

California Regional Water Quality Control Board
Santa Ana Region

Resolution R8-2021-0044

Resolution Amending the Water Quality Control Plan for the Santa Ana River Basin to Establish Maximum Benefit TDS and Nitrate Groundwater Quality Objectives and a Salt and Nutrient Management Plan for the Elsinore Groundwater Management Zone (GMZ)

Whereas, the California Regional Water Quality Control Board, Santa Ana Region (hereafter Santa Ana Water Board), finds that:

1. An updated Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was adopted by the Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) on March 11, 1994 and approved by the State Water Resources Control Board (State Board) and Office of Administrative Law (OAL) on July 21, 1994 and January 24, 1995, respectively.
2. The Basin Plan identifies groundwater and surface water bodies within the Santa Ana Region (Region), establishes water quality objectives for these water bodies, prescribes implementation plans to ensure that the objectives are achieved, and establishes monitoring and surveillance programs.
3. Subsequent amendments have been made to the Basin Plan. The 2004 Basin Plan amendment revised groundwater sub-basin boundaries (groundwater management zones or GMZs) and total dissolved solids (TDS) and nitrate-as-nitrogen (nitrate) objectives for the GMZs. The 2004 Basin Plan amendment was adopted by the Santa Ana Water Board on January 22, 2004, and approved by the State Board and OAL on September 30 and December 23 of 2004, respectively. A water quality monitoring program to implement the revised water quality objectives was approved by the Santa Ana Water Board on April 15, 2005.
4. The TDS and nitrate antidegradation objectives for the GMZs defined in the 2004 Basin Plan amendment are statistically derived values representative of the volume-weighted groundwater TDS and nitrate concentrations over the historical period of 1954 through 1973.
5. During the technical work to support the 2004 Basin Plan amendment, some stakeholders identified concerns that the proposed TDS antidegradation objectives would limit or prevent the use of recycled water within GMZs where the current TDS concentration is equal to or greater than the historical TDS concentration. In these GMZs, there would be no assimilative capacity and

recycled water reuse with TDS concentrations over the TDS objective will require costly mitigation plans.

6. The State Board's Antidegradation Policy (Resolution No. 68-16) allows the Santa Ana Water Board some flexibility in regulating waste discharges if it can be demonstrated that allowing some degradation of water quality is to the maximum benefit of the people of California and that beneficial uses can reasonably be protected.
7. The California Water Code (CWC) section 13241 requires the Santa Ana Water Board to consider other requirements when setting water quality objectives such as the characteristics of the hydrographic unit under consideration, water quality conditions that could reasonably be achieved under coordinated control of all factors which affect water quality, economic considerations, housing development need, the needs to develop recycled water reuse.
8. Recognizing that recycled water reuse was a critical component of achieving a long-term reliable water supply in the rapidly developing watershed and would ultimately improve overall water supply reliability in California, several agencies proposed, and the Santa Ana Water Board approved, alternative "maximum benefit" TDS and nitrate objectives that were numerically higher than the antidegradation objectives and the (then) current ambient concentrations. The establishment of the maximum benefit objectives created assimilative capacity for degradation and allowed the Santa Ana Water Board to permit recycled water reuse without requiring treatment to reduce TDS and nitrate concentrations prior to reuse. In addition, each party developed a schedule of time-certain, concentration-based and/or event-based actions, known as maximum benefit commitments, to ensure the long-term protection of the beneficial uses of each GMZ and downstream GMZs, with the understanding that failure to comply with the commitments would result in the enforcement of the more stringent antidegradation objectives for the GMZ. Together the maximum benefit objectives and commitments comprise a maximum benefit salt and nutrient management plan (SNMP).
9. The GMZs for which maximum benefit SNMPs were adopted in the 2004 Basin Plan amendment include: Beaumont, Chino-North, Cucamonga, San Timoteo, and Yucaipa. In 2010, the Santa Ana Water Board approved maximum benefit objectives for the San Jacinto Upper Pressure GMZ.
10. In 2012, the ambient TDS concentration for the Elsinore GMZ was computed to be 490 mg/L, which is greater than the antidegradation objective of 480 mg/L. Following the adoption of the objectives in the 2004 Basin Plan amendment, the ambient nitrate concentration for the Elsinore GMZ has consistently exceeded

the antidegradation objectives. This means that there is no assimilative capacity for TDS and nitrate loading in excess of the antidegradation objectives in the Elsinore GMZ.

11. The Elsinore Valley Municipal Water District (District) is the sole municipal agency overlying the Elsinore GMZ. Two of the District's recycled water service areas are tributary to and overlie the Elsinore GMZ: Railroad Canyon and Wildomar service areas. The Railroad Canyon Water Reclamation Facility produces recycled water at TDS concentrations that exceed the permitted limit of 700 mg/L. And, the recycled water served in Railroad Canyon and Wildomar service areas exceeds the TDS antidegradation objective of 480 mg/L. For these reasons, the Santa Ana Water Board required the District to prepare a salt offset plan to mitigate salt loading that exceeds these regulatory limits.
12. The District has proposed amending the Basin Plan to incorporate a maximum benefit SNMP for the Elsinore GMZ as a mitigation measure to offset its historical and ongoing salt loading in the Elsinore GMZ. Consistent with prior maximum benefit SNMPS adopted by the Santa Ana Water Board, the District prepared a proposal package which includes the detailed technical analysis, regulatory rationale pursuant to the Antidegradation Policy and CWC 13241, and economic considerations in support of the proposal.
13. Based on the result of work performed and presented in the proposal package, the proposed maximum benefit TDS and nitrate objectives for the Elsinore GMZ are 530 and 5 mg/L, respectively.
14. The District also proposed maximum benefit commitments and the associated time-certain compliance schedules to protect beneficial uses of the Elsinore GMZ and downstream GMZs. The maximum benefit commitments will be incorporated into Chapter 5: Implementation Plan.
15. Amending the Basin Plan to establish the maximum benefit SNMP for the Elsinore GMZ is not an approval of any specific salt offset projects that may be proposed by Elsinore Valley MWD. Approval of any such projects must follow standard Santa Ana Water Board procedures and requirements.
16. The Santa Ana Water Board prepared and distributed the Notice of Filing, Notice of Public Hearing, draft Basin Plan amendment, written report (Staff Report), including the Substitute Environmental Document (SED), regarding adoption of the proposed Basin Plan amendment, to interested persons and public agencies in accordance with the applicable state and federal environmental regulations (California Code of Regulations [CCR] title 23, sections 3720 et seq. and Title 40 of the Code of Federal Regulations [40 CFR] Parts 25 and 131 et seq.). The

Santa Ana Water Board complied with the applicable procedural requirements and provided public participation opportunities to afford the public with reasonable opportunity to participate in consideration of the Basin Plan amendment.

