

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

2375 Northside Drive, Suite 100, San Diego, CA 92108

(619) 516-1990 - Fax (619) 516-1994

<https://www.waterboards.ca.gov/sandiego/>

TENTATIVE ORDER NO. R9-2025-0060

**WASTE DISCHARGE REQUIREMENTS
FOR THE EAST COUNTY ADVANCED WATER PURIFICATION JOINT POWERS
AUTHORITY, EAST COUNTY WATER RECYCLING FACILITY,
SAN DIEGO COUNTY**

The following Discharger is subject to waste discharge requirements (WDRs) set forth in this Order:

Table 1. Discharger Information

Discharger	Name of Facility	Facility Address
East County Advanced Water Purification (ECAWP) Joint Powers Authority (JPA)	East County Water Recycling Facility (ECWRF)	12001 North Fanita Parkway, Santee, CA 92071

Table 2. Discharge Location

Effluent Description	Hydrologic Unit (HU)	Hydrologic Area (HA)	Hydrologic Sub Areas (HSA)
Tertiary treated recycled water	San Diego Hydrologic Unit (907)	Lower San Diego Hydrologic Area (907.1)	Santee HSA (907.12) El Cajon HSA (907.13)

This Order was adopted on:

November 12, 2025

This Order shall become effective on:

June 1, 2026

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the San Diego Water Board on **November 12, 2025**.

TENTATIVE

David W. Gibson, Executive Officer

CONTENTS

1. FACILITY INFORMATION	3
2. FINDINGS.....	3
3. DISCHARGE PROHIBITIONS	4
4. EFFLUENT LIMITATIONS AND RECYCLING SPECIFICATIONS.....	4
4.1. Effluent Limitations	4
4.2. Recycling Specifications	5
5. PROVISIONS	7
5.1. Standard Provisions.....	7
5.2. Monitoring and Reporting Program (MRP) Provisions	12
5.3. Special Provisions	12
6. COMPLIANCE DETERMINATION.....	12

TABLES

Table 1. Discharger Information	1
Table 2. Discharge Location.....	1
Table 3. Effluent Limitations at Monitoring Location EFF-003	5

ATTACHMENTS

ATTACHMENT A – ABBREVIATIONS AND DEFINITIONS	A-1
ATTACHMENT B – MAPS	B-1
ATTACHMENT C – FLOW SCHEMATICS	C-1
ATTACHMENT D – CALCULATION OF ADJ SODIUM ADSORPTION RATIO.....	D-1
ATTACHMENT E – MONITORING AND REPORTING PROGRAM.....	E-1
ATTACHMENT F – FACT SHEET	F-1

1. FACILITY INFORMATION

Information describing the ECWRF is summarized on the cover page and in sections 1 and 2 of Attachment F of this Order (Fact Sheet). Section 1 of the Fact Sheet also includes information regarding the ECAWP JPA's permit application.

2. FINDINGS

The San Diego Water Board finds:

2.1. Legal Authorities

This Order serves as WDRs pursuant to section 13260 et. seq. of the California Water Code (Water Code) and in accordance with the *Water Quality Control Plan for the San Diego Basin* (Basin Plan).

2.2. Background and Rationale for Requirements

The San Diego Water Board developed the requirements in this Order based on information submitted as part of the Discharger's Report of Waste Discharge/permit application, through monitoring and reporting programs, and other available information. The Fact Sheet contains the background information and rationale for the requirements in this Order, which is hereby incorporated into and constitutes Findings for this Order. Attachments A through E are also incorporated into this Order.

2.3. California Environmental Quality Act (CEQA)

The adoption of this Order for the discharge of waste is categorically exempt from CEQA under California Code of Regulations (CCR), title 14, sections 15301 (ongoing or existing projects). Padre Dam adopted a Mitigated Negative Declaration for the ECAWP Project¹ on December 5, 2018. Additional details about CEQA are provided in section 3.2. of the Fact Sheet.

2.4. Executive Officer Delegation of Authority

The San Diego Water Board, by prior resolution, delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to Water Code section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under Water Code section 13223, or this Order explicitly states otherwise.

¹ The ECAWP project includes upgrades to the existing influent pump station, construction of a new ECWRF, a Solids Handling and Energy Recovery Facility, the ECAWP Facility and facilities to convey purified water from the ECAWP Facility to Lake Jennings. Additionally, the project includes modifications to the East Mission Gorge Pump Station and construction of a force main and a residuals bypass system.

2.5 Notification of Interested Parties

The San Diego Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Details of the notification are provided in section 7.1. of the Fact Sheet.

2.6 Consideration of Public Comment

The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in section 7.3. of the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes and replaces Order No. 97-49, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, the Discharger shall comply with the requirements in this Order. Order No. 97-49 is also rescinded upon the adoption of this Order. The Discharger is hereby authorized to produce recycled water subject to WDRs in this Order for distribution within the discharge locations specified in Table 2.

3. DISCHARGE PROHIBITIONS

- 3.1. Discharges of waste to land which have not been specifically described in this Order or in the ROWD, and for which valid WDRs are not in force, are prohibited.
- 3.2. Discharges of treated or untreated solid or liquid waste to waters of the United States are prohibited unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit issued by the San Diego Water Board.
- 3.3. Discharges of treated or untreated solid or liquid waste directly or indirectly to any waters of the State (e.g. ephemeral streams and vernal pools) are prohibited unless authorized by WDRs.
- 3.4. The Discharger must comply with all applicable waste discharge prohibitions contained in the Basin Plan.

4. EFFLUENT LIMITATIONS AND RECYCLING SPECIFICATIONS

4.1. Effluent Limitations

- 4.1.1. The Discharger must ensure that the effluent flow rate measured at ~~INT-003A~~ ~~EFF-003~~ as described in the Monitoring and Reporting Program (MRP, Attachment E) does not exceed 2.5 MGD.
- 4.1.2. The Discharger must maintain compliance with the following effluent limitations, with compliance measured at Monitoring Location EFF-003, as described in the MRP.

Table 3. Effluent Limitations at Monitoring Location EFF-003

Parameter	Units	Average Annual ¹	Average Monthly ¹	Average Weekly ¹
Biochemical Oxygen Demand (BOD ₅ -day @ 20°C) ²	Milligram per liter (mg/L)	--	30	45
Boron	mg/L	0.75	--	--
Chloride	mg/L	250	--	--
Fluoride	mg/L	1.0	--	--
Iron	mg/L	0.3	--	--
Manganese	mg/L	0.05	--	--
Methylene Blue Activated Substances (MBAS)	mg/L	0.5	--	--
Sodium Hazard ³	%	60	--	--
pH ⁴	standard units	--	--	--
Sulfate	mg/L	500	--	--
Total Dissolved Solids (TDS)	mg/L	1,000	--	--
Total Nitrogen	mg/L	--	15	--
Total Suspended Solids (TSS) ²	mg/L	--	30	45

Notes for Table 3:

1. See Attachment A for definitions of abbreviations and a glossary of common terms used in the Order.
2. The Discharger must measure compliance with the BOD₅-day @ 20°C and TSS effluent limitations at monitoring location INT-003.
3. If the percent sodium value of the effluent exceeds 60 percent, compliance with the Sodium Hazard discharge specification may be evaluated by calculating the adjusted sodium adsorption ratio (SAR) and the electrical conductivity of the effluent. If the adjusted SAR and electrical conductivity values indicate the degree or restriction of use of the effluent falls within or below the slight to moderate range, as indicated in Basin Plan Table 3-8, the effluent will comply with the sodium hazard discharge specification. See Attachment D – Calculation of Adjusted Sodium Adsorption Ratio for more details.
4. The pH measured at EFF-003 shall not drop below an instantaneous minimum of 6.5 and an instantaneous maximum of 8.5 standard units at all times.

