

**Appendix M Addendum**  
**to the**  
**San Diego County Water Authority's**  
**2015 Urban Water Management Plan**

**Reporting on Reduced Delta Reliance**

**May 27, 2021**

## Appendix M – Reporting on 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 of Regulations, Title 23, §5003).<sup>1</sup>

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.<sup>2</sup>

The California Code of Regulations, Title 23, § 5003(c)(1), states that commencing in 2015, water suppliers that have done all of the following are contributing to reduced reliance on the Delta and improving regional self-reliance and are therefore consistent with Delta Plan Policy WR P1:

- (A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8;
- (B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and
- (C) Included in the Plan, commencing in 2015, the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance shall be reported in the Plan as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code section 1011(a).

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<sup>1</sup> *Draft Urban Water Management Plan Guidebook 2020*, California Department of Water Resources, August 2020, p. C-1.

<sup>2</sup> *Ibid.*, p. C-2.

The Water Authority’s 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.

**Process to Demonstrate Reduced Reliance on Delta**

Consistent with Appendix C in the California Department of Water Resource’s *Draft UWMP Guidebook 2020*<sup>3</sup> (DWR Guidebook), the analysis followed Steps 2 through 4 in the DWR Guidebook to document consistency with WR P1 and produce data and information covering the Water Authority’s 2015 and 2020 UWMPs. It should be noted that Step 1 of the DWR Guidebook process applies to water suppliers that do not quantify the water use efficiency supply volumes in their UWMPs. The Water Authority quantifies this information in its UWMPs, therefore, Step 1 of the process was not included in the analysis.<sup>4</sup> A list of Steps 1 through 4 is shown below.

- 1) Quantify the water use efficiency supply volume (not applicable);
- 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.

Unless otherwise noted, the sources of the data used in the analysis are shown in Table 1.

Table 1 – Source of Water Supply Data

Analysis Year	Data Source	
2010 (Baseline)	2005 UWMP	Tables 2-2 and 8-1
2015	2010 UWMP	Tables 2-5 and 9-1
2020	2015 UWMP	Tables 2-4 and 9-1
2025, 2030, 2035, 2040, 2045	2020 UWMP	Tables 2-4 and 9-1

**Quantification of Total Water Supplies**

To demonstrate reduced reliance on the Delta, the Water Authority compared its projected Delta water use against a baseline. The baseline, shown in Table 2, was calculated by taking the projected 2010 normal year water demand and adding projected water efficiency savings for 2010. Consistent with DWR’s Guidebook, normal year water demands were used as a surrogate for normal year water supplies to help alleviate issues associated with instances where available water supplies exceed normal year water demands.<sup>5</sup> In addition, consistent with the DWR

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<sup>3</sup> *Ibid.*, p. C-6.  
<sup>4</sup> *Ibid.*, p. C-14.  
<sup>5</sup> *Ibid.*, p. C-16.

Guidebook, actual water use was not used for the current year due to the influence of weather and other variables on water use.<sup>6</sup> Rather, UWMP normal year demand projections were used to represent current and future water use.

Table 2 – Service Area Water Demands without Water Use Efficiency

Total Service Area Water Demands (Acre-Feet)	Baseline (2010)	2015 <sup>a</sup>	2020	2025	2030	2035	2040	2045 (opt)
Service Area Water Demands with Water Use Efficiency	715,450	647,285	587,581	555,758	578,244	598,474	614,235	630,771
Saving from Water Use Efficiency	79,960	6,737	74,141	62,411	66,921	73,035	81,625	85,698
Service Area Water Demands without Water Use Efficiency	795,410	654,022	661,722	618,169	645,165	671,509	695,860	716,469

<sup>a</sup> Consistent with SBX7-7 guidelines, water use efficiency targets could be met through both recycled water supplies and additional conservation savings. For 2015, the savings from water use efficiency represents the additional increment of water use efficiency required to meet the region’s water use efficiency target under SBX7-7 after accounting for available recycled water supplies.

### **Quantification of Water Supplies that Contribute to Regional Self-Reliance**

For a covered action 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 2 is used to compare against the water supplies listed in Table 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 3 lists the sources of water supplies and volumes that contribute to regional self-reliance. As shown in the table, the Water Authority’s reliance on the Delta watershed decreases over time as the percent of water supplies that contribute to regional self-reliance increase over time. The volumes of the individual supplies that contribute to regional self-reliance can be found in Section 8 of the Water Authority’s 2005 UWMP, and Section 9 of the Water Authority’s 2010, 2015, and 2020 UWMPs.

The water supplies included in Table 3 that contribute to regional self-reliance are grouped into categories that are consistent with the DWR Guidebook and represent Water Authority and member agency verifiable supplies. Recycled water supplies are listed in the “Water Recycling” category. Water supplies from the Carlsbad Desalination Plant are listed in the “Advanced Water Technologies” category. The remaining water supplies are included in the “Local and Regional Water Supply and Storage Projects” category, and consist of water supplies from the Imperial Irrigation District water transfer, All-American and Coachella Canal lining projects, groundwater, brackish groundwater, surface water, potable reuse, and San Luis Rey water transfers. Since supplies from the Metropolitan Water District of Southern California (Metropolitan) may include a percentage of water from the Delta watershed, Metropolitan supplies are excluded from the list of supplies that contribute to regional self-reliance in the San Diego region.

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<sup>6</sup> *Ibid.*, p. C-7.

