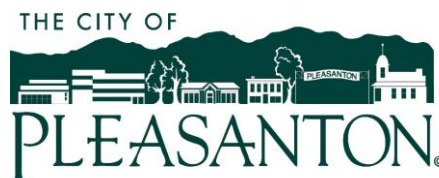


Addendum to 2015 Urban Water Management Plan
Demonstration of Reduced Delta Reliance

JOINTLY PREPARED BY



**City of Pleasanton
Reduced Reliance on the Delta**

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LIST OF ACRONYMS AND ABBREVIATIONS

City	City of Pleasanton
Delta	Sacramento-San Joaquin Delta
DWR	Department of Water Resources
UWMP	Urban Water Management Plan

City of Pleasanton

Reduced Reliance on the Delta

The purpose of this document is to demonstrate compliance with the Sacramento-San Joaquin Delta Reform Act of 2009. The Sacramento-San Joaquin Delta Reform Act of 2009 is described below, followed by an analysis of City of Pleasanton's (City) reduced reliance in accordance with State protocols and expected outcomes for reduced reliance on the Delta.

1.0 SACRAMENTO-SAN JOAQUIN DELTA REFORM ACT OF 2009

Under the Sacramento-San Joaquin Delta Reform Act of 2009, State and local public agencies proposing a "covered action" in the Sacramento-San Joaquin Delta (Delta) must submit a written certification of consistency to the Delta Stewardship Council as to whether the covered action is consistent with applicable Delta Plan policies. Covered actions include a multi-year water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Delta. Anyone may appeal a certification of consistency, and if the Delta Stewardship Council grants the appeal, the covered action may not be implemented until the agency proposing the covered action submits a revised certification of consistency, and either no appeal is filed, or the Delta Stewardship Council denies the subsequent appeal.

An urban water supplier that anticipates participating in or receiving water from a proposed covered action is required to provide information in their 2015 and 2020 Urban Water Management Plans (UWMPs) that can then be used in the covered action process to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (WR P1).

WR P1 details the requirements for a covered action to demonstrate consistency with reduced reliance on the Delta and improved regional self-reliance. WR P1 subsection (a) states that:

(a) Water shall not be exported from, transferred through, or used in the Delta if all of the following apply:

- (1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);*
- (2) That failure has significantly caused the need for the export, transfer, or use; and*
- (3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.*

WR P1 subsection (c)(1) further defines what adequately contributing to reduced reliance on the Delta means in terms of (a)(1) above.

(c)(1) Water suppliers that have done all the following are contributing to reduced reliance on the Delta and improved regional self-reliance and are therefore consistent with this policy:

- (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*

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(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).

The analysis and documentation provided below include all of the elements described in WR P1(c)(1) that need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action.

The inclusion of this document as an appendix in the 2015 and 2020 Urban Water Management Plans fulfills the requirements of WR P1 subsection (c)(1) Paragraph A.

Future projects under evaluation as described in Chapter 6 and the demand management measures described in Chapter 9 of the 2020 UWMP fulfill the requirements of WR P1 subsection (c)(1) Paragraph B.

2.0 REDUCED RELIANCE ANALYSIS

The methodology used to determine the City reduced Delta reliance and improved regional self-reliance is consistent with the approach detailed by the California Department of Water Resources (DWR) in Appendix C of their "2020 Urban Water Management Plans Guidebook for Urban Water Suppliers" (DWR Guidebook), issued in March 2021. The following analysis uses narrative justifications to account for supplies and document specific data sources. All data were obtained from the 2020 UWMP or previously adopted UWMPs and represent average or normal water year conditions. The analysis was conducted at the retail level, focusing on the City's demands and available supplies (i.e., groundwater and purchases from Zone 7).

