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Appendix J Addendum to the Elsinore Valley Municipal Water District's 2015 Urban Water Management Plan

Demonstration of Reduced Delta Reliance

FINAL JUNE 2021



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Quantifying Regional Self-Reliance and Reduced Reliance on Water Supplies from the Delta Watershed

1.1 Background

Under the Sacramento–San Joaquin Delta Reform Act of 2009, state and local public agencies proposing a covered action in the Delta, prior to initiating the implementation of that action, must prepare a written certification of consistency with detailed findings as to whether the covered action is consistent with applicable Delta Plan policies and submit that certification to the Delta Stewardship Council. 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.

The **Urban Water Management Plan Guidebook 2020** states that that 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 Urban Water Management Plans (UWMPs) that can then be used in the covered action process to demonstrate consistency with Delta Plan Policy, Water Restriction (WR) P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Req., tit. 23, § 5003).

Elsinore Valley Municipal Water District (EVMWD) is an urban water supplier that anticipates receiving a blend of Delta water through its imported water. Currently, EVMWD purchases imported water from Metropolitan Water District of Southern California (Metropolitan) via Western Municipal Water District (Western). The imported water is a blend of Colorado River water, State Project Water, and local Western supplies. Therefore, EVMWD is preparing this analysis to comply with the Delta Plan Policy WR P1.

The Delta Plan Policy WR P1 specifies the measures that must be taken by water suppliers under certain conditions to reduce their reliance on the Delta and improve regional self-reliance. In addition, the Delta Plan recommends that all water suppliers within the Delta watershed voluntarily implement the measures contained in WR P1 to reduce their reliance on the Delta and improve regional self-reliance. Delta Plan WR P1 identifies UWMPs as the tool to be used to demonstrate consistency with the state policy that states suppliers who carry out or take part in covered actions must reduce their reliance on the Delta.

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

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

(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 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.

1.2 Demonstration of Regional Self-Reliance

The methodology used to determine EVMWD's improved regional self-reliance is consistent with the approach detailed in DWR's UWMP Guidebook Appendix C (Guidebook Appendix C), including the use of narrative justifications for the accounting of supplies and the documentation of specific data sources.

Some of the key assumptions underlying EVMWD's demonstration of reduced reliance include:

- All data were obtained from the current 2020 UWMP or previously adopted UWMPs and represent average or normal water-year conditions.
- All analyses were conducted at the service-area level, and all data reflect the total contributions of EVMWD and its customers.
- Future projects that are covered actions requiring a certification of consistency with the Delta Plan were excluded from this analysis.

1.2.1 Baseline and Expected Outcomes

To demonstrate the expected outcomes for a reduced reliance on the Delta and improved regional selfreliance, a comparison to a baseline is needed. This analysis uses a normal water-year representation of 2010 as the baseline, which is consistent with the approach described in the Guidebook Appendix C. Population, demand, and supply data for the 2010 baseline were taken from EVMWD's 2005 UWMP, because UWMPs generally do not provide normal water-year data for the year they are adopted (i.e., 2005 UWMP forecasts begin in 2010, 2010 UWMP forecasts begin in 2015, and so on).

Consistent with the 2010 baseline data approach, the expected outcomes for reduced Delta reliance and improved regional self-reliance for 2015 and 2020 were taken from EVMWD's 2010 and 2015 UWMPs,

respectively, unless noted otherwise. Expected outcomes for 2025–2045 are from the current 2020 UWMP. Documentation of the specific data sources and assumptions are included in the discussions below.

1.2.2 Service-Area Demands without Water Use Efficiency

In alignment with the Guidebook Appendix C, this analysis uses normal water-year demands, rather than normal water-year supplies, to calculate expected outcomes in terms of the percentage of water used. Normal water-year demands serve as a proxy for the amount of supplies that would be used in a normal water-year, which helps alleviate issues associated with how supply capability is presented to fulfill the requirements of the UWMP Act versus how supplies might be accounted for to demonstrate consistency with WR P1.

Because WR P1 considers water-use efficiency savings a source of water supply, water suppliers can calculate their embedded water-use efficiency savings based on changes in forecasted per capita water use compared with the baseline. As explained in the Guidebook Appendix C, water-use efficiency savings must be added back to the normal year demands to represent demands without water-use efficiency savings accounted for; otherwise, the effect of water-use efficiency savings on regional self-reliance would be overestimated. **Table B-1** shows the results of this adjustment for EVMWD. Supporting narratives and documentation for all the data shown in **Table B-1** are provided below.

