing to Regional Self-Reliance**

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)		Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Use Efficiency		-	1,991	5,803	2,489	2,545	2,601	2,716	2,790
Water Recycling									
Stormwater Capture and Use									
Advanced Water Technologies									
Conjunctive Use Projects									
Local and Regional Water Supply and Storage Projects		6,252	5,278	12,500	12,500	12,500	12,500	12,500	12,500
Other Programs and Projects the Contribute to Regional Self-Reliance									
Water Supplies Contributing to Regional Self-Reliance		6,252	7,269	18,303	14,989	15,045	15,101	15,216	15,290

  

Service Area Water Demands without Water Use Efficiency (Acre-Feet)		Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For		19,982	19,232	16,941	21,104	21,581	22,057	23,031	23,659

  

Change in Regional Self Reliance (Acre-Feet)		Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Supplies Contributing to Regional Self-Reliance		6,252	7,269	18,303	14,989	15,045	15,101	15,216	15,290
Change in Water Supplies Contributing to Regional Self-Reliance			1,017	12,051	8,737	8,793	8,849	8,964	9,038

  

Percent Change in Regional Self Reliance (As Percent of Demand w/out WUE)		Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Percent of Water Supplies Contributing to Regional Self-Reliance		31.3%	37.8%	108.0%	71.0%	69.7%	68.5%	66.1%	64.6%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance			6.5%	76.8%	39.7%	38.4%	37.2%	34.8%	33.3%

**Table C-4: Calculation of Reliance on Water Supplies from the Delta Watershed**

<b>Water Supplies from the Delta Watershed (Acre-Feet)</b>	<b>Baseline (2010)</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045 (Optional)</b>
CVP/SWP Contract Supplies	14,548	13,954	2,701	8,604	9,081	9,557	10,531	11,159
Delta/Delta Tributary Diversions								
Transfers and Exchanges								
Other Water Supplies from the Delta Watershed								
<b>Total Water Supplies from the Delta Watershed</b>	<b>14,548</b>	<b>13,954</b>	<b>2,701</b>	<b>8,604</b>	<b>9,081</b>	<b>9,557</b>	<b>10,531</b>	<b>11,159</b>

  

<b>Service Area Water Demands without Water Use Efficiency (Acre-Feet)</b>	<b>Baseline (2010)</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045 (Optional)</b>
Service Area Water Demands without Water Use Efficiency Accounted For	19,982	19,232	16,941	21,104	21,581	22,057	23,031	23,659

  

<b>Change in Supplies from the Delta Watershed (Acre-Feet)</b>	<b>Baseline (2010)</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045 (Optional)</b>
Water Supplies from the Delta Watershed	14,548	13,954	2,701	8,604	9,081	9,557	10,531	11,159
Change in Water Supplies from the Delta Watershed		(594)	(11,847)	(5,944)	(5,467)	(4,991)	(4,017)	(3,389)

  

<b>Percent Change in Supplies from the Delta Watershed (As a Percent of Demand w/out WUE)</b>	<b>Baseline (2010)</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045 (Optional)</b>
Percent of Water Supplies from the Delta Watershed	72.8%	72.6%	15.9%	40.8%	42.1%	43.3%	45.7%	47.2%
Change in Percent of Water Supplies from the Delta Watershed		-0.2%	-56.9%	-32.0%	-30.7%	-29.5%	-27.1%	-25.6%