Table 1 through Table 4 present the analysis of the City's reduced Delta reliance using DWR's spreadsheet tool and fulfill the requirements of WR P1 subsection (c)(1) Paragraph C. Descriptions of the various inputs of the analysis are provided below:

- **Baseline (2010) and 2015-2045 Conditions** – The analysis uses a normal water year representation of 2010 as the baseline, which is consistent with the approach described in the DWR Guidebook. Data for the City's 2010 baseline are taken from its 2010 UWMP, while actual conditions for 2015 and 2020 are based on data reported in the City's 2015 and 2020 UWMPs, respectively. Normal year projections for 2025 through 2045 are also based on the City's 2020 UWMP.
- **Service Area Water Demands with Water Use Efficiency Accounted For** – These values reflect the City's actual and projected water use, including potable water demands, recycled water demands, and losses.
- **Non-Potable Water Demands** – These values consist of recycled water demands.

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- **Water Supplies Contributing to Regional Self-Reliance**
 - **Water Use Efficiency** – This amount is calculated by DWR’s spreadsheet tool based on the City’s baseline demand, actual demands, and expected future demands. The value shown is the reduction in per capita water demand from the baseline (2010) multiplied by the projected population for each. Because the City has successfully reduced per capita potable water demands over time, water use efficiency contributes significantly to the City’s regional self-reliance.
 - **Water Recycling** – The City substantially completed construction of its recycled water distribution system in 2016. Recycled water contributes to regional self-reliance by reducing the demand for potable water.
 - **Conjunctive Use Projects** – The City pumps groundwater as part of its normal water supply portfolio. By agreement with Zone 7, the City can pump up to 3,500 acre-feet per year (AFY) from the local groundwater basin (Main Basin). If the City pumps less than 3,500 acre-feet (AF) in a year, it can carry over up to 700 AF of pumping capacity to the following year.
- **Water Supplies from the Delta Watershed**
- **CVP/SWP Contract Supplies** – Some of Zone 7’s water supplies are from the Delta watershed. Since the City purchases treated water from Zone 7, a portion of the City’s supplies therefore originated in the Delta watershed. To estimate this portion, it was assumed the composition of Zone 7’s deliveries to the City in a given year would mirror that of Zone 7’s overall supply portfolio for that same year. For example, in 2020 approximately 63 percent of Zone 7’s supplies were from the Delta watershed. Therefore, it was assumed 63 percent of Zone 7’s 2020 deliveries to the City were from the Delta watershed.

Table 1. Calculation of Water Use Efficiency (DWR Table C-1)

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	16,131	11,459	16,007	18,240	18,889	19,387	20,036	20,036
Non-Potable Water Demands	-	104	1,228	1,500	1,650	1,650	1,800	1,800
Potable Service Area Demands with Water Use Efficiency Accounted For	16,131	11,355	14,779	16,740	17,239	17,737	18,236	18,236

Total Service Area Population	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Population	69,300	71,776	82,977	86,326	91,430	96,171	100,913	100,913

Water Use Efficiency Since Baseline (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Per Capita Water Use (GPCD)	208	141	159	173	168	165	161	161
Change in Per Capita Water Use from Baseline (GPCD)		(67)	(49)	(35)	(39)	(43)	(46)	(46)
Estimated Water Use Efficiency Since Baseline		5,352	4,536	3,354	4,044	4,649	5,254	5,254

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Table 2. Calculation of Service Area Water Demands Without Water Use Efficiency (DWR Table C-2)

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	16,131	11,459	16,007	18,240	18,889	19,387	20,036	20,036
Reported Water Use Efficiency or Estimated Water Use Efficiency Since Baseline	-	5,352	4,536	3,354	4,044	4,649	5,254	5,254
Service Area Water Demands without Water Use Efficiency Accounted For	16,131	16,811	20,543	21,594	22,932	24,036	25,290	25,290

Table 3. Calculation of Supplies Contributing to Regional Self-Reliance (DWR Table C-3)

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Use Efficiency	-	5,352	4,536	3,354	4,044	4,649	5,254	5,254
Water Recycling	-	104	1,228	1,500	1,650	1,650	1,800	1,800
Stormwater Capture and Use								
Advanced Water Technologies								
Conjunctive Use Projects	3,507	3,629	3,027	3,500	3,500	3,500	3,500	3,500
Local and Regional Water Supply and Storage Projects								
Other Programs and Projects the Contribute to Regional Self-Reliance								
Water Supplies Contributing to Regional Self-Reliance	3,507	9,085	8,790	8,354	9,194	9,799	10,554	10,554