Table 3 – Calculation of Supplies Contributing to Regional Self-Reliance

<b>Water Supplies Contributing to Regional Self-Reliance (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 (opt)</b>
Water Use Efficiency	79,960	6,737	74,141	62,411	66,921	73,035	81,625	85,698
Water Recycling	33,668	38,660	40,459	42,993	46,493	46,593	46,693	46,793
Stormwater Capture and Use	-	-	-	-	-	-	-	-
Advanced Water Technologies	-	-	56,000	56,000	56,000	56,000	56,000	56,000
Conjunctive Use Projects	-	-	-	-	-	-	-	-
Local and Regional Water Supply and Storage Projects	235,924	250,436	355,120	402,599	423,959	484,021	480,521	480,521
Other Programs and Projects the Contribute to Regional Self-Reliance	-	-	-	-	-	-	-	-
<b>Water Supplies Contributing to Regional Self-Reliance</b>	<b>349,552</b>	<b>295,833</b>	<b>525,720</b>	<b>564,003</b>	<b>593,373</b>	<b>659,649</b>	<b>664,839</b>	<b>669,012</b>

  

<b>Service Area Water Demands without Water Use Efficiency</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 (opt)</b>
Service Area Water Demands without Water Use Efficiency	795,410	654,022	661,722	618,169	645,165	671,509	695,860	716,469

  

<b>Change in Regional Self Reliance (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 (opt)</b>
Water Supplies Contributing to Regional Self-Reliance	349,552	295,833	525,720	564,003	593,373	659,649	664,839	669,012
Change in Water Supplies Contributing to Regional Self-Reliance		(53,719)	176,168	214,451	243,821	310,097	315,287	319,460

  

<b>Change in Percentage Regional Self Reliance (As a Percent of Water Demand without 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 (opt)</b>
Percentage of Water Supplies Contributing to Regional Self-Reliance	43.9%	45.2%	79.4%	91.2%	92.0%	98.2%	95.5%	93.4%
Change in Percentage of Water Supplies Contributing to Regional Self-Reliance		102.9%	180.8%	207.6%	209.3%	223.5%	217.4%	212.5%

**Demonstration of 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. For the Water Authority and its member agencies, the only potential source of water from the Delta watershed is water purchased from Metropolitan. However, because of the integrated nature of Metropolitan’s systems and operations, and the collective nature of Metropolitan’s regional efforts, it is infeasible to attempt to completely segregate and quantify individual reliance on the Delta for each of Metropolitan’s member agencies. In addition, the Water Authority receives blended water from Metropolitan as determined by Metropolitan. That blend varies from month-to-month and year-to-year due to hydrology, operational constraints, use of storage, and other factors. Because of these data limitations, the Water Authority utilized the data contained in Table A.11-3 of Metropolitan’s *Draft 2020 UWMP* to report on the expected outcomes for measurable reductions in water supplies from the Delta watershed.<sup>7</sup> This information is shown in Table 4.

<sup>7</sup> *Draft 2020 UWMP*, Metropolitan Water District of Southern California, May 2021, Appendix 11, Table A.11-3.

Table 4 – Calculation of Reliance on Water Supplies from Delta Watershed <sup>8</sup>

Water Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (opt)
CVP/SWP Contract Supplies	1,472,000	1,029,000	984,000	1,133,000	1,130,000	1,128,000	1,126,000	1,126,000
Delta/Delta Tributary Diversions	-	-	-	-	-	-	-	-
Transfers and Exchanges	20,000	44,000	91,000	58,000	52,000	52,000	52,000	52,000
Other Water Supplies from the Delta Watershed								
<b>Total Water Supplies from the Delta Watershed</b>	<b>1,492,000</b>	<b>1,073,000</b>	<b>1,075,000</b>	<b>1,191,000</b>	<b>1,182,000</b>	<b>1,180,000</b>	<b>1,178,000</b>	<b>1,178,000</b>
Service Area Water Demands without Water Use Efficiency	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (opt)
Service Area Water Demands without Water Use Efficiency Savings	5,493,000	5,499,000	5,219,000	4,925,000	5,032,000	5,156,000	5,261,000	5,374,000
Change in Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (opt)
Total Water Supplies from the Delta Watershed	1,492,000	1,073,000	1,075,000	1,191,000	1,182,000	1,180,000	1,178,000	1,178,000
Change in Water Supplies from the Delta Watershed		(419,000)	(417,000)	(301,000)	(310,000)	(312,000)	(314,000)	(314,000)
Change in Percentage of Supplies from the Delta Watershed (As a Percent of Water Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (opt)
Percentage of Total Water Supplies from the Delta Watershed	27.2%	19.5%	20.6%	24.2%	23.5%	22.9%	22.4%	21.9%
Change in Percentage of Water Supplies from the Delta Watershed		-7.6%	-6.6%	-3.0%	-3.7%	-4.3%	-4.8%	-5.2%

The CVP/SWP contract supplies in Table 4 include Metropolitan's State Water Project Table A and Article 21 supplies. The values in Table 4 do not include supplies from San Luis Carryover storage or Central Valley storage programs. The transfers and exchanges of supplies from the Delta watershed shown in Table 4 include supplies from the San Bernardino Valley MWD Program, Yuba River Accord Purchase Program, the San Gabriel Valley MWD Program, and other generic SWP and Central Valley transfers and exchanges. Additional information can be found in Section 3.2 and Appendix 3 of Metropolitan's *Draft 2020 UWMP*.<sup>9</sup>

<sup>8</sup> *Ibid.*, Table A.11-3.

<sup>9</sup> *Ibid.*, pg. A.11-8.