4.2. Recycling Specifications

- 4.2.1. The Discharger shall operate the granular media filters (GMF) to meet the following specifications:
 - 4.2.1.1. A maximum individual filter loading rate of 5 gallons per minute per square foot (GPM/SF) pursuant to title 22 California Code of Regulations (CCR) section 60301.320(a)(1).

- 4.2.1.2. Pursuant to title 22 CCR section 60307(a) the GMF influent turbidity must not exceed 5 Nephelometric Turbidity Units (NTU) for more than 15 minutes and must never exceed 10 NTU. The Discharger must maintain the ability to automatically activate chemical addition for coagulation or divert the GMF influent if the filter influent turbidity exceeds 5 NTU for more than 15 minutes.
- 4.2.1.3. The influent flow must be equal to all GMF units in operation. The Discharger must also verify that influent flow rates are equal in daily operation logs.
- 4.2.2. The Discharger shall maintain compliance with the following turbidity limitations, with compliance measured at Monitoring Locations INT-003 (GMF effluent), as described in the MRP, and pursuant to title 22 CCR section 60301.320(a)(2), such that turbidity does not exceed any of the following.
 - 4.2.2.1. An average of 2 NTU within a 24-hour period.
 - 4.2.2.2. 5 NTU for more than 5 percent of the time during a 24-hour period.
 - 4.2.2.3. 10 NTU at any time.
- 4.2.3. The Discharger shall maintain standard operating procedure (SOP) for the GMF that ensures compliance with the proceeding specifications and meets the following conditions:
 - 4.2.3.1. Operating procedures for maintaining an individual filter loading rate of 5 gallons GPM/SF or less.
 - 4.2.3.2. The SOPs must list supervisory control and data acquisition (SCADA) system alarm set points for filter effluent turbidity for the GMF.
 - 4.2.3.3. The SOPs must list corrective actions to be taken in the event of elevated GMF influent or effluent turbidity.
 - 4.2.3.4. The SOPs must always be available in the control room of the ECWRF.
 - 4.2.3.5. The ECWRF operators must all be trained on how to operate the GMF in accordance with the SOPs.
 - 4.2.3.6. The Discharger must get approval from the State Water Resources Control Board Division of Drinking Water (DDW) to revise or modify the SOPs.
- 4.2.4. The Discharger shall operate the chlorine contact basin (CCB) to meet the following disinfection specifications and maintain SOPs for the CCB that ensure compliance with the following specifications:
 - 4.2.4.1. A maximum flowrate of 2.5 MGD controlled by the Discharger's SCADA system.

- 4.2.4.2. A minimum contact time (CT) value² of 450 milligram-minutes per liter, pursuant to title 22 CCR section 60301.230(a)(1).³
- 4.2.5. The Discharger shall maintain compliance the following total coliform limitations, with compliance measured at Monitoring Locations EFF-003 (CCB effluent), as described in the MRP, and pursuant to title 22 CCR section 60301.230(b).
 - 4.2.5.1. A maximum seven-day median most probable number (MPN) of 2.2 per 100 milliliters utilizing the last seven days of total coliform results.
 - 4.2.5.2. A maximum MPN of 23 per 100 milliliters in more than one sample in any 30-day period.
 - 4.2.5.3. A maximum MPN of 240 per 100 milliliters in any one sample.
- 4.2.6. The Discharger shall maintain SOPs for the CCB that ensure compliance with the proceeding specifications and meets the following conditions:
 - 4.2.6.1. The SOPs must list the SCADA system alarm set points for the CCB.
 - 4.2.6.2. The SOPs must list CT parameters to be monitored to verify disinfection specifications are being met.
 - 4.2.6.3. The SOPs must describe the CCB effluent total coliform monitoring that is representative of the recycled water produced at the ECWRF.

5. PROVISIONS

5.1. Standard Provisions

- 5.1.1. The Discharger must comply with all conditions of this Order. If there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply. Any noncompliance with this Order constitutes a violation of the Water Code and is grounds for (a) enforcement action; (b) termination and reissuance or modification of this Order; or (c) denial of an application for new or revised WDRs.
- 5.1.2. The Discharger must allow the San Diego Water Board or an authorized representative, upon the presentation of credentials, to:
 - 5.1.2.1. Enter upon the Discharger's premises where the regulated ECWRF or activity is located, conducted, or where the Discharger keeps the required records under the conditions of this Order.

² CT is the product of the total chlorine residual and the modal contact time.

³ The modal contact time must be calculated using the CCB flow rate and the fourth order best-fit polynomial equation, as described in the *Chlorine Contact Basin Tracer Test – Final Report* based on the Tracer Test done in June 2022 for the Ray Stoyer Water Recycling Facility. If the flow rate at CCB is less than 0.6 MGD, then CT calculations must use a modal contact time of 199 minutes.

- 5.1.2.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order.
- 5.1.2.3. Inspect at reasonable times the ECWRF, equipment (including monitoring and control equipment), practices, or operations that are regulated or required under this Order.
- 5.1.2.4. Sample or monitor any substances or parameters at any location at reasonable times to assure compliance with this Order or as otherwise authorized by the Water Code.
- 5.1.3. The Discharger must verbally report any noncompliance that may endanger human health, safety, or the environment to the San Diego Water Board within 24 hours from the time the Discharger becomes aware of the circumstances. The Discharger must also provide the San Diego Water Board with a written report; within 5 days of the time the Discharger becomes aware of any noncompliance. The written report must contain: (1) a description of the noncompliance and its cause; (2) the period of noncompliance, including exact dates and times; (3) the anticipated time expected to continue normal operations, if the noncompliance has not already been corrected; and (4) the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board Executive Officer may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
 - 5.1.3.1. Pursuant to section 5411.5 of the Health and Safety Code, any sewage overflow or spill that results in a discharge to a water of the state, or that may result in a discharge to a water of the state must be immediately reported to the California Office of Emergency Services (OES) and the County of San Diego Department of Environmental Health and Quality (DEHQ). The Discharger must also comply with any reporting or notification requirements contained in State Water Board Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*; and San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.
 - 5.1.3.2. The Discharger must report the following occurrence(s) to the San Diego Water Board within 24 hours:
 - 5.1.3.2.1. Any intentional or unintentional bypass of any portion of the ECWRF,
 - 5.1.3.2.2. Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge, or any other circumstances,
 - 5.1.3.2.3. Any treatment plant upset resulting in an exceedance of the discharge specifications and effluent limitations of this Order,
 - 5.1.3.2.4. Failure of the ECWRF disinfection system.
 - 5.1.3.3. The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the Order that has a reasonable likelihood of adversely affecting human health or the environment.