17. The Santa Ana Water Board has considered factors in adopting maximum benefit objectives for the Elsinore GMZ consistent with CWC section 13241. Examinations of these factors can be found in Section 4 of the Staff Report.
18. The Basin Plan amendment complies with Water Code section 106.3, in which it is the policy of the state of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking and sanitary purposes. The Basin Plan Amendment does not lessen water quality protections in any portion of the basin that is currently serving, or is expected to serve, as a domestic or municipal water source.
19. The Santa Ana Water Board has prepared a Substitute Environmental Document (SED), the Environmental Checklist and Analysis, for the proposed Basin Plan amendment. The analysis conducted in the SED demonstrates that there are no potential adverse environmental impacts associated with the proposed action to amend the Basin Plan to incorporate the maximum benefit water quality objectives and SNMP for the Elsinore GMZ. The SED can be found in Enclosure 2 to the Staff Report.
20. The Santa Ana Water Board submitted formal notifications for Tribal consultations to four Native American Tribes that are culturally affiliated with the project area, pursuant to Assembly Bill 52 (AB 52) on June 4, 2020. These four Tribes are Pechanga Band of Mission Indians, Rincon Band of Luiseño Indians, Soboba Band of Luiseño Indians, and Aqua Caliente Band of Cahuilla Indians. No Tribal comments were submitted to the Santa Ana Water Board within the 30-day consultation period. The AB 52 consultation was concluded on July 3, 2020.
21. Pursuant to the State Water Board's regulations implementing the California Environmental Quality Act (CEQA) in CCR title 23, section 3777(a)), no analysis of reasonable alternatives to the proposed action was required since the SED concludes that the project could not result in any reasonably foreseeable adverse environmental impacts (CCR, title 23, sec. 3777(e).). However, the SED did evaluate the no project alternative.
22. Consistent with CEQA Section 15187, the SED also includes identification of reasonably foreseeable methods of compliance and an environmental analysis of any reasonably foreseeable significant environmental impacts associated with the methods. The SED concludes that implementation of the maximum benefit

commitments in the SNMP could not result in reasonably foreseeable significant adverse environmental impacts (CCR, title 23, sec. 3777(f).) The regulatory compliance alternatives analyzed in the SED assumed complying with the antidegradation objective by: (1) desalting recycled water prior to distribution to customers for reuse; (2) desalting groundwater to offset recycled water reuse with TDS concentration over the antidegradation objectives; and (3) replacing recycled water use with imported water. It was concluded in the maximum benefit SNMP proposal package that complying with the antidegradation objectives through these alternatives would not be cost-effective and would not reduce TDS concentration in the Elsinore GMZ.

23. A CEQA scoping meeting was held on June 24, 2020 to provide interested parties the opportunity to comment on the appropriate scope and content of the SED that was prepared for the proposed Basin Plan amendment. Any comments received in the response to the scoping meeting were considered in preparing the subsequent environmental analysis.
24. Based on the environmental analyses described in the SED, the Santa Ana Water Board finds that the proposed Basin Plan amendment could not result in any foreseeable significant adverse environmental impacts; therefore, no mitigation measures are proposed or analyzed.
25. The Final Substitute Environmental Document consists of the Staff Report (including documents referenced therein), the comments and responses to comments on the Staff Report and the Basin Plan amendment, the environmental checklist and this resolution.
26. Pursuant to California Health and Safety Code section 57004, the maximum benefit SNMP proposal package and the Staff Report were submitted for external scientific peer review in 2021. The reviewers found that the proposed regulatory action to adopt the proposed maximum benefit objectives and the SNMP is based on scientifically defensible information. Comments from peer reviewers were addressed in August 2021.
27. The Santa Ana Water Board notified all known interested persons by email distribution list and by publication in newspapers within the affected counties pursuant to CWC section 13244 and Government Code section 6061, of its intent to hold a public hearing on December 10, 2021.
28. On December 10, 2021, the Santa Ana Water Board held a public hearing for, provided interested parties and the public an opportunity to comment on, and carefully considered all comment received and evidence in the administrative record pertaining to, this Resolution and Basin Plan amendment.

29. The Basin Plan amendment must be submitted for review and approval by the State Water Board and by the OAL. Because the proposed Basin Plan amendment makes no changes to water quality standards for surface waters or effluent limits in any National Pollutant Discharge Elimination System (NPDES) permit, U.S. Environmental Protection Agency approval is not required. The Basin Plan amendment will become effective upon OAL approval.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Santa Ana Water Board has reviewed and considered the record for this matter, including the information contained in the SED, all written comments and responses to comments, and all oral testimony and responses provided at the public hearing held on December 10, 2021.
2. The Santa Ana Water Board confirms the preliminary determination by the Santa Ana Water Board staff that the proposed amendment could not have a significant adverse effect on the environment and hereby approves and certifies the Environmental Checklist and supporting documentation that is part of the SED.
3. The Santa Ana Water Board hereby adopts the Basin Plan amendment delineated in Attachment A (Redline) and Attachment B (clean version) to this Resolution, which incorporate maximum benefit TDS and nitrate objectives and commitments for the Elsinore GMZ.
4. The Executive Officer is directed to forward copies of the Basin Plan amendment, and the related Administrative Record, to the State Water Board, in accordance with the requirements in CWC section 13245.
5. The Santa Ana Water Board requests that the State Water Board review and approve the Basin Plan amendment in accordance with the requirements of CWC sections 13245 and 13246 and, thereafter, forward the amendments to OAL for approval.
6. If, during its approval process, the State Water Board or OAL determine that minor, non-substantive corrections to the language of the amendments are needed for clarity or for consistency, the Executive Officer may make such changes and shall inform the Santa Ana Water Board forthwith.
7. The Executive Officer is directed, at the time of filing and posting the Notice of Decision, to take steps to promptly ensure payment of application fee to the California Department of Fish and Wildlife for its review of the SED for this Basin Plan amendment or to file a Certificate of Fee Exemption, whichever is applicable.