1.2.3 Service-Area Demands with Water Use Efficiency

The service-area water demands shown in **Table B-1** represent the total municipal and industrial (M&I) water demands and non-potable demands for EVMWD's retail service area.

The M&I demand data shown in Table B-1 were collected from the following sources:

- Baseline (2010): EVMWD 2005 UWMP, Table 3-21
- 2015: EVMWD 2010 UWMP, Table 3-16 (DWR Table 11)
- 2020: EVMWD 2015 UWMP, Table 4-3 (DWR Table 4-3R)
- 2025–2045: EVMWD 2020 UWMP, Table 4-7 (DWR 4-3R)

The 2010 UWMP demand projections included water demand from Farm Mutual Water Company (FMWC) and "additional water uses and losses" in the total demand projections. The FMWC demands were included but the "additional water uses and losses" were not. The "additional water uses and losses" include recycled-water demands and groundwater recharge targets as part of the Metropolitan Groundwater Storage Program. These demands were excluded because recycled water is incorporated separately, and the groundwater storage is not included in this analysis, as discussed in the Local and Regional Water Supply and Storage Projects section, to prevent double counting. The non-potable water (i.e., recycled water) demands are discussed in the next section. The potable demand projections are presented in **Table B-1**.

1.2.4 Non-Potable Water Demands

EVMWD serves recycled water to customers for landscape and golf course irrigation. EVMWD is also permitted to discharge 7.5 million gallons per day (MGD) of recycled water from the regional water reclamation facility (WRF) to Lake Elsinore to maintain a minimum lake level of 1,240 feet and to Temescal Wash to maintain a minimum discharge of 0.5 MGD. The combined flow for these requirements is 8 MGD. Additional information on the supplies is discussed in **Chapter 6** of the 2020 UWMP.

The recycled-water demands by customers for irrigation purposes, as well as discharge requirements for Lake Elsinore and Temescal Wash were collected from the following sources:

- Baseline (2010): EVMWD 2005 UWMP, Table 6-6 and Table 6-11
- 2015: EVMWD 2010 UWMP, Table 3-15 (DWR Table 10)
- 2020: EVMWD 2015 UWMP, Table 4-3 (DWR Table 4-3R) and Table 6-8 (DWR Table 6-4R)
- 2025–2045: EVMWD 2020 UWMP, Table 6-9 (DWR Table 6-4R)

The total non-potable demands for these uses are presented in **Table B-1**. In the 2005 UWMP, it was estimated that EVMWD would have a recycled-water maximum day demand (MDD) of 18.9 MGD. Recycled-water demand was assumed to have an MDD peaking factor of 2.77, based on evapotranspiration and rainfall patterns.

1.2.5 Potable Service-Area Demands with Water-Use Efficiency

The potable service area demands with water-use efficiency were calculated by subtracting the nonpotable water demands value from service area demands with water-use efficiency value.

1.2.6 Service-Area Population

The population data shown in Table B-1 were collected from the following sources:

- Baseline (2010): EVMWD 2010 UWMP, Table 2-2
- 2015: EVMWD 2015 UWMP, Table 3-2 (DWR Table 3-1R)
- 2020–2045: EVMWD 2020 UWMP, Table 3-2 (DWR Table 3-1R)

1.2.7 Estimated Water-Use Efficiency Since Baseline

The estimated water-use efficiency since baseline was calculated using the potable service-area demands with water-use efficiency value divided by service-area population value and then comparing with 2010 per capita water use data.

1.2.8 Service-Area Water Demands without Water-Use Efficiency

In **Table B-2**, the service-area demands with water-use efficiency value was added to the estimated water-use efficiency since baseline value to obtain the service-area water demands without water-use efficiency accounted for figure.

1.2.9 Supplies Contributing 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 the expected outcomes for measurable improvement in regional self-reliance. **Table B-3** shows expected outcomes for supplies contributing to regional self-reliance in terms of volume. **Table B-3** represents efforts to improve regional self-reliance for EVMWD's entire service area and includes the total contributions of EVMWD and its customers. Supporting narratives and documentation for all the data provided in **Table B-3** are described below.