- 5.1.4. If the Discharger, without regard to intent or negligence, causes or permits an unauthorized discharge of 50,000 gallons or more of disinfected tertiary recycled water, or 1,000 gallons or more of recycled water that is treated at a level less than disinfected tertiary recycled water, to waters of the State, the Discharger must immediately notify the San Diego Water Board in accordance with reporting requirements in Standard Provision 5.1.3. The Discharger must notify the San Diego Water Board as soon as (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures.
- 5.1.5. Upon reduction, loss, or failure of the ECWRF the Discharger must, to the extent necessary to maintain compliance with this Order, control production and/or control all discharges, until the ECWRF is restored, or until an alternative method of treatment is provided. This provision applies, for example, when the primary source of power to the ECWRF has failed or is reduced and backup power sources are insufficient.
- 5.1.6. Any person who, without regard to intent or negligence, causes or permits any hazardous substance to be discharged in or on any waters of the State, must immediately notify DEHQ and OES of the discharge. The Discharger must notify DEHQ and OES as soon as (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, in accordance with Health and Safety Code section 5411.5, and the spill reporting provision of the *Hazardous Materials Incident Contingency Plan* adopted pursuant to title 2, Government Code, division 1, chapter 7, article 3.7 (commencing with section 8574.17).⁴ This provision does not require reporting of any discharge that is less than a reportable quantity as provided for under Water Code section 13271, subdivisions (f) and (g), (see CCR, title 23 sections 2250-2251), unless the Discharger is in violation of a prohibition in the Basin Plan.
- 5.1.7. Except for a discharge which is in compliance with this Order, any person who, without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where the oil or petroleum product is or probably will be discharged in or on any waters of the State must immediately notify OES of the discharge. The Discharger must notify OES as soon as (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code title 2, division 1, chapter 7, article 3.7, commencing with section 8574.1. The Discharger is not required to report

⁴ Referenced material can be found at the following webpage:
<https://www.caloes.ca.gov/wp-content/uploads/Fire-Rescue/Documents/HazMat-Incident-Contingency-Plan-HMICP.pdf>

any discharge that is less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.

- 5.1.8. The Discharger shall maintain a hard copy of this Order at the ECWRF and at the ECAWP Facility or maintain an electronic copy of this Order which can be accessed online at the ECWRF and at the ECAWP Facility. This Order shall be available at all times for site personnel, San Diego Water Board, and State Water Resources Control Board (State Water Board), or their authorized representative.
- 5.1.9. The ECWRF shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to CCR title 23, division 3, chapter 26. The ECWRF shall be staffed with enough qualified personnel to operate the wastewater facilities effectively and in a manner that consistently achieves the required level of treatment.
- 5.1.10. The filing of a request by the Discharger for the modification or rescission of this Order, or notification by the Discharger of planned changes or anticipated noncompliance does not stay any condition of this Order.
- 5.1.11. At least 120 days prior to any proposed changes to the ECWRF, the Discharger must submit a new or amended ROWD to the San Diego Water Board for review and response. The ROWD must be stamped and signed by a licensed professional. The following are examples of changes that require submittal of a new or amended ROWD:
 - 5.1.11.1. Addition of a major industrial waste discharge to a discharge of domestic sewage, or the addition of a new process or product by an industrial ECWRF resulting in a change in the character of the wastes.
 - 5.1.11.2. Significant change in the treatment or discharge method (e.g. change in the method of treatment which would significantly alter the nature of the waste).
 - 5.1.11.3. Change in the discharge area from that described in the findings of this Order.
 - 5.1.11.4. Increase in discharge flowrate beyond that specified in this Order.
 - 5.1.11.5. Addition of monitoring, injection, and/or production wells not described in this Order.
 - 5.1.11.6. Other circumstances that result in a material change in character, amount, or location of the waste discharge.
 - 5.1.11.7. Any planned change in the ECWRF or activity which may result in noncompliance with this Order.
- 5.1.12. This Order is not transferable to any person except after notice to the San Diego Water Board. The notice must be in writing and received by the San Diego Water Board at least 120 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the existing and the new discharger. This

agreement must include an acknowledgement that the existing Discharger is liable for violations occurring before the transfer date and that the new discharger is liable from the transfer date and thereafter. The San Diego Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary.

5.1.13. Where the Discharger becomes aware that it failed to submit any relevant facts in a ROWD or submitted incorrect information in a ROWD or in any report to the San Diego Water Board or DDW, the Discharger must promptly submit such facts or information.

5.1.14. The Discharger must sign and certify all applications, reports, or information submitted to the San Diego Water Board as follows:

5.1.14.1. An ROWD must be signed as follows:

5.1.14.1.1. For a municipality, State, federal or other public agency, by either a public executive officer or ranking elected official, or

5.1.14.1.2. By a licensed professional performing engineering or geological judgments. The lead professional must sign and affix their license stamp to the report, plan, or document by direction of the person designated in section 5.1.14.1.1. of this Order, only if:

5.1.14.1.2.1. The authorization is made in writing by a person described in section 5.1.14.1.1 of this Order.

5.1.14.1.2.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated ECWRF or activity.

5.1.14.2. All other reports required by this Order and other information required by the San Diego Water Board must be signed by a person designated in section 5.1.14.1. of this Order or a duly authorized representative of that person. An individual is a duly authorized representative only if all the following are true:

5.1.14.2.1. The authorization is made in writing by a person described in section 5.1.14.1.1. of this Order.

5.1.14.2.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated ECWRF or activity.

5.1.14.2.3. The written authorization is submitted to the San Diego Water Board.

5.1.14.3. Any person signing a document under this section must make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment."

- 5.1.15. This Order may be reopened for modification, or revocation and reissuance, at any time for reasons including, but not limited to:
- 5.1.15.1. Violation of any terms or conditions of this Order,
 - 5.1.15.2. Obtaining this Order by misrepresentation or failing to disclose fully all relevant facts,
 - 5.1.15.3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge, and
 - 5.1.15.4. The reduction or cessation of the discharge for any reason at any time. The Discharger must provide written notification of the change in action to the San Diego Water Board and DDW.
- 5.1.16. This Order does not convey property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, State or local laws, nor create a vested right for the Discharger to continue the waste discharge.

5.2. Monitoring and Reporting Program (MRP) Provisions

- 5.2.1. The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E.
- 5.2.2. The Discharger shall certify and sign reports in accordance with section 5.1.14.2. of this Order.

5.3. Special Provisions

- 5.3.1. All waste treatment, containment, and disposal facilities must be protected against a 100-year storm event as defined by the San Diego County Flood Control District (FCD).
- 5.3.2. All waste treatment, containment, and disposal facilities must be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24-hour storm event as defined by the FCD.

6. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section 4.1. of this Order will be determined as specified below:

6.1. Compliance with Average Monthly Effluent Limitations (AMELs)

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily

discharge) is taken, no compliance determination can be made for that calendar month

6.2. Compliance with Average Weekly Effluent Limitations (AWELs)

If the average of daily discharges over a calendar week (Sunday through Saturday) exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in seven days of noncompliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

6.3. Compliance with Average Annual Effluent Limitations (AAELs)

The annual average shall consist of an average of all monitoring results for a given parameter for the calendar year (January through December). If the annual average of daily discharges over any 365-day period exceeds the annual average effluent limitation for a given parameter, an alleged violation will be flagged, and the Discharger will be considered out of compliance for each day of that 365-day period for that parameter. If only a single sample is taken during a given 365-day period and the analytical result for that sample exceeds the annual average, the Discharger will be considered out of compliance for the 365-day period. For any 365-day period during which no sample is taken, no compliance determination can be made for the annual average limitation.

6.4. Compliance with Single-Constituent Effluent Limitations

The Discharger shall be deemed out of compliance with an effluent limitation or discharge specification if the concentration of the constituent in the monitoring sample is greater than the effluent limitation or discharge specification and greater than or equal to the minimum level.

6.5. Multiple Sample Data Reduction

When determining compliance with an AMEL or average annual effluent limitations and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of Detected, but Not Quantified (DNQ) or Not Detected (ND). In those cases, the Discharger shall compute the median (middle) value in place of the arithmetic mean in accordance with the following procedure:

- 6.5.1. The data set shall be ranked from lowest to highest, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- 6.5.2. The median of the data set shall be determined. If the data set has an odd number of values, then the median is the middle value. If the data set has an

even number of values, then the median is the average of the two values around the middle unless one or both values are ND or DNQ, in which case the median value shall be the lower of the two values where DNQ is lower than a value and ND is lower than DNQ.