I, Jayne Joy, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on December 10, 2021.

Jayne Joy
Executive Officer

Attachment A to Resolution No. R8-2021-0044

(Proposed Basin Plan amendment changes are shown as **redline** for additions)

Chapter 4. Water Quality Objectives -- Table 4-1 WATER QUALITY OBJECTIVES – Continued (PAGES 4-57 and 4-58)

GROUNDWATER MANAGEMENT ZONES	WATER QUALITY OBJECTIVES (mg/l)						Hydrologic Unit	
	Total Dissolved Solids	Hardness	Sodium	Chloride	Nitrate as Nitrogen	Sulfate	Primary	Secondary
UPPER SANTA ANA RIVER BASIN								
Cucamonga “antidegradation”++	210	---	---	---	2.4	---	801.24	801.21
Lytle	260	---	---	---	1.5	---	801.41	801.42
Rialto	230	---	---	---	2.0	---	801.41	801.42
San Timoteo “maximum benefit”++	400	---	---	---	5.0	---	801.62	
San Timoteo “antidegradation”++	300	---	---		2.7	---	801.62	
Yucaipa “maximum benefit”++	370	---	---	---	5.0	---	801.61	801.55, 801.54, 801.56, 801.63, 801.65, 801.66 801.67
Yucaipa “antidegradation”++	320	---	---	---	4.2	---	801.61	801.55, 801.54, 801.56, 801.63, 801.65, 801.66 801.67
MIDDLE SANTA ANA RIVER BASIN								
Arlington	980	---	---	---	10	---	801.26	
Bedford**	---	---	---	---	---	---	801.32	
Coldwater	380	---	---	---	1.5	---	801.31	
Elsinore “maximum benefit”++	530	---	---	---	5.0	---	802.31	
Elsinore “antidegradation”++	480	---	---	---	1.0	---	802.31	
Lee Lake**	---	---	---	---	---	---	801.34	

.
++ “Maximum benefit” objectives apply unless the Santa Ana Water Board determines that lowering of water quality is not of maximum benefit to
the people of the state; in that case, “antidegradation” objectives apply (for Chino North, antidegradation objectives for Chino 1, 2, 3 would apply
if maximum benefit is not demonstrated). (see discussion in Chapter 5).
** Numeric objectives not established; narrative objectives apply.

Chapter 5 – Implementation

Section X. Salt Management - Elsinore Groundwater Management Zone – Elsinore Valley Municipal Water District

As shown in Chapter 4, both “antidegradation” and “maximum benefit” objectives for TDS and nitrate-nitrogen are specified in this Basin Plan for the Elsinore GMZ. The application of the “maximum benefit” objectives relies on the implementation of the maximum benefit commitments in **Table X** by the Elsinore Valley Municipal Water District (EVMWD). **Table X** identifies the projects and requirements that must be implemented to demonstrate that water quality consistent with the maximum benefit to the people of the State will be maintained. An implementation schedule is also provided in **Table X**.

**Table X
Maximum benefit Commitments and Implementation Schedule**

Commitment	Milestones	Compliance Schedule
1. Beneficial Use Protection	a. Triennial report of historical, current and future water supply and recycled water quality; the ten-year projection will include estimations of TDS and nitrate concentrations of each District water supply source and a volume-weighted projection of all sources.	a. Initial report due by August 15, 2021, subsequent reports due every three years by August 15 th
	b. If the need for treatment to meet TDS and nitrate drinking water standards is identified in the ten-year projection, the District will prepare a proposed schedule to plan, design and construct the necessary treatment facilities (treatment plan)	b. A treatment plan will be submitted to the Executive Officer of the Santa Ana Water Board (Executive Officer) for review and approval within one year of publishing a finding of the need for treatment within the ten-year projection
	c. Implement treatment plan	c. Upon approval of plan and schedule by Executive Officer
	d. Reporting of treatment plan implementation status	d. May 1st (as part of Commitment 7)
	e. Report of pumping and sustainable yield	e. May 1st (as part of Commitment 7)
2. Prioritization of Recycled Water Reuse from Regional WRF to Comply with LECWA Before Initiating IPR Project.	Status report of latest recycled water planning projections for the Regional WRF, its current and projected deliveries to Lake Elsinore, and an estimate of when surplus recycled water supply will be available to initiate the indirect potable reuse program	May 1st (as part of Commitment 7)
3. Salt Mitigation Accounting	Report of monthly, annual and cumulative salt liabilities and offsets	May 1st (as part of Commitment 7)

4. Integrated Resources Plan Implementation	Status report of Integrated Resources Plan implementation	May 1st (as part of Commitment 7)
5. Salt Offset Project Plan and Implementation	a. Complete engineering design for the expansion of the Regional WRF to 12 mgd, including MBR system required to operate IPR project	a. December 31, 2020
	b. Complete construction of Regional WRF expansion to 12 mgd, including MBR system	b. December 31, 2024
	c. Complete research studies on potential for arsenic leaching	c. December 31, 2026
	d. When the total recycled water production at the Regional WRF reaches 8.5 mgd, start preliminary engineering and related investigations to provide the information necessary to implement the IPR project or alternative equivalent salt offset projects; and prepare a plan and schedule to construct the project by the time the Regional WRF reaches 10 mgd	d. Start study when Regional WRF reaches 8.5 mgd of recycled water production Submit engineering study and project plan and schedule within 24 months of when Regional WRF reaches 8.5 mgd of recycled water production
	e. Implement the salt offset project plan	e. Upon approval of the project plan and schedule by the Executive Officer
	f. Once the salt offset project plan implementation begins, prepare progress reports to the Regional Board until project startup commences	f. Reporting commences upon Executive Officer approval of the project plan and schedule
	g. Complete construction and commence operations of IPR or other salt offset	g. When Regional WRF discharge reaches 10 mgd
	h. Once the salt offset project facilities are operational, report the cumulative amount of salt removed by the salt offset project, the balance of its salt mitigation obligation and a projection of the year in which the salt liability will be completely mitigated	h. May 1st (as part of Commitment 7)
6. Monitoring and Analysis	a. Prepare a monitoring and analysis program work plan that is consistent with the State Board's 2019 Recycled Water Policy	a. within 90 days of OAL adoption of the Maximum Benefit Salinity Management Plan
	b. Implement monitoring program work plan	b. Within 60 days of approval of plan by Executive Officer
	c. Periodic update of monitoring plan	c. As requested by the Executive Officer