EVMWD's water sources include groundwater pumped from EVMWD-owned wells, local surface water treated at the Canyon Lake Water Treatment Plant, and imported water from Metropolitan through Western. EVWMD plans to use these supplies to meet current and future demands. In addition, EVMWD is planning several local projects to increase the reliability of its local water supplies, which include adding or replacing groundwater wells and pursuing an indirect potable reuse project.

EVMWD is expecting to complete the following projects, which are discussed more in Chapter 6 of the 2020 UWMP:

- Palomar Well Replacement anticipated in 2023
- Lee Lake Wells anticipated in 2024
- Canyon Lake Water Treatment Plant Upgrades anticipated in 2025
- Temecula-Pauba Groundwater Wells anticipated in 2032
- Indirect Potable Reuse anticipated in 2034

To prevent double counting, regional projects (i.e., the Metropolitan Conjunctive Use Project and Santa Ana River Regional Conjunctive Use Project) were not included in this analysis. As part of the groundwater storage program, during dry years, EVMWD may also extract up to 4,000 acre-feet per year (AFY) of water stored in the Elsinore Basin for use. This was not included in the analysis.

1.2.10 Water-Use Efficiency

The water-use efficiency information shown in **Table B-3** is taken directly from **Table B-1**.

1.2.11 Water Recycling

EVMWD currently owns and operates three WRFs, and the recycled-water system is divided into four service areas: Wildomar, Railroad Canyon, Horsethief, and regional service areas. In addition, wastewater collected in the southern part of EVMWD's service area is treated at the Santa Rosa WRF operated by Rancho California Water District.

The Wildomar, Railroad Canyon, and Horsethief service areas provide recycled water to public and private customers for irrigation needs such as parks, schools, golf courses, homeowner associations, and roadway medians. For more information, refer to **Chapter 6** of the 2020 UWMP. The water recycling values shown in **Table B-3** are the non-potable water demands for landscape and golf course irrigation. The recycled-water demands to maintain discharge requirements are discussed in the Other Programs and Projects that Contribute to Regional Self-Reliance section to better track these uses.

These data were compiled from the following sources:

- Baseline (2010): EVMWD 2010 UWMP, Table 4-14 (same as Table 24 in the 2010 Guidebook)
- 2015: EVMWD 2015 UWMP, Table 6-9 (DWR Table 6-5R)
- 2020: EVMWD 2020 UWMP, Table 6-8 (DWR Table 6-4R)
- 2025–2045: EVMWD 2020 UWMP, Table 6-14 (DWR Table 6-9R)

For this analysis, the actual recycled-water supply data for 2010, 2015, and 2020 were used because the supply projections in previous UWMPs are not representative of current conditions — they assumed the recycled-water supply to be equal to the demand. Currently, the production and use of recycled water are limited by the wastewater available for treatment and the demand by each of the four recycled-water service areas.

1.2.12 Local and Regional Water Supply and Storage Projects

As discussed above, EVMWD relies on groundwater, surface water, and imported water to meet its potable demands and is actively investing in local water projects.

EVMWD's local water supplies are shown in Table B-3, and data were from the following sources:

- Baseline (2010): EVMWD 2005 UWMP, Table 3-10 (includes Elsinore Valley Basin, Canyon Lake, and Groundwater for TDSA)
- 2015: EVMWD 2010 UWMP, Table 4-18 (same as Table 16 in 2010 Guidebook)
- 2020: EVMWD 2015 UWMP, Table 6-13 (DWR Table 6-9R)
- 2025–2045: EVMWD 2020 UWMP, Table 6-14 (DWR Table 6-9R)

In the 2015 UWMP, the projected groundwater supply for 2020 was 10,560 AFY. This is not accurate, because the local groundwater projects that would have increased the supply by 3,860 AFY were not completed. Therefore, the established 6,700 AFY was used.

1.2.13 Other Programs and Projects that Contribute to Regional Self-Reliance

Other programs and projects that contribute to regional self-reliance that are listed in **Table B-3** include EVMWD deliveries of tertiary treated recycled water for replenishment of Lake Elsinore and Temescal Wash. The use of recycled water offsets the use of potable water.