ATTACHMENT A – ABBREVIATIONS AND DEFINITIONS

Part 1. – Abbreviations

For the abbreviations with an asterisk (*), see Part 2 of Attachment A (Glossary of Common Terms) for further definition.

Abbreviation	Definition
40 CFR	Title 40 of the Code of Federal Regulations
AAEL*	Average Annual Effluent Limitation
AMEL*	Average Monthly Effluent Limitation
AWEL*	Average Weekly Effluent Limitation
AWP	Advanced Water Purification
Basin Plan	<i>Water Quality Control Plan for the San Diego Basin</i>
BOD ₅	Biochemical Oxygen Demand (5-Day @ 20°C)
°C	Degrees Celsius
CCB	Chlorine Contact Basin
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CFU	Colony Forming Units
CIWQS	California Integrated Water Quality System
CO ₂	Carbon Dioxide
CT	Product of total chlorine residual and modal contact time
DDW	State Water Board, Division of Drinking Water
Discharger	East County Advanced Water Purification Joint Powers Authority
DNQ*	Detected, But Not Quantified
ECWRF	East County Water Recycling Facility
ECAWP	East County Advanced Water Purification
ELAP	Environmental Laboratory Accreditation Program
°F	Degrees Fahrenheit
FCD	Flood Control District
GPM/SF	Gallons per Minute per Square Foot
HA	Hydrologic Area
HSA	Hydrologic Subarea
IND	Industrial Service Supply
JPA	Joint Powers Authority
MDEL*	Maximum Daily Effluent Limitation
MDL*	Method Detection Limit
mg/L	Milligram per Liter
MGD	Million Gallons per Day
ML*	Minimum Level
MRP	Monitoring and Reporting Program
ND*	Not Detected
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
POTWs	Publicly-Owned Treatment Works

Abbreviation	Definition
QA	Quality Assurance
QC	Quality Control
Regional General Order	Order No. R9-2007-0005, <i>Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region</i>
ROWD	Report of Waste Discharge
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
SIC	Standard Industrial Classification
SMR	Self-Monitoring Report
SOPs	Standard Operating Procedures
SSO*	Sanitary Sewer Overflow
State Water Board	State Water Resources Control Board
Statewide General Order	State Water Board Order WQ 2022-0103-DWQ, <i>Statewide General Waste Discharge Requirements General Order for Sanitary Sewer Systems</i>
TSS	Total Suspended Solids
USEPA	United States Environmental Protection Agency
Water Code	California Water Code
WDRs	Waste Discharge Requirements

*See Part 2 of Attachment A (Definitions) for further definition.

Arithmetic Mean (μ)

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean } (\mu) = \frac{\sum x}{n}$$

where: $\sum x$ is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Annual Effluent Limitation (AAEL)

The highest allowable average of daily discharges over a calendar year, calculated as the sum of all daily discharges measured during a calendar year divided by the number of daily discharges measured during that year.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Composite Sample

A sample composed of two or more discrete samples of at least 100 milliliters collected at periodic intervals during the operating hours of a facility over a 24-hour period. The aggregate sample will reflect the average water quality covering the compositing or sample period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the reporting limit (RL), but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated chemical concentrations.

Disinfected Tertiary Recycled Water

Disinfected tertiary recycled water is defined in CCR title 22, section 60301.230 as a filtered and subsequently disinfected wastewater that meets the following criteria:

- a. The filtered wastewater has been disinfected by either:
 1. A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or
 2. A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.
- b. The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30-day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

Grab Sample

An individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes. The sample is taken from a waste stream on a one-time basis without consideration of the flow rate of the waste stream and without consideration of time of day.

Inland Surface Waters

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order)

If the number of measurements (n) is odd, then:

$$\text{Median} = \frac{X(n+1)}{2}$$

If n is even, then:

$$\text{Median} = \frac{X\left(\frac{n}{2}\right) + X\left(\frac{n}{2} + 1\right)}{2}$$

(i.e., the midpoint between the $(n/2)$ and $((n/2)+1)$)).

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 Code of Federal Regulations (CFR), part 136, Attachment B.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

Percent Sodium

Percent sodium, often referred to as the sodium percentage, is a measure of the proportion of sodium ions (Na^+) relative to the total cations (positively charged ions) present in a water sample.

The formula to calculate percent sodium is:

$$\text{Percent Sodium} = \left(\frac{\text{Na}^+}{\text{Ca}^{2+} + \text{Mg}^{2+} + \text{K}^+ + \text{Na}^+} \right) \times 100$$

Where:

- Na^+ = concentration of sodium ions
- Ca^{2+} = concentration of calcium ions
- Mg^{2+} = concentration of magnesium ions
- K^+ = concentration of potassium ions

Sodium Adsorption Ratio (SAR) and Adjusted Sodium Adsorption Ratio (adj. SAR)

The sodium adsorption ratio (SAR) and adjusted sodium adsorption ratios (Adj. SAR) are measures of the potential hazard in soils due to sodium. SAR and Adj. SAR are like percent sodium in that their calculated values provide an indication of a soil's potential for permeability and potential aeration problems. However, by taking into consideration the soil's solidity and the exchange phases between Ca, Na and Mg, the SAR and Adj. SAR predict potential sodium build up in soils. The Adj. SAR calculation further considers the effects of carbonate and bicarbonate ion concentrations of a soil. Adj. SAR is the most common method for determining sodium hazard in irrigation water at the present time. Refer to Calculation Of Adjusted Sodium Adsorption Ratio (Attachment D) for more information on how to calculate Adj. SAR.

Sodium Hazard

Sodium hazard is the potential negative effects of high sodium levels in reclaimed or reused water on soil and plant health. When water with high sodium content is used for irrigation, it can lead to soil structure degradation, reduced soil permeability, and poor water infiltration. This can ultimately affect plant growth and crop yields. The sodium hazard is often assessed using the Sodium Adsorption Ratio (SAR), which measures the relative concentration of sodium ions to calcium and magnesium ions in the water. High SAR values indicate a greater risk of soil and plant damage.

Standard Deviation (σ)

Standard Deviation is a measure of variability that is calculated as follows:

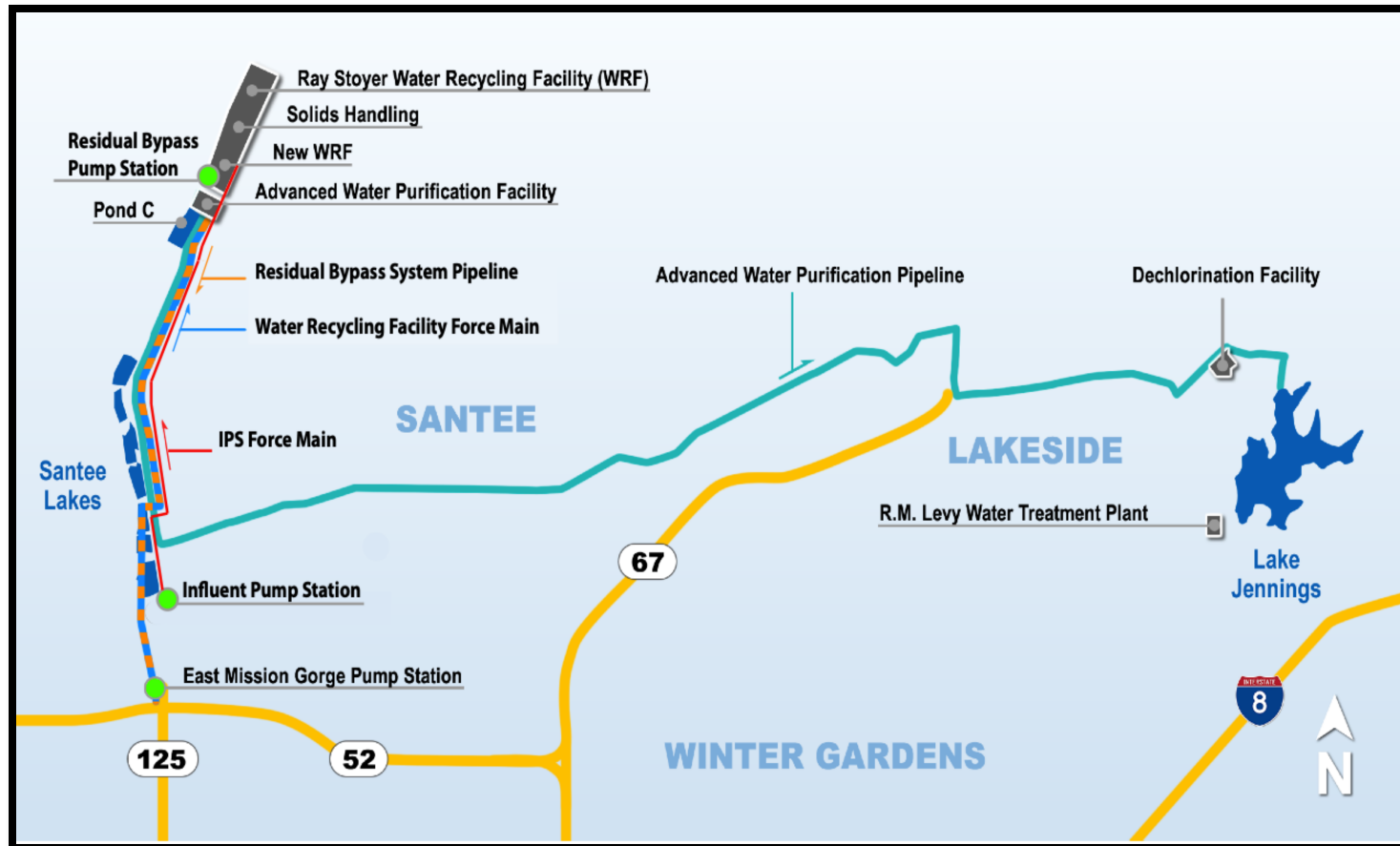
$$\text{Standard Deviation } (\sigma) = \frac{\sum (X - \mu)^2}{(n-1)^{0.5}}$$

Where:

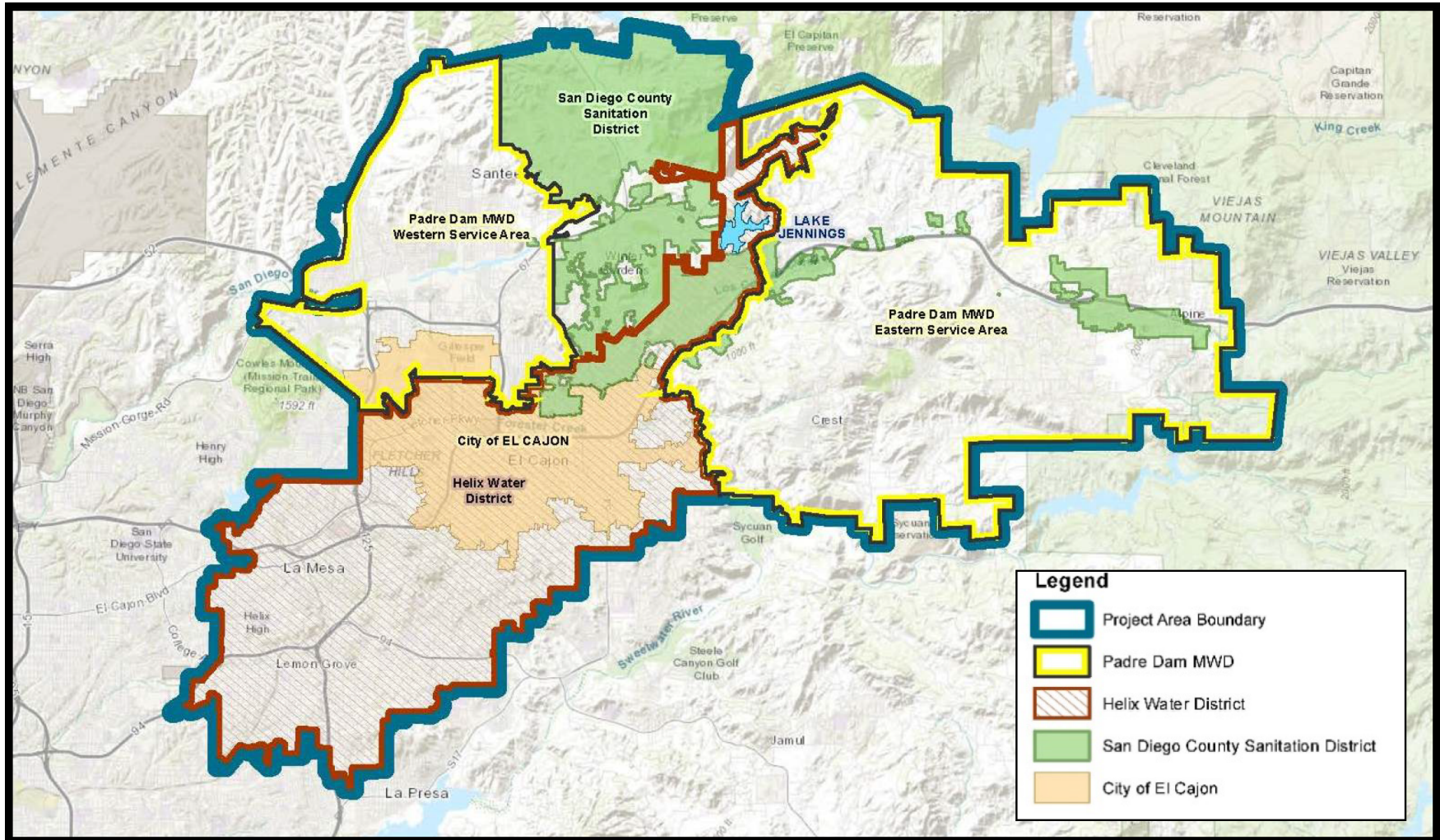
- x is the observed value
- μ is the arithmetic mean of the observed values
- n is the number of samples.