7. Reporting	Annual report of compliance with the Maximum Benefit Commitments	First report completed by May 1st following OAL adoption of the Maximum Benefit Salinity Management Plan, and every May 1st each year thereafter
--------------	--	--

Description of Elsinore Valley Municipal Water District Commitments

1. **Beneficial Use Protection.** The District will ensure that there will be no impairment of beneficial uses of the Elsinore GMZ or downstream GMZs. To accomplish this, the District will sustainably produce groundwater from the Elsinore GMZ, consistent with the newly enacted Sustainable Groundwater Management Act, and will not reduce its groundwater pumping to a volume that is less than the sustainable yield as TDS and/or nitrate concentrations in the Elsinore GMZ increase over time. The District will not abandon the use of Elsinore GMZ groundwater due to the cost of TDS and nitrate treatment. The District will accomplish this by constructing treatment facilities, as necessary, to treat groundwater to ensure that the TDS and nitrate concentrations in the water served to its customers meets drinking water standards. This will be done as follows:
 - a. Every three years, the District will prepare a triennial report for the Santa Ana Water Board that describes its historical, current, and projected water supply and wastewater discharge operations and quality. The objectives of the report are to: demonstrate the nexus between the District’s water supply and recycled water quality, characterize water and recycled water supply and quality trends over time, and prepare a ten-year projection of the TDS and nitrate concentrations of each District water supply source and a volume-weighted projection of all sources. The water supply quality projections will be based on monitoring data or groundwater model projections at the discretion of the District. Each report will identify if there is a projected need for new groundwater treatment in the 10-year projection period. The first triennial report will be due by August 15, 2021 and every three years thereafter by August 15th, unless relieved of this commitment by the Executive Officer.
 - b. If the need for treatment to meet TDS and nitrate drinking water standards is identified in the ten-year projection, the District will prepare a proposed schedule to plan, design and construct the necessary treatment facilities (treatment plan). The treatment plan will be submitted to the Executive Officer for review and approval within one year of publishing the finding in the triennial report.
 - c. When the treatment plan is approved by the Executive Officer, the District will begin its implementation pursuant to the schedule in the approved treatment plan.
 - d. The District will prepare an annual progress report that describes the activities of the prior year to implement the treatment plan. Once triggered, the reporting done pursuant to this commitment will be included in the annual maximum benefit report described in Commitment 7 below.

- e. Each year, as part of the annual report of the maximum benefit salinity management plan (Commitment 7 below), the District will provide the Santa Ana Water Board with (1) data on its historical, current and planned pumping from the Elsinore GMZ and (2) a comparison of average pumping to the most current estimation of the sustainable yield of the basin, and (3) to the extent that the current or planned average pumping is less than the sustainable yield of the Basin, the District will provide detailed information as to why the beneficial use of the Basin is not being maximized and will provide a schedule for resuming an average pumping level that is consistent with the sustainable yield.

2. Prioritization of Recycled Water Reuse from Regional WRF to Comply with LECWA before Initiating Indirect Potable Reuse Project. The District proposes to use its planned indirect potable reuse (IPR) project to inject advanced-treated recycled water from the Regional WRF into the Elsinore GMZ to offset its legacy and ongoing salt liabilities. The Regional WRF currently produces about 6.0 mgd: 0.5 mgd of which is discharged to Temescal Wash to maintain riparian habitat, and 5.5 mgd is discharged to Lake Elsinore to help maintain surface water elevation pursuant to the District's agreement with the City of Lake Elsinore under the Lake Elsinore Comprehensive Water Management Agreement or LECWA. The target lake water level pursuant to the LECWA is 1240 ft. Recent studies indicate that the long-term average discharge required to maintain the Lake at or above 1240 feet is about 7.5 mgd. A minimum of 2.5 mgd of effluent is required to operate the IPR project. Thus, to meet the commitment to the LECWA, the IPR project cannot be operated until the total effluent from the Regional WRF reaches at least to 10 mgd. Current planning projections for growth in the District's service area indicate that there should be 10 mgd of recycled water produced at the Regional WRF to operate the IPR project starting in 2035. As the District service area grows, the new recycled water supply will first be needed to maintain surface water levels in Lake Elsinore to comply with the LECWA. The recycled water produced in excess of that required for compliance with the LECWA will be prioritized for the IPR project.

- a. Each year, as part of the annual report of the maximum benefit salinity management plan (Commitment 7), the District will provide the Santa Ana Water Board with the latest planning information available with regards to recycled water production projections for the Regional WRF, its current and projected deliveries to Lake Elsinore, and an estimate of when surplus recycled water supply will be available to initiate the indirect potable reuse program.

3. Salt Mitigation Accounting. The District will track its monthly, annual, and cumulative salt mitigation requirements and report on them annually to the Santa Ana Water Board as part of its annual reporting commitment (Commitment 7). The salt liability will be accounted as follows:

- a. The District will prepare an accounting of the TDS mitigation requirements that resulted from exceedances of the RRC discharge limitation from January 1, 2004¹

¹ This is the effective date of the Basin Plan amendment that incorporated the current antidegradation objectives for the Elsinore GMZ.

through July 1, 2014.² The mitigation requirement is calculated based on the mass of TDS in excess of the RRC permit limit of 700 mg/L for the entire volume of recycled water produced by the plant over this period.