These values come from the following sources:

- Baseline (2010): EVMWD 2010 UWMP, Table 4-14 (same as Table 24 in the 2010 Guidebook)
- 2015: EVMWD 2015 UWMP, Table 6-9 (DWR Table 6-5R)
- 2020: EVMWD 2020 UWMP, Table 6-8 (DWR Table 6-4R)
- 2025–2045: EVMWD 2020 UWMP, Table 6-14 (DWR Table 6-9R)

As discussed above, this supply is limited by the available wastewater supply, so the actual volumes for 2010, 2015, and 2020 were used. In 2020, the regional WRF produced 6,585 AF of recycled water to maintain the lake levels and flows, which is well below the projected supply of 8,960 AF.

1.3 Reliance on Water Supplies from the Delta Watershed

Metropolitan's service area, as a whole, reduces reliance on the Delta through investments in non-Delta water supplies, local water supplies, and regional and local demand-management measures. Metropolitan's member agencies coordinate reliance on the Delta through their membership in Metropolitan, a regional cooperative providing wholesale water service to its 26 member agencies, which includes Western, and EVMWD receives supplies from both. Accordingly, regional reliance on the Delta can only be measured regionally, not by individual Metropolitan member agencies and not by the customers of those member agencies.

Metropolitan's member agencies, and those agencies' customers, indirectly reduce reliance on the Delta through their collective efforts as a cooperative. Metropolitan's member agencies do not control the amount of Delta water they receive from Metropolitan. Metropolitan manages a statewide integrated conveyance system consisting of its participation in the State Water Project (SWP); its Colorado River Aqueduct (CRA), including Colorado River water resources, programs, and water exchanges; and its regional storage portfolio. Along with the SWP, CRA, storage programs, and Metropolitan's conveyance and distribution facilities, demand-management programs increase the future reliability of water

resources for the region. In addition, demand-management programs provide systemwide benefits by decreasing the demand for imported water, which helps decrease the burden on the district's infrastructure, reduce system costs, and free up conveyance capacity to the benefit of all member agencies.

Metropolitan's costs are funded almost entirely from its service area, except for grants and other assistance from government programs. Most of Metropolitan's revenues are collected directly from its member agencies. Properties within Metropolitan's service area pay a property tax that currently provides approximately 8% of the fiscal year 2021 annual budgeted revenues. The rest of Metropolitan's costs are funded through rates and charges paid by Metropolitan's member agencies for the wholesale services it provides them. Thus, Metropolitan's member agencies fund nearly all operations Metropolitan undertakes to reduce reliance on the Delta, including Colorado River programs, storage facilities, local resources programs, and conservation programs within Metropolitan's service area.

Because of the integrated nature of Metropolitan's systems and operations, and the collective nature of Metropolitan's regional efforts, it is infeasible to quantify each of Metropolitan member agencies' individual reliance on the Delta. It is infeasible to attempt to segregate an entity and a system designed to work as an integrated regional cooperative.

In addition to the member agencies funding Metropolitan's regional efforts, they also invest in their own local programs to reduce their reliance on any imported water. Moreover, the customers of those member agencies may also invest in their own local programs to reduce water demand. However, to the extent those efforts result in reduction of demands on Metropolitan, that reduction does not equate to a like reduction of reliance on the Delta. Demands on Metropolitan are not commensurate with demands on the Delta, because most of Metropolitan member agencies receive blended resources from Metropolitan as determined by Metropolitan — not the individual member agency — and for most member agencies, the blend varies from month to month and year to year due to hydrology, operational constraints, use of storage, and other factors.

1.3.1 Programs Implemented by Metropolitan to Reduce Delta Reliance

As mentioned, Metropolitan, Western, EVMWD, and other local agencies invest in local sources to reduce reliance on the Delta. However, EVMWD purchases imported water from Western while Western purchases water from Metropolitan. Because of the intricacies in these large systems and the blend of supplies, Western has summarized the various programs Metropolitan has invested in to decrease reliance on the Delta. Details are provided in **Appendix R** of Western's 2020 UWMP.

Because it is not feasible to separate out the reduced reliance on the Delta of individual member agencies or their customers, Metropolitan has completed the analysis to demonstrate a region-wide reduction, which is shown in **Table B-4**.

1.4 Summary of Expected Outcomes for Reduced Reliance on the Delta

As stated in WR P1(c)(1)(C), the policy requires that, commencing in 2015, UWMPs 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 of water used, or in the percentage of water used, from the Delta.

The expected outcomes for EVMWD's reduced Delta reliance and regional self-reliance were developed using the approach and guidance described in Guidebook Appendix C issued in March 2021.