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	16,131	16,811	20,543	21,594	22,932	24,036	25,290	25,290

Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Supplies Contributing to Regional Self-Reliance	3,507	9,085	8,790	8,354	9,194	9,799	10,554	10,554
Change in Water Supplies Contributing to Regional Self-Reliance		5,578	5,283	4,847	5,687	6,292	7,047	7,047

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	21.7%	54.0%	42.8%	38.7%	40.1%	40.8%	41.7%	41.7%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance		32.3%	21.0%	16.9%	18.3%	19.0%	20.0%	20.0%

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Table 4. Calculation of Reliance on Water Supplies from the Delta Watershed (DWR Table C-4)

Water Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
CVP/SWP Contract Supplies	10,728	6,942	7,386	10,702	9,619	9,665	9,918	9,918
Delta/Delta Tributary Diversions								
Transfers and Exchanges								
Other Water Supplies from the Delta Watershed								
Total Water Supplies from the Delta Watershed	10,728	6,942	7,386	10,702	9,619	9,665	9,918	9,918

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	16,131	16,811	20,543	21,594	22,932	24,036	25,290	25,290

Change in Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Supplies from the Delta Watershed	10,728	6,942	7,386	10,702	9,619	9,665	9,918	9,918
Change in Water Supplies from the Delta Watershed		(3,786)	(3,342)	(26)	(1,110)	(1,063)	(810)	(810)

Percent Change in Supplies from the Delta Watershed (As a Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Percent of Water Supplies from the Delta Watershed	66.5%	41.3%	36.0%	49.6%	41.9%	40.2%	39.2%	39.2%
Change in Percent of Water Supplies from the Delta Watershed		-25.2%	-30.5%	-16.9%	-24.6%	-26.3%	-27.3%	-27.3%

3.0 EXPECTED OUTCOMES FOR REDUCED RELIANCE ON THE DELTA

As stated in WR P1(c)(1)(C), commencing in 2015, UWMPs are required to include expected outcomes for measurable reduction in Delta reliance and improved regional self-reliance. WR P1 further states that those outcomes shall be reported in the UWMP as the reduction in the amount or percentage of water used from the Delta.

The following provides a summary of the near-term (2025) and long-term (2045) expected outcomes for the City’s Delta reliance and regional self-reliance based on the assumptions described in the previous section and DWR’s analysis tool. The results show that the City is measurably reducing reliance on the Delta and improving regional self-reliance, based on the percentage of the City’s water supplies from the Delta watershed.

Expected Outcomes for Regional Self-Reliance:

- Near-term (2025) – Normal water year regional self-reliance is expected to increase by approximately 4,800 AFY from the 2010 baseline. Water use efficiency is a major contributor to this increase, supplemented by recycled water.
- Long-term (2045) – Normal water year regional self-reliance is expected to increase by approximately 7,000 AFY from the 2010 baseline. Water use efficiency is a major contributor to this increase, supplemented by recycled water.

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Expected Outcomes for Percent of Water Supplies from the Delta Watershed:

- Near-term (2025) – Normal water year reliance on supplies from the Delta watershed is expected to decrease by 17 percent relative to the 2010 baseline.
- Long-term (2045) – Normal water year reliance on supplies from the Delta watershed is expected to decrease by 27 percent relative to the 2010 baseline.

4.0 NEW APPENDIX TO 2015 UWMP

The information contained in this Appendix is also included as a new Appendix N to the City's 2015 UWMP, consistent with WR P1 subsection (c)(1)(C) (Cal. Code Regs. tit. 23, § 5003). As described in Chapter 10 of its 2020 UWMP, the City followed the required public notification, public review and hearing, and adoption processes required by the Urban Water Management Planning Act.

Appendix N to the City's 2015 UWMP, the 2020 UWMP (including this Appendix), and the Water Shortage Contingency Plan were adopted by the City Council on June 1, 2021 (see Appendix L of the 2020 UWMP).