- b. The District will prepare an accounting of the TDS mitigation requirements that resulted from the reuse of all sources of recycled water used in the watershed tributary to the Elsinore GMZ that were in excess of the antidegradation objective from July 1, 2014³ through [*date of OAL adoption of Maximum Benefit objectives*]. The mitigation requirement is calculated based on the mass of TDS in excess of the antidegradation objective of 480 mg/L.
- c. The District will prepare an accounting of the TDS mitigation requirements for the balance of the recycled water produced at the RRC WRF that was not used in the watershed tributary to the Elsinore GMZ from July 1, 2014 through [*date of OAL adoption of Maximum Benefit objectives*]. The mitigation requirement is calculated based on the mass of TDS in excess of the RRC permit limit of 700 mg/L.
- d. As of [*date of OAL adoption of Maximum Benefit objectives*], the District will prepare and maintain an ongoing accounting of the continued salt mitigation requirements that accumulate from ongoing exceedances of the RRC discharge limitation and report them to the Santa Ana Water Board. The mitigation requirement is calculated based on the mass of TDS in excess of 700 mg/L for the entire volume of recycled water produced by the plant.
- e. No offsets will be required for the reuse of imported recycled water sources as of [*date of OAL adoption of Maximum Benefit objectives*] so long as assimilative capacity exists in the Elsinore GMZ. Once assimilative capacity is used up (e.g. when the ambient TDS concentration equals or exceeds 530 mg/L), the mitigation requirement is calculated based on the mass of TDS in excess of the maximum benefit objective of 530 mg/L.
- f. Once a Santa Ana Water Board-approved salt mitigation project is initiated (indirect potable reuse or other), the District will prepare and maintain an ongoing accounting of the mitigation credits attributable to the project and the cumulative remaining offset obligation.

4. **Integrated Resources Plan Implementation.** The District will aggressively pursue the suite of nine water supply projects identified in its IRP and apprise the Santa Ana Water Board of its progress in the annual maximum benefit report described in Commitment 7 below. It is the intent of the District to use its planned indirect potable reuse project, which will inject low-TDS advanced treated water to the Elsinore GMZ, as the salt offset project to mitigate the salt obligations accrued pursuant to Commitment Number 3 as soon as there is sufficient recycled water production at the Regional WRP to support the LECWA commitments and the IPR project (e.g. when recycled water production is 10 mgd).

² The accounting starts on July 1, 2014 because this is the effective date of the finding of no assimilative capacity in the Elsinore GMZ per the 2012 Ambient Water Quality findings.

³ The accounting starts on July 1, 2014 because this is the effective date of the finding of no assimilative capacity in the Elsinore GMZ per the 2012 Ambient Water Quality findings.

5. **Salt Offset Project Plan and Implementation.** The District will complete construction and commence its salt offset project once the total recycled water production at its Regional WRF reaches 10 mgd. The project will be designed to completely offset the District's cumulative and ongoing salt mitigation obligations. This will be done as follows:
- a. No later than December 31, 2020, the District will complete the design for the expansion of the Regional WRF to 12 mgd, which will include a Membrane Bioreactor (MBR) system that will be required to operate the IPR project.
 - b. No later than December 31, 2024, the District will complete an expansion of the Regional WRF to 12 mgd, including construction of the MBR system that will be required to operate the IPR project.
 - c. No later than December 31, 2026, the District will complete a study on the potential for arsenic leaching as a result of the planned indirect potable reuse project. This research studies need to be conducted prior to design and construction of the indirect potable reuse project.
 - d. Once the recycled water production at the Regional WRF reaches 8.5 mgd, the District will start preliminary engineering and related investigations to provide the information necessary to implement the IPR project and alternative equivalent salt offset projects (such as a groundwater desalter). At the completion of the study, the District will prepare a schedule to complete project construction by the time the Regional WRF is producing 10 mgd of recycled water. The engineering study and project plan and schedule must be submitted to the Santa Ana Water Board within 24 months of when the Regional WRF reaches 8.5 mgd of recycled water production.
 - i. If indirect potable reuse is the proposed salt offset project alternative, it will be designed to completely offset the District's historical salt liabilities within 10 years of initiating the project.
 - ii. If a desalter or other equivalent treatment alternative is the approved salt offset project alternative, it will be designed to completely offset the District's historical salt liabilities within 30 years of initiating the project.
 - e. Implement the salt offset project plan upon approval by the Executive Officer.
 - f. Once the salt offset project plan implementation begins, the District will prepare quarterly progress reports to the Santa Ana Water Board until project startup commences. These reports will summarize technical and related findings, achievement of milestones, schedule status and actions being taken to ensure compliance with schedule in the approved salt offset project plan.
 - g. Complete construction and commence operations of IPR or other salt offset project when recycled water production at the Regional WRF reaches 10 mgd
 - h. Once the salt offset project facilities are operational, the District will document the monthly amount of salt mitigated by the project. Each year, the District will report the cumulative amount of salt removed by the salt offset project, the balance of its salt mitigation obligation and a projection of the year in which the salt liability will

be completely mitigated. The reporting done pursuant to this commitment will be included in the annual maximum benefit report described in Commitment 7 below.

6. **Monitoring and Analysis.** The District will conduct monitoring, investigations, and report results in a manner that is consistent with the State Water Resources Control Board's 2019 Recycled Water Policy.
 - a. The District will prepare a monitoring and analysis program work plan and submit it to the Santa Ana Water Board within 90 days of [*date of OAL adoption of Maximum Benefit objectives*]. The work plan will address the requirements of the State Board's 2019 Recycled Water Policy, including: a description of the methodologies for assessing current groundwater quality (e.g. ambient water quality) and assessing impacts of recycled water reuse in the Elsinore GMZ; the data collection and monitoring required to perform the water quality assessments; and a schedule for analysis and reporting.
 - b. The monitoring and assessment program will be implemented within 60 days of the Executive Officer's approval of the work plan.
 - c. The monitoring plan will be updated, as appropriate, subject to approval of the Executive Officer.
7. **Reporting.** The District will prepare an annual report of activities performed pursuant to the maximum benefit salinity management plan by May 1st of each year. The first annual report will be submitted on the May 1st following OAL adoption of the Maximum Benefit Salinity Management Plan. The annual report will include a detailed status report of compliance with each maximum benefit commitment, including the specific information referenced in each commitment's description above. The reporting schedule will be updated, as appropriate, subject to approval of the Executive Officer.

If the Santa Ana Water Board determines that EVMWD is not implementing the maximum benefit commitments and schedule as listed in **Table X** and described above, then maximum benefit is not demonstrated and the antidegradation objectives for the Elsinore GMZ will apply. In this case, the Santa Ana Water Board will require retroactive mitigation (back to the date of adoption of the maximum benefit SNMP) for the discharge of recycled water overlying and tributary to the Elsinore GMZ with TDS concentrations over the antidegradation objectives. The Santa Ana Water Board will also require mitigation of any impact of water quality to the downstream GMZs that result from failure to implement the "maximum benefit" commitments.