1.4.1 Regional Self-Reliance

The data used to demonstrate increased regional self-reliance in this analysis represent the total regional efforts of EVMWD and its customers and were developed in conjunction with Western and Metropolitan as part of the UWMP coordination process.

The following provides a summary of the near-term (2025) and long-term (2045) expected outcomes for EVMWD's regional self-reliance:

- Near-term (2025) normal water-year regional self-reliance is expected to increase by about 13,412 AFY from the 2010 baseline (**Table B-3**).
- Long-term (2045) normal water-year regional self-reliance is expected to increase by almost 42,724 AFY from the 2010 baseline (Table B-3).

The results show that EVMWD and its customers are measurably reducing reliance on the Delta and improving regional self-reliance.

1.4.2 Reduced Reliance on Supplies from the Delta Watershed

For reduced reliance on supplies from the Delta Watershed, the data used in this analysis represent the total regional efforts of Metropolitan, Western, and its member agencies and their customers (many of them retail agencies), and were developed in conjunction with EVMWD and other Metropolitan member agencies as part of the UWMP coordination process (as described in Section 5 of Metropolitan's 2020 UWMP). In accordance with UWMP requirements, Metropolitan's member agencies and their customers (many of them retail agencies) also report demands and supplies for their service areas in their respective UWMPs. The data reported by those agencies are not additive to the regional totals shown in Metropolitan's UWMP; rather, their reporting represents subtotals of the regional total and should be considered as such for the purposes of determining reduced reliance on the Delta.

Although the demands that Metropolitan's member agencies and their customers report in their UWMP's are a good reflection of the demands in their respective service areas, they do not adequately represent each water supplier's individual contributions to reduced reliance on the Delta. To calculate and report their reliance on water supplies from the Delta watershed, water suppliers that receive water from the Delta through other regional or wholesale water supplier. Two specific pieces of information are needed to accomplish this: first is the quantity of demands on the regional or wholesale water supplier on the Delta and second is the quantity of a supplier's demands on the regional or wholesale water supplier that are met by supplies from the Delta watershed.

For water suppliers that make investments in regional projects or programs, it may be infeasible to quantify their demands on the regional or wholesale water supplier in a way that accurately reflects their individual contributions to reduced reliance on the Delta. Because of the extensive, long-standing, and successful implementation of regional demand management and local resource incentive programs in Metropolitan's service area, this infeasibility holds true for Metropolitan's members as well as their customers. For Metropolitan's service area, reduced reliance on supplies from the Delta watershed can only be accurately accounted for at the regional level.

The results show that as a region, Metropolitan and its members (including EVMWD), as well as their customers, are measurably reducing reliance on the Delta and improving regional self-reliance.

1.5 UWMP Implementation

In addition to the analysis and documentation described above, WR P1 subsection (c)(1)(B) requires that all programs and projects included in the UWMP that are locally cost-effective, technically feasible, and reduce reliance on the Delta are identified, evaluated, and implemented consistent with the implementation schedule. WR P1 (c)(1)(B) states that

(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[.]

In accordance with Water Code Section 10631(f), water suppliers must already include in their UWMP a detailed description of expected projects and programs that they may implement to increase the amount of water supply available to them in normal and single-dry water years and for a period of drought lasting five consecutive years. The UWMP description must also identify specific projects, including a description of the increase in water supply that is expected to be available from each project, and include an estimate regarding the implementation timeline for each project or program.

Chapter 6 of EVMWD's 2020 UWMP summarizes the implementation plan and continued progress in developing a diversified water portfolio to meet the region's water needs.

1.6 2015 UWMP Appendix J

The information contained in this appendix is also intended to be a new Appendix J to EVMWD's 2015 UWMP, consistent with WR P1 subsection (c)(1)(C) (Cal. Code Regs. tit. 23, § 5003). EVMWD provided notice of the availability of the draft 2020 UWMP, 2021 Water Shortage Continency Plan (WSCP), and the new Appendix J to the 2015 UWMP and held a public hearing to consider adoption of the documents in accordance with California Water Code Sections 10621(b) and 10642, Government Code Section 6066, and Chapter 17.5 (starting with Section 7290) of Division 7 of Title 1 of the Government Code. The public review drafts of the 2020 UWMP, Appendix J to the 2015 UWMP, and the 2021 WSCP were posted on EVMWD's website, EVMWD.com, in advance of the public hearing on June 10, 2021. The notice of availability of the documents was sent to EVMWD's customers, as well as to cities and counties in EVMWD's service area. Copies of the notification letter sent to the customers, cities, and counties in EVMWD's 2020 UWMP, which was adopted with EVMWD's 2020 UWMP, will also be recognized and treated as **Appendix J** to EVMWD's 2015 UWMP.