ATTACHMENT B – MAPS

Map 1 – East County Advanced Water Purification Project Map and Schematic

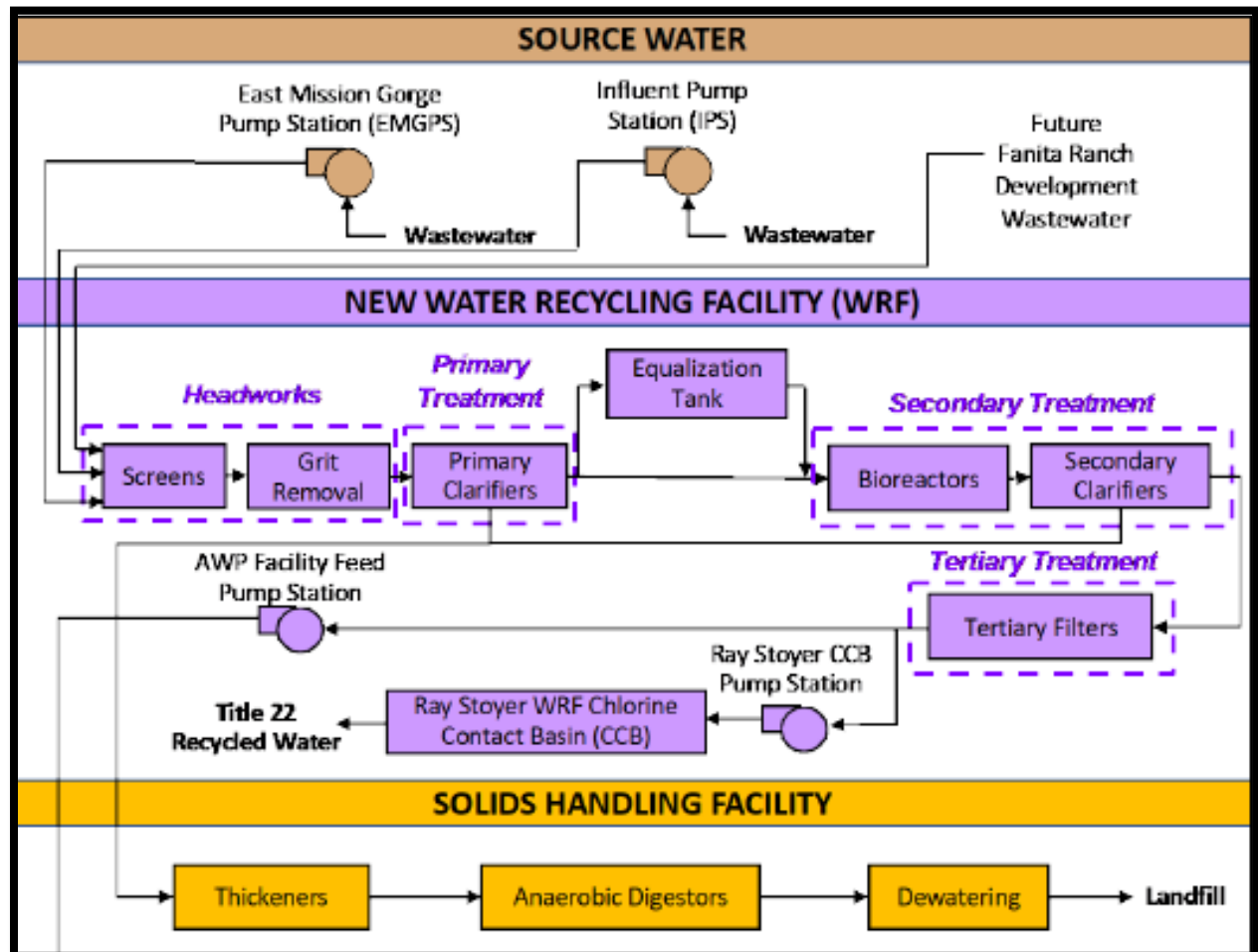


Map 2 – East County Advanced Water Purification Agency Service Areas

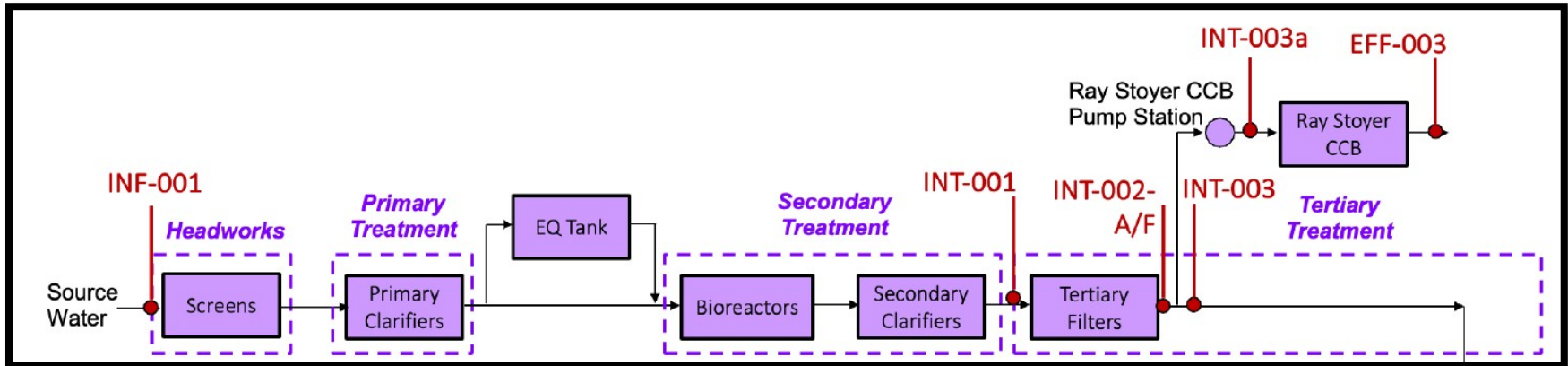


ATTACHMENT C – FLOW SCHEMATICS

East County Water Recycling Facility Process Flow Schematic



East County Water Recycling Facility Process Flow Diagram with Monitoring Locations Identified



Process flow schematic with monitoring locations is from East County Advanced Water Purification Monitoring and Reporting Plan dated October 2023. An updated flow schematic with monitoring locations was provided by the Discharger via email on February 18, 2025.

ATTACHMENT D – CALCULATION OF ADJUSTED SODIUM ADSORPTION RATIO

The adjusted sodium adsorption ratio (SAR) for the soil surface is calculated from the following equation:

$$\text{Adjusted SAR} = \frac{\text{Na}}{\sqrt{\frac{\text{Ca}_x + \text{Mg}}{2}}}$$

Where Na and Mg in milliequivalents per liter (meq/L) are taken from the water quality analysis and Ca_x is obtained from the table below. To use the table, the applied water electrical conductivity (EC_w) in millimhos per centimeter (mmho/cm) or in deciSiemens per meter (dS/m) and the bicarbonate to calcium ratio (HCO_3/Ca) using milliequivalents per liter must be known from the water quality analysis.

Ca_x values for near surface soil-water at various applied water salinities and HCO_3/Ca ratios assuming equilibrium conditions for soil-water, no precipitation of magnesium, and a partial pressure of CO_2 (PCO_2) of 0.0007 atmospheres.

Table G. Sodium Adsorption Ratio Reference Table

Ratio of HCO_3/Ca	Salinity of applied water (EC _w) (mmho/cm or dS/m)											
	0.1	0.2	0.3	0.5	0.7	1.0	1.5	2.0	3.0	4.0	6.0	8.0
0.05	13.20	13.61	13.92	14.40	14.79	15.26	15.91	16.43	17.28	17.97	19.07	19.94
0.10	8.31	8.57	8.77	9.07	9.31	9.62	10.02	10.35	10.89	11.32	12.01	12.56
0.15	6.34	6.54	6.69	6.92	7.11	7.34	7.65	7.90	8.31	8.64	9.17	9.58
0.20	5.24	5.40	5.52	5.71	5.87	6.06	6.31	6.52	6.86	7.13	7.57	7.91
0.25	4.51	4.65	4.76	4.92	5.06	5.22	5.44	5.62	5.91	6.15	6.52	6.82
0.30	4.00	4.12	4.21	4.36	4.48	4.62	4.82	4.98	5.24	5.44	5.77	6.04
0.35	3.61	3.72	3.80	3.94	4.04	4.17	4.35	4.49	4.72	4.91	5.21	5.45
0.40	3.30	3.40	3.48	3.60	3.70	3.82	3.98	4.11	4.32	4.49	4.77	4.98
0.45	3.05	3.14	3.22	3.33	3.42	3.53	3.68	3.80	4.00	4.15	4.41	4.61
0.50	2.84	2.93	3.00	3.10	3.19	3.29	3.43	3.54	3.72	3.87	4.11	4.30
0.75	2.17	2.24	2.29	2.37	2.43	2.51	2.62	2.70	2.84	2.95	3.14	3.28
1.00	1.79	1.85	1.89	1.96	2.01	2.09	2.16	2.23	2.35	2.44	2.59	2.71