Attachment B to Resolution No. R8-2021-0044

Chapter 4. Water Quality Objectives -- Table 4-1 WATER QUALITY OBJECTIVES – Continued (PAGES 4-57 and 4-58)

GROUNDWATER MANAGEMENT ZONES	WATER QUALITY OBJECTIVES (mg/L)						Hydrologic Unit	
	Total Dissolved Solids	Hardness	Sodium	Chloride	Nitrate as Nitrogen	Sulfate	Primary	Secondary
UPPER SANTA ANA RIVER BASIN								
Cucamonga “antidegradation”++	210	---	---	---	2.4	---	801.24	801.21
Lytle	260	---	---	---	1.5	---	801.41	801.42
Rialto	230	---	---	---	2.0	---	801.41	801.42
San Timoteo “maximum benefit”++	400	---	---	---	5.0	---	801.62	
San Timoteo “antidegradation”++	300	---	---		2.7	---	801.62	
Yucaipa “maximum benefit”++	370	---	---	---	5.0	---	801.61	801.55, 801.54, 801.56, 801.63, 801.65, 801.66 801.67
Yucaipa “antidegradation”++	320	---	---	---	4.2	---	801.61	801.55, 801.54, 801.56, 801.63, 801.65, 801.66 801.67
MIDDLE SANTA ANA RIVER BASIN								
Arlington	980	---	---	---	10	---	801.26	
Bedford**	---	---	---	---	---	---	801.32	
Coldwater	380	---	---	---	1.5	---	801.31	
Elsinore “maximum benefit”++	530	---	---	---	5.0	---	802.31	
Elsinore “antidegradation”++	480	---	---	---	1.0	---	802.31	
Lee Lake**	---	---	---	---	---	---	801.34	

- ++ “Maximum benefit” objectives apply unless Santa Ana Water Board determines that lowering of water quality is not of maximum benefit to the people of the state; in that case, “antidegradation” objectives apply (for Chino North, antidegradation objectives for Chino 1, 2, 3 would apply if maximum benefit is not demonstrated). (see discussion in Chapter 5).
- ** Numeric objectives not established; narrative objectives apply.

Chapter 5 – Implementation

Section X. Salt Management - Elsinore Groundwater Management Zone – Elsinore Valley Water District

As shown in Chapter 4, both “antidegradation” and “maximum benefit” objectives for TDS and nitrate-nitrogen are specified in this Basin Plan for Elsinore GMZ. The application of the “maximum benefit” objectives relies on the implementation of the maximum benefit commitments in **Table X** by the Elsinore Valley Municipal Water District (EVMWD). **Table X** identifies the projects and requirements that must be implemented to demonstrate that water quality consistent with the maximum benefit to the people of the State will be maintained. An implementation schedule is also provided in **Table X**.

Table X
Maximum benefit Commitments and Implementation Schedule

Commitment	Milestones	Compliance Schedule
1. Beneficial Use Protection	a. Triennial report of historical, current and future water supply and recycled water quality; the ten-year projection will include estimations of TDS and nitrate concentrations of each District water supply source and a volume-weighted projection of all sources.	a. Initial report due by August 15, 2021, subsequent reports due every three years by August 15th
	b. If the need for treatment to meet TDS and nitrate drinking water standards is identified in the ten-year projection, the District will prepare a proposed schedule to plan, design and construct the necessary treatment facilities (treatment plan)	b. A treatment plan will be submitted to the Executive Officer for review and approval within one year of publishing a finding of the need for treatment within the ten-year projection
	c. Implement treatment plan	c. Upon approval of plan and schedule by Executive Officer
	d. Reporting of treatment plan implementation status	d. May 1st (as part of Commitment 7)
	e. Report of pumping and sustainable yield	e. May 1st (as part of Commitment 7)
2. Prioritization of Recycled Water Reuse from Regional WRF to Comply with LECWA Before Initiating IPR Project.	Status report of latest recycled water planning projections for the Regional WRF, its current and projected deliveries to Lake Elsinore, and an estimate of when surplus recycled water supply will be available to initiate the indirect potable reuse program	May 1st (as part of Commitment 7)
3. Salt Mitigation Accounting	Report of monthly, annual and cumulative salt liabilities and offsets	May 1st (as part of Commitment 7)
4. Integrated Resources Plan Implementation	Status report of Integrated Resources Plan implementation	May 1st (as part of Commitment 7)
5. Salt Offset Project Plan and Implementation	a. Complete engineering design for the expansion of the Regional WRF to 12 mgd, including MBR system required to operate IPR project	a. December 31, 2020
	b. Complete construction of Regional WRF expansion to 12 mgd, including MBR system	b. December 31, 2024
	c. Complete research studies on potential for arsenic leaching	c. December 31, 2026
	d. When the total recycled water production at the Regional WRF reaches 8.5 mgd, start preliminary engineering and related investigations to provide the information necessary to implement the IPR project and alternative equivalent salt offset projects; and prepare a plan and schedule to construct the project by the time the Regional WRF reaches 10 mgd	d. Start study when Regional WRF reaches 8.5 mgd of recycled water production Submit engineering study and project plan and schedule within 24 months of when Regional WRF reaches 8.5 mgd of recycled water production
	e. Implement the salt offset project plan	e. Upon approval of the project plan and schedule by the Executive Officer
	f. Once the salt offset project plan implementation begins, prepare progress reports to the Regional Board until project startup commences	f. Reporting commences upon Executive Officer approval of the project plan and schedule.
	g. Complete construction and commence operations of IPR or other salt offset	g. When Regional WRF discharge reaches 10 mgd
	h. Once the salt offset project facilities are operational, report the cumulative amount of salt removed by the salt offset project, the balance of its salt mitigation obligation and a projection of the year in which the salt liability will be completely mitigated	h. May 1st (as part of Commitment 7)
6. Monitoring and Analysis	a. Prepare a monitoring and analysis program work plan that is consistent with the State Board's 2019 Recycled Water Policy	a. within 90 days of OAL adoption of the Maximum Benefit Salinity Management Plan
	b. Implement monitoring program work plan	b. Within 60 days of approval of plan by Executive Officer
	c. Periodic update of monitoring plan	c. As requested by the Executive Officer
7. Reporting	Annual report of compliance with the Maximum Benefit Commitments	First report completed by May 1st following OAL adoption of the Maximum Benefit Salinity Management Plan, and every May 1st each year thereafter

