

## **Appendix K - Delta Reliance**

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## Appendix K – Reporting on Reduced Delta Reliance

### Regulatory Background

Urban water suppliers that anticipate 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) are required to demonstrate reduced reliance on the Delta in their 2015 and 2020 Urban Water Management Plans (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).<sup>1</sup> The Delta Plan Policy WR P1 identifies 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 City'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.

### City of Oceanside (City) Reliance on Delta Watershed

The City currently has two direct sources of potable water: purchased raw and treated water from the San Diego County Water Authority (Water Authority), and local groundwater. In 2020, approximately 89% of the City's water supplies were purchased from the Water Authority. The Water Authority's imported water supplies are primarily sourced from the State Water Project (SWP) and Colorado River Project (CVP) via Metropolitan Water District of Southern California (MWD), and from the CVP via transfers from Imperial Irrigation District (IID).

The City's only imported water supplies that originate in the Delta watershed are imported water supplies delivered by the Water Authority via MWD. Recognizing that the Delta supplies are threatened by uncertain long-term reliability issues associated with drought shortages, climate change, seismic events, environmental impacts, and flow restrictions, and that imported water purchases are becoming increasingly expensive, the City is actively working toward reducing demand for imported water from the Water Authority as supplied by MWD. The City plans to use more water from local sources and is implementing Pure Water Oceanside to produce local potable reuse supplies, as well as expand its non-potable recycled water system to offset potable demands, thereby lessening the need for imported water in the future.

### Quantification of Water Supplies that Contribute to Local Self-Reliance

**Table 1** shows the City's local supply projections, demands with water use efficiency, and changes to the City's reliance for purchased water from the Water Authority (shown in **Table 1** as Regional Self-Reliance).

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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.

**Table 1 – City of Oceanside’s Local Contribution to Reducing Reliance on the Delta\***

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Use Efficiency								
Water Recycling	130	104	249	3,000	5,040	5,040	5,040	5,040
Stormwater Capture and Use								
Advanced Water Technologies				3,360	6,720	6,720	6,720	6,720
Conjunctive Use Projects								
Local and Regional Water Supply and Storage Projects	3,732	3,213	2,302	2,800	2,800	2,800	2,800	2,800
Other Programs and Projects that Contribute to Regional Self-Reliance								
Water Supplies Contributing to Regional Self-Reliance	3,862	3,317	2,551	9,160	14,560	14,560	14,560	14,560

  

Service Area Water Demands with 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	25,718	23,717	24,212	24,041	24,138	24,310	24,368	24,540

  

Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Supplies Contributing to Regional Self-Reliance	3,862	3,317	2,551	9,160	14,560	14,560	14,560	14,560
Change in Water Supplies Contributing to Regional Self-Reliance		(545)	(1,311)	5,298	10,698	10,698	10,698	10,698

  

Percent Change in Regional Self Reliance (As Percent of Demand with WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Percent of Water Supplies Contributing to Regional Self-Reliance	15.0%	14.0%	10.5%	38.1%	60.3%	59.9%	59.8%	59.3%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance		-1.0%	-4.5%	23.1%	45.3%	44.9%	44.7%	44.3%

\*Accounts for Water Use Efficiency

**Water Authority Reduced Reliance on Delta Watershed**

As part of its *Draft 2020 UWMP*, the Water Authority completed a Delta Reliance analysis to evaluate reduced Delta reliance consistent with Appendix C in the California Department of Water Resources’ (DWR) *Draft UWMP Guidebook 2020* (DWR Guidebook). Given that the City’s only potential source of water from the Delta watershed is water purchased from the Water Authority, the City further relies on the Water Authority’s Delta reliance analysis to also demonstrate reduced regional reliance on the Delta.

The Water Authority’s *Draft 2020 UWMP* documents consistency with WR P1 by quantifying the water supplies that contribute to regional self-reliance and demonstrating reduced reliance on the Delta watershed, as summarized below.

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

Water suppliers must report the expected outcome for measurable improvement in regional self-reliance as a reduction in water used from the Delta watershed. **Table 2** lists the sources of water supplies and volumes that contribute to regional self-reliance.<sup>3</sup> As shown in the table, the Water Authority’s reliance on the Delta watershed, and consequently the City’s reliance on the Delta watershed, decreases over time as the percent of water supplies that contribute to regional self-reliance increase over time.

<sup>3</sup> *Draft 2020 UWMP*, San Diego County Water Authority, March 2021, Appendix J, Table 2.

**Table 2 – 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 (opt)
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	-	-	-	-	-	-	-	-
Water Supplies Contributing to Regional Self-Reliance	349,552	295,833	525,720	564,003	593,373	659,649	664,839	669,012

  

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	795,410	654,022	661,722	618,169	645,165	671,509	695,860	716,469

  

Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (opt)
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

  

Change in Percentage Regional Self Reliance (As a Percent of Water Demand without WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (opt)
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*

Water suppliers are required to report on the expected outcomes for measurable reductions in water supplies from the Delta watershed. For the City, the only potential source of water from the Delta watershed is water purchased from the Water Authority via MWD. Because water provided by MWD to the Water Authority can include supplies that comingle Delta watershed and CVP supplies, the Water Authority (and therefore the City) must wholesale incorporate the MWD’s forecast as a reasonable methodology to forecast the percent of MWD water supply from the Delta watershed and the CVP, at least until MWD provides the methodology approved by the DSC as anticipated. To serve as placeholder for this requirement, **Table 3** calculates the reduced reliance on the Delta watershed within the entirety of the MWD service area.<sup>4</sup>

**Table 3 – Calculation of Reliance on Water Supplies from Delta Watershed<sup>5</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	1,108,670	1,108,670	1,108,670	993,980	993,980
Delta/Delta Tributary Diversions	-	-	-	-	-	-	-	-
Transfers and Exchanges	20,000	44,000	91,000	8,000	8,000	8,000	8,000	8,000
Other Water Supplies from the Delta Watershed	-	-	-	-	-	-	-	-
Total Water Supplies from the Delta Watershed	1,492,000	1,073,000	1,075,000	1,116,670	1,116,670	1,116,670	1,001,980	1,001,980

  

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	4,598,000	4,737,000	4,877,000	4,981,000	5,100,000

  

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	1,116,670	1,116,670	1,116,670	1,001,980	1,001,980
Change in Water Supplies from the Delta Watershed	-	(419,000)	(417,000)	(375,330)	(375,330)	(375,330)	(490,020)	(490,020)

  

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%	24.3%	23.6%	22.9%	20.1%	19.6%
Change in Percentage of Water Supplies from the Delta Watershed	-	-7.6%	-6.6%	-2.9%	-3.6%	-4.3%	-7.0%	-7.5%

<sup>4</sup> Draft 2020 UWMP, Metropolitan Water District of Southern California, February 2021, Appendix 11, Table A.11-3.

<sup>5</sup> Metropolitan Water District of Southern California, Draft 2020 UWMP, February 2021, Appendix 11, Table A.11-3.

The CVP/SWP contract supplies in **Table 3** include MWD's SWP Table A and Article 21 supplies.<sup>6</sup> The values in **Table 3** 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 3** 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 MWD's *Draft 2020 UWMP*.<sup>7</sup>

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<sup>6</sup> *Ibid.*, p. A.11-7.

<sup>7</sup> *Ibid.*, pgs. A.11-7 – 11-8.