EVMWD held a public hearing for the draft 2020 UWMP, draft **Appendix J** to the 2015 UWMP, and draft 2021 WSCP on June 10, 2021, at a regular Board of Directors meeting, which was held online due to COVID-19 concerns. EVMWD's Board of Directors determined that the 2020 UWMP and the 2021 WSCP accurately represent the water resources plan for EVMWD's service area. In addition, EVMWD's Board of Directors determined that **Appendix J** to both the 2015 UWMP and the 2020 UWMP includes all the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003), which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action. As stated in Resolutions 21-06-01, 21-06-02, and 21-06-03, the EVMWD Board of Directors adopted the 2020 UWMP, **Appendix J** to the 2015 UWMP, and the 2021 WSCP, and authorized their submittal to the State of California. Copies of the resolutions are included in the 2020 UWMP **Appendix O**.

Table B-1. Optional Calculation of Water Use Efficiency

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	43,476	46,707	42,795	38,938	42,000	45,319	48,085	50,967
Non-Potable Water Demands	7,643	9,415	9,870	9,113	9,870	10,706	10,797	10,797
Potable Service Area Demands with Water Use Efficiency Accounted For	35,833	37,292	32,925	29,825	32,130	34,613	37,288	40,170
Total Service Area Population	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Population	123,375	149,300	163,984	176,657	190,310	205,018	220,863	237,932
Water Use Efficiency Since Baseline (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Per Capita Water Use (GPCD)	259	223	179	151	151	151	151	151
Change in Per Capita Water Use from Baseline (GPCD)		(36)	(80)	(109)	(109)	(109)	(109)	(109)
Estimated Water Use Efficiency Since Baseline		6,071	14,702	21,483	23,144	24,932	26,859	28,935

Table B-2. Calculation of Service Area Water Demands without Water Use Efficiency

Table 2: Calculation of Service Area Water Demands Without Water Use Efficiency								
Total Service Area Water Demands	Baseline	2015	5 2020	2025	2030	2035	2040	2045
(Acre-Feet)	(2010)	2015						(Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	43,476	46,707	42,795	38,938	42,000	45,319	48,085	50,967
Reported Water Use Efficiency or Estimated Water Use Efficiency Since Baseline		6,071	14,702	21,483	23,144	24,932	26,859	28,935
Service Area Water Demands without Water Use Efficiency Accounted For	43,476	52,778	57,497	60,421	65,144	70,252	74,944	79,902

Table B-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	-	6,071	14,702	21,483	23,144	24,932	26,859	28,935
Water Recycling	308	1,236	1,204	1,837	1,837	1,837	1,837	1,837
Stormwater Capture and Use								
Advanced Water Technologies								
Conjunctive Use Projects								
Local and Regional Water Supply and Storage Projects	8,900	11,650	11,650	11,825	11,825	12,575	13,515	14,545
Other Programs and Projects the Contribute to Regional Self-Reliance	2,345	6,008	6,590	7,276	8,033	8,869	8,960	8,960
Water Supplies Contributing to Regional Self-Reliance	11.553	24,965	34.146	42.421	44.839	48.213	51.171	54.277
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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	43,476	52,778	57,497	60,421	65,144	70,252	74,944	79,902
Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Supplies Contributing to Regional Self-Reliance	11,553	24,965	34,146	42,421	44,839	48,213	51,171	54,277
Change in Water Supplies Contributing to Regional Self-Reliance		13,412	22,593	30,868	33,286	36,660	39,618	42,724

Table B-4. Calculation of Reliance on Water Supplies from the Delta Watershed

Table 4: Calculation of Reliance on Water Supplies from the Delta Watershed								
Water Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
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								
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
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	5,493,000	5,499,000	5,219,000	4,938,000	5,019,000	5,143,000	5,248,000	5,361,000
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	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)
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	27.2%	19.5%	20.6%	24.1%	23.6%	22.9%	22.4%	22.0%
Change in Percent of Water Supplies from the Delta Watershed		-7.6%	-6.6%	-3.0%	-3.6%	-4.2%	-4.7%	-5.2%

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