Description of Elsinore Valley Municipal Water District Commitments

1. **Beneficial Use Protection.** The District will ensure that there will be no impairment of beneficial uses of the Elsinore GMZ or downstream GMZs. To accomplish this, the District will sustainably produce groundwater from the Elsinore GMZ, consistent with the newly enacted Sustainable Groundwater Management Act, and will not reduce its groundwater pumping to a volume that is less than the sustainable yield as TDS and/or nitrate concentrations in the Elsinore GMZ increase over time. The District will not abandon the use of Elsinore GMZ groundwater due to the cost of TDS and nitrate treatment. The District will accomplish this by constructing treatment facilities, as necessary, to treat groundwater to ensure that the TDS and nitrate concentrations in the water served to its customers meets drinking water standards. This will be done as follows:
 - a. Every three years, the District will prepare a triennial report for the Santa Ana Water Board that describes its historical, current, and projected water supply and wastewater discharge operations and quality. The objectives of the report are to: demonstrate the nexus between the District's water supply and recycled water quality, characterize water and recycled water supply and quality trends over time, and prepare a ten-year projection of the TDS and nitrate concentrations of each District water supply source and a volume-weighted projection of all sources. The water supply quality projections will be based on monitoring data or groundwater model projections at the discretion of the District. Each report will identify if there is a projected need for new groundwater treatment in the ten-year projection period. The first triennial report will be due by August 15, 2021 and every three years thereafter by August 15th, unless relieved of this commitment by the Executive Officer.
 - b. If the need for treatment to meet TDS and nitrate drinking water standards is identified in the ten-year projection, the District will prepare a proposed schedule to plan, design and construct the necessary treatment facilities (treatment plan). The treatment plan will be submitted to the Executive Officer for review and approval within one year of publishing the finding in the triennial report.
 - c. When the treatment plan is approved by the Executive Officer, the District will begin its implementation pursuant to the schedule in the approved treatment plan.
 - d. The District will prepare an annual progress report that describes the activities of the prior year to implement the treatment plan. Once triggered, the reporting done pursuant to this commitment will be

included in the annual maximum benefit report described in Commitment 7 below.

- e. Each year, as part of the annual report of the maximum benefit salinity management plan (Commitment 7 below), the District will provide the Santa Ana Water Board with (1) data on its historical, current and planned pumping from the Elsinore GMZ and (2) a comparison of average pumping to the most current estimation of the sustainable yield of the basin, and (3) to the extent that the current or planned average pumping is less than the sustainable yield of the Basin, the District will provide detailed information as to why the beneficial use of the Basin is not being maximized and will provide a schedule for resuming an average pumping level that is consistent with the sustainable yield.

2. **Prioritization of Recycled Water Reuse from Regional WRF to Comply with LECWA before Initiating Indirect Potable Reuse Project.** The District proposes to use its planned indirect potable reuse (IPR) project to inject advanced-treated recycled water from the Regional WRF into the Elsinore GMZ to offset its legacy and ongoing salt liabilities. The Regional WRF currently produces about 6.0 mgd: 0.5 mgd of which is discharged to Temescal Wash to maintain riparian habitat, and 5.5 mgd is discharged to Lake Elsinore to help maintain surface water elevation pursuant to the District's agreement with the City of Lake Elsinore under the Lake Elsinore Comprehensive Water Management Agreement or LECWA. The target lake water level pursuant to the LECWA is 1240 ft. Recent studies indicate that the long-term average discharge required to maintain the Lake at or above 1240 feet is about 7.5 mgd. A minimum of 2.5 mgd of effluent is required to operate the IPR project. Thus, to meet the commitment to the LECWA, the IPR project cannot be operated until the total effluent from the Regional WRF reaches at least to 10 mgd. Current planning projections for growth in the District's service area indicate that there should be 10 mgd of recycled water produced at the Regional WRF to operate the IPR project starting in 2035. As the District service area grows, the new recycled water supply will first be needed to maintain surface water levels in Lake Elsinore to comply with the LECWA. The recycled water produced in excess of that required for compliance with the LECWA will be prioritized for the IPR project.

- a. Each year, as part of the annual report of the maximum benefit salinity management plan (Commitment 7), the District will provide the Santa Ana Water Board with the latest planning information available with regards to recycled water production projections for the Regional WRF, its current and projected deliveries to Lake Elsinore, and an estimate of

when surplus recycled water supply will be available to initiate the indirect potable reuse program.

3. **Salt Mitigation Accounting.** The District will track its monthly, annual, and cumulative salt mitigation requirements and report on them annually to the Santa Ana Water Board as part of its annual reporting commitment (Commitment 7). The salt liability will be accounted as follows:
 - a. The District will prepare an accounting of the TDS mitigation requirements that resulted from exceedances of the RRC discharge limitation from January 1, 2004¹ through July 1, 2014.² The mitigation requirement is calculated based on the mass of TDS in excess of the RRC permit limit of 700 mg/L for the entire volume of recycled water produced by the plant over this period.
 - b. The District will prepare an accounting of the TDS mitigation requirements that resulted from the reuse of all sources of recycled water used in the watershed tributary to the Elsinore GMZ that were in excess of the antidegradation objective from July 1, 2014³ through [date of OAL adoption of Maximum Benefit objectives]. The mitigation requirement is calculated based on the mass of TDS in excess of the antidegradation objective of 480 mg/L.
 - c. The District will prepare an accounting of the TDS mitigation requirements for the balance of the recycled water produced at the RRC WRF that was not used in the watershed tributary to the Elsinore GMZ from July 1, 2014 through [date of OAL adoption of Maximum Benefit objectives]. The mitigation requirement is calculated based on the mass of TDS in excess of the RRC permit limit of 700 mg/L.
 - d. As of [date of OAL adoption of Maximum Benefit objectives], the District will prepare and maintain an ongoing accounting of the continued salt mitigation requirements that accumulate from ongoing exceedances of the RRC discharge limitation and report them to the Santa Ana Water Board. The mitigation requirement is calculated based on the mass of TDS in excess of 700 mg/L for the entire volume of recycled water produced by the plant.
 - e. No offsets will be required for the reuse of imported recycled water sources as of [date of OAL adoption of Maximum Benefit objectives] so

¹ This is the effective date of the Basin Plan amendment that incorporated the current antidegradation objectives for the Elsinore GMZ.

² The accounting starts on July 1, 2014 because this is the effective date of the finding of no assimilative capacity in the Elsinore GMZ per the 2012 Ambient Water Quality findings.

³ The accounting starts on July 1, 2014 because this is the effective date of the finding of no assimilative capacity in the Elsinore GMZ per the 2012 Ambient Water Quality findings.

long as assimilative capacity exists in the Elsinore GMZ. Once assimilative capacity is used up (e.g. when the ambient TDS concentration equals or exceeds 530 mg/L), the mitigation requirement is calculated based on the mass of TDS in excess of the maximum benefit objective of 530 mg/L.

- f. Once a Santa Ana Water Board-approved salt mitigation project is initiated (indirect potable reuse or other), the District will prepare and maintain an ongoing accounting of the mitigation credits attributable to the project and the cumulative remaining offset obligation.
4. **Integrated Resources Plan Implementation.** The District will aggressively pursue the suite of nine water supply projects identified in its IRP and apprise the Santa Ana Water Board of its progress in the annual maximum benefit report described in Commitment 7 below. It is the intent of the District to use its planned indirect potable reuse project, which will inject low-TDS advanced treated water to the Elsinore GMZ, as the salt offset project to mitigate the salt obligations accrued pursuant to Commitment Number 3 as soon as there is sufficient recycled water production at the Regional WRP to support the LECWA commitments and the IPR project (e.g. when recycled water production is 10 mgd).
 5. **Salt Offset Project Plan and Implementation.** The District will complete construction and commence its salt offset project once the total recycled water production at its Regional WRF reaches 10 mgd. The project will be designed to completely offset the District's cumulative and ongoing salt mitigation obligations. This will be done as follows:
 - a. No later than December 31, 2020, the District will complete the design for the expansion of the Regional WRF to 12 mgd, which will include a Membrane Bioreactor (MBR) system that will be required to operate the IPR project.
 - b. No later than December 31, 2024, the District will complete an expansion of the Regional WRF to 12 mgd, including construction of the MBR system that will be required to operate the IPR project.
 - c. No later than December 31, 2026, the District will complete a study on the potential for arsenic leaching as a result of the planned indirect potable reuse project. This research studies need to be conducted prior to design and construction of the indirect potable reuse project.
 - d. Once the recycled water production at the Regional WRF reaches 8.5 mgd, the District will start preliminary engineering and related investigations to provide the information necessary to implement the IPR project and alternative equivalent salt offset projects (such as a

groundwater desalter). At the completion of the study, the District will prepare a schedule to complete project construction by the time the Regional WRF is producing 10 mgd of recycled water. The engineering study and project plan and schedule must be submitted to the Santa Ana Water Board within 24 months of when the Regional WRF reaches 8.5 mgd of recycled water production.

- i. If indirect potable reuse is the proposed salt offset project alternative, it will be designed to completely offset the District's historical salt liabilities within 10 years of initiating the project.
 - ii. If a desalter or other equivalent treatment alternative is the approved salt offset project alternative, it will be designed to completely offset the District's historical salt liabilities within 30 years of initiating the project.
 - e. Implement the salt offset project plan upon approval by the Executive Officer.
 - f. Once the salt offset project plan implementation begins, the District will prepare quarterly progress reports to the Santa Ana Water Board until project startup commences. These reports will summarize technical and related findings, achievement of milestones, schedule status and actions being taken to ensure compliance with schedule in the approved salt offset project plan.
 - g. Complete construction and commence operations of IPR or other salt offset project when recycled water production at the Regional WRF reaches 10 mgd
 - h. Once the salt offset project facilities are operational, the District will document the monthly amount of salt mitigated by the project. Each year, the District will report the cumulative amount of salt removed by the salt offset project, the balance of its salt mitigation obligation and a projection of the year in which the salt liability will be completely mitigated. The reporting done pursuant to this commitment will be included in the annual maximum benefit report described in Commitment 7 below.
6. **Monitoring and Analysis.** The District will conduct monitoring, investigations, and report results in a manner that is consistent with the State Water Resources Control Board's 2019 Recycled Water Policy.
 - a. The District will prepare a monitoring and analysis program work plan and submit it to the Santa Ana Water Board within 90 days of [*date of OAL adoption of Maximum Benefit objectives*]. The work plan will address the requirements of the State Board's 2019 Recycled Water

Policy, including: a description of the methodologies for assessing current groundwater quality (e.g. ambient water quality) and assessing impacts of recycled water reuse in the Elsinore GMZ; the data collection and monitoring required to perform the water quality assessments; and a schedule for analysis and reporting.

- b. The monitoring and assessment program will be implemented within 60 days of the Executive Officer's approval of the work plan.
 - c. The monitoring plan will be updated, as appropriate, subject to approval of the Executive Officer.
7. **Reporting.** The District will prepare an annual report of activities performed pursuant to the maximum benefit salinity management plan by May 1st of each year. The first annual report will be submitted on the May 1st following OAL adoption of the Maximum Benefit Salinity Management Plan. The annual report will include a detailed status report of compliance with each maximum benefit commitment, including the specific information referenced in each commitment's description above. The reporting schedule will be updated, as appropriate, subject to approval of the Executive Officer.

If the Santa Ana Water Board determines that EVMWD is not implementing the maximum benefit commitments and schedule as listed in **Table X** and described above, then maximum benefit is not demonstrated and the antidegradation objectives for the Elsinore GMZ will apply. In this case, the Santa Ana Water Board will require retroactive mitigation (back to the date of adoption of the maximum benefit SNMP) for the discharge of recycled water overlying and tributary to the Elsinore GMZ with TDS concentrations over the antidegradation objectives. The Santa Ana Water Board will also require mitigation of any impact of water quality to the downstream GMZs that result from failure to implement the "maximum benefit" commitments.