Ratio of HCO ₃ /Ca	Salinity of applied water (ECw) (mmho/cm or dS/m)											
	0.1	0.2	0.3	0.5	0.7	1.0	1.5	2.0	3.0	4.0	6.0	8.0
1.25	1.54	1.59	1.62	1.68	1.73	1.78	1.86	1.92	2.02	2.10	2.23	2.33
1.50	1.37	1.41	1.44	1.49	1.53	1.58	1.65	1.70	1.79	1.86	1.97	2.07
1.75	1.23	1.27	1.30	1.35	1.38	1.43	1.49	1.54	1.62	1.68	1.78	1.86
2.00	1.13	1.16	1.19	1.23	1.26	1.31	1.36	1.40	1.48	1.54	1.63	1.70
2.25	1.04	1.08	1.10	1.14	1.17	1.21	1.26	1.30	1.37	1.42	1.51	1.58
2.50	0.97	1.00	1.02	1.06	1.09	1.12	1.17	1.21	1.27	1.32	1.40	1.47
3.00	0.85	0.89	0.91	0.94	0.96	1.00	1.04	1.07	1.13	1.17	1.24	1.30
3.50	0.78	0.80	0.82	0.85	0.87	0.90	0.94	0.97	1.02	1.06	1.12	1.17
4.00	0.71	0.73	0.75	0.78	0.80	0.82	0.86	0.88	0.93	0.97	1.03	1.07
4.50	0.66	0.68	0.69	0.72	0.74	0.76	0.79	0.82	0.86	0.90	0.95	0.99
5.00	0.61	0.63	0.65	0.67	0.69	0.71	0.74	0.76	0.80	0.83	0.88	0.93
7.00	0.49	0.50	0.52	0.53	0.55	0.57	0.59	0.61	0.64	0.67	0.71	0.74
10.0	0.39	0.40	0.41	0.42	0.43	0.45	0.47	0.48	0.51	0.53	0.56	0.58
20.0	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.35	0.37

Table Notes:

1. Table 3-2 (Calculation of Adjusted $R_{Na}^{a,b,c}$) from *Irrigation with Reclaimed Municipal Wastewater, A Guidance Manual*
2. The adjusted SAR is a modification of the sodium adsorption ratio SAR procedure. Calcium concentrations in the soil-water are not constant. The calcium concentration at equilibrium depends on both the concentration in the applied water and the dissolution from soil-calcium or precipitation from soil-water. The effect on sodium adsorption by soil-water salinity and the concentration of calcium, bicarbonate, and dissolved carbon dioxide.
3. The adjusted sodium adsorption ratio includes the effects of the factors noted in the above footnotes and more correctly predicts the sodium hazard and potential infiltration problem caused by water quality.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

CONTENTS

1. GENERAL MONITORING PROVISIONS	1
2. MONITORING LOCATIONS	3
3. CORE MONITORING REQUIREMENTS	4
3.1. Internal Monitoring Requirements	4
3.2. Effluent Monitoring Requirements	5
4. REPORTING REQUIREMENTS	6
4.1. General Monitoring and Reporting Requirements	6
4.2. Self-Monitoring Reports (SMRs)	6
4.3. Volumetric Reporting	8
4.4 Nonrecurring Reports Required to be Submitted	8

TABLES

Table E-1. Monitoring Station Locations	3
Table E-2. Internal Monitoring Requirements	4
Table E-3. Effluent Monitoring at Monitoring Location EFF-003	5
Table E-4. Monitoring Periods and Reporting Schedule	7
Table E-5. Required Contents in SMRs	7
Table E-6. Required Other Plans and Reports	8

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

California Water Code (Water Code) section 13267 authorizes the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. Pursuant to this authority, this monitoring and reporting program (MRP) establishes conditions for the East County Advanced Water Purification Joint Powers Authority (Discharger) to conduct routine or episodic self-monitoring of the discharges regulated under Order No. R9-2025-0060 *Waste Discharge Requirements for the East County Advanced Water Purification Joint Powers Authority, East County Water Recycling Facility, San Diego County* (Order) at specified effluent and receiving water monitoring locations. This MRP requires the Discharger to report the results to the San Diego Water Board with information necessary to evaluate discharge characteristics and compliance status with the Order. While the San Diego Water Board is not required to consider costs as part of the development or adoption of this MRP, the Board recognizes that monitoring and reporting costs can be a significant burden to the Discharger. The San Diego Water Board estimates that the burden and cost of compliance with this MRP may range from \$300,000 to \$400,000 per year. The San Diego Water Board assessed this MRP to reduce and eliminate unnecessary or overlapping monitoring and reporting requirements where appropriate. This MRP is reasonable given the needs and benefits of the reports.

The purpose of this Monitoring and Reporting Program (MRP, Attachment E) is to determine and ensure compliance with effluent limitations and other requirements established in the Order, assess treatment efficiency and characterize effluents. The MRP also specifies requirements concerning the proper use, maintenance, and installation of monitoring equipment and methods, and the monitoring type intervals and frequency necessary to yield data that is representative of the activities and discharges regulated under the Order.

1. GENERAL MONITORING PROVISIONS

- 1.1. The Discharger must ensure samples and measurements collected as required by the Order and the MRP are representative of the volume and nature of the monitored discharge. The Discharger must collect all samples at the monitoring points specified in the MRP and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. The Discharger must not change monitoring locations prior to notifying and receiving approval from the San Diego Water Board.
- 1.2. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The flow measurement devices shall be installed, calibrated at least once per year (i.e., no more than 12 months between calibrations) or more frequently, and maintained to ensure that the accuracy of

the measurement is consistent with the accepted capability of that type of device. The flow measurement devices selected shall be capable of measuring flows with a maximum deviation of less than ± 5 percent from true discharge rates throughout the range of expected discharge volumes.

- 1.3. The Discharger must conduct monitoring for any contaminants and parameters in accordance with the United States Environmental Protection Agency (USEPA) test procedures approved in title 40 Code of Federal Regulations (40 CFR) part 136. The Discharger shall not use test procedures listed in 40 CFR part 136 unless the test procedure has been reviewed and approved by the San Diego Water Board and the State Water Resources Control Board Division of Drinking Water (DDW).
- 1.4. The Discharger must ensure that the laboratory performing analyses required by this MRP are accredited by the State Water Resources Control Board Division of Drinking Water, Environmental Laboratory Accreditation Program (ELAP) for the analytical method used. The Discharger must use a laboratory capable of producing and providing quality assurance and quality control (QA/QC) records for San Diego Water Board review.⁵ Data generated using field tests is exempt from this ELAP requirement pursuant to Water Code section 13176. The use of non-ELAP accredited lab methods requires review and approval by the San Diego Water Board.
- 1.5. The Discharger shall ensure that analytical procedures used to evaluate compliance with effluent limitations established in the Order use minimum levels (ML) no greater than the applicable effluent limitations and are consistent with the requirements of 40 CFR part 136 and authorized by the San Diego Water Board. If no authorized ML value is below the effluent limitation, then the method must achieve an ML no greater than the lowest ML value provided in 40 CFR part 136.
- 1.6. If the Discharger monitors any pollutants more frequently than required by this MRP, using approved test procedures, or as specified in this MRP, the results of this monitoring must be included in the Discharger's monitoring report. The Discharger must also report the increased frequency of monitoring.
- 1.7. The Discharger must retain records of all monitoring information, all calibration and maintenance records, all original strip chart and/or electronic recordings for continuous monitoring instrumentation, and copies of all reports required by this MRP. The Discharger must maintain records for a minimum of five years from the date of the sample, measurement, report, or application. The San Diego Water Board may extend this period during any unresolved litigation regarding this discharge. The Discharger must ensure that monitoring records include the following:

⁵ Additional information on ELAP can be accessed at:
https://www.waterboards.ca.gov/drinking_water/certlic/labs/index.shtml

- 1.7.1. The date, exact place, and time of sampling or measurements,
- 1.7.2. The individual(s) who performed the sampling or measurements,
- 1.7.3. The date(s) analyses were performed,
- 1.7.4. The individual(s) who performed the analyses,
- 1.7.5. The analytical techniques or methods used, and
- 1.7.6. The results of such analyses.

2. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in the Order:

Table E-1. Monitoring Station Locations

Monitoring Location(s)	Monitoring Location Description ¹
INF-001	A location where all influent flow to East County Water Recycling Facility (ECWRF) is accounted for in monitoring events; upstream of any in-plant return flows, and where a representative sample of the influent can be obtained. Latitude: 32.8830° Longitude: -116.9974°
INT-001	Tertiary filter influent – A point where influent to all the tertiary filters at the ECWRF can be monitored. Latitude: 32.88097° Longitude: - 116.9992°
INT-002A INT-002B INT-002C INT-002D INT-002E INT-002F	Tertiary filter effluent - A point where effluent from each of the 6 tertiary filter units at the ECWRF can be monitored prior to the chlorine contact basin (CCB).
INT-003	Combined tertiary filter effluent. A point where the combined effluent from the tertiary filter units at the ECWRF can be monitored prior to the CCB.
<u>INT-003A</u>	<u>A point where the influent to the CCB can be monitored.</u>
EFF-003	Downstream of any in-plant return flow at the ECWRF where represented samples of effluent treated at the ECWRF can be collected, after chlorine disinfection. Latitude: 32.884808° Longitude: -116.996523°

Note for Table E-1:

1. The North latitude and West longitude information in Table E-1 are approximate for administrative purposes.

3. CORE MONITORING REQUIREMENTS

3.1. Internal Monitoring Requirements

- 3.1.1. The Discharger shall conduct internal monitoring as described in Table E-2:

Table E-2. Internal Monitoring Requirements

Parameter	Units	Monitoring Location/Station ²	Sample Type	Minimum Sampling Frequency
Flow Rate	Million gallons per day (MGD)	INT-001 INT-002A INT-002B INT-002C INT-002D INT-002E INT-002F INT-003A	Recorder/ Totalizer	Continuous
Turbidity	Nephelometric turbidity units (NTU)	INT-001 INT-002A INT-002B INT-002C INT-002D INT-002E INT-002F INT-003	Recorder ²	Continuous ³
Biochemical Oxygen Demand 5-day @ 20°C	Milligram per liter (mg/L)	INT-003	24-hour Composite ¹	1/Week
Total Suspended Solids (TSS)	mg/L	INT-003	24-hour Composite	1/Week

Notes for Table E-2:

1. See Attachment A for definitions of abbreviations and a glossary of common terms used in the Order.
2. Turbidity performance compliance must be determined using the levels of recorded turbidity taken at intervals of no more than 1.2 hours over a 24-hour period.
3. Continuous turbidity monitoring of each individual filter effluent, combined filter effluent and filter influent must be conducted following approved standard operating procedures (SOPs). Turbidity monitoring protocol to be followed in the event of turbidimeter failure and calibration maintenance shall be addressed in the SOPs.

3.2. Effluent Monitoring Requirements

3.2.1. The Discharger shall monitor the effluent at Monitoring Location EFF-003 as described in Table E-3:

Table E-3. Effluent Monitoring at Monitoring Location EFF-003

Parameter	Units	Sample Type	Minimum Sampling Frequency
Boron	mg/L	24-hour Composite	1/Quarter
Chloride	mg/L	24-hour Composite	1/Quarter
Chlorine Contact Time ²	milligram-minutes per liter	Calculation ²	Continuous
Flow Rate	Million gallons per day (MGD)	Recorder/ Totalizer	Continuous
Fluoride	mg/L	24-hour Composite	1/Quarter
Iron	mg/L	24-hour Composite	1/Quarter
Manganese	mg/L	24-hour Composite	1/Quarter
Methylene Blue Activated Substances (MBAS)	mg/L	24-hour Composite	1/Quarter
Percent Sodium ^{1,3}	%	24-hour Composite	1/Quarter
pH	standard units	Grab	1/Day
Sulfate	mg/L	24-hour Composite	1/Quarter
Total Chlorine Residual	mg/L	Meter	Continuous
Total Coliform	MPN/ 100 milliliters	Grab	1/Day
Total Dissolved Solids (TDS)	mg/L	24-hour Composite	1/Quarter
Total Nitrogen	mg/L	24-hour Composite	1/Quarter

Notes for Table E-3:

1. See Attachment A for definitions of abbreviations and a glossary of common terms used in the Order.
2. The modal contact time must be calculated using the CCB flow rate and the fourth order best-fit polynomial equation, as described in the *Chlorine Contact Basin Tracer Test - Final Report* based on the Tracer Test done in June 2022 for the Ray

Stoyer Water Recycling Facility (RSWRF). The ECWRF will utilize the existing CCB form the RSWRF.

3. The Discharger must monitor sodium, calcium, magnesium, and potassium to calculate percent sodium. The Discharger must monitor for sodium, magnesium, calcium, bicarbonate, and electrical conductivity to calculate adjusted sodium adsorption ratio, as needed.

4. REPORTING REQUIREMENTS

4.1. General Monitoring and Reporting Requirements

- 4.1.1. The Discharger shall comply with all Standard Provisions in section 5 of the Order related to monitoring, reporting, and recordkeeping.
- 4.1.2. The Discharger shall report all instances of noncompliance not reported under the Standard Provisions in section 5 of the Order at the time monitoring reports are submitted.
- 4.1.3. The Discharger shall submit an annual report that includes a compliance summary for all prohibitions, effluent limitations, and other provisions of the Order and this MRP by March 1st of each year.

4.2. Self-Monitoring Reports (SMRs)

- 4.2.1. The Discharger shall submit SMRs electronically using the State Water Resources Control Board's California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/water_issues/programs/ciwqs). The CIWQS website will provide additional information for SMR submittals in the event there will be a planned service interruption for electronic submittal.
- 4.2.2. The Discharger shall submit SMRs in accordance with the following requirements:
 - 4.2.2.1. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with effluent limitations. The Discharger shall electronically submit the data in a tabular format as an attachment.
 - 4.2.2.2. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the Order; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- 4.2.3. The Discharger shall report in the SMR the results for all monitoring specified in section 3 of this MRP. The Discharger shall use USEPA-approved test methods or other test methods specified in the Order for analysis of any samples collected. SMRs must include all new monitoring results obtained since the last SMR was submitted to the San Diego Water Board. If the Discharger monitors any pollutant more frequently than required by the Order, the results of this

monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

- 4.2.4. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-4. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	Sunday following the adoption date of the Order	All	Submit with monthly SMR
Daily	Sunday following the adoption date of the Order	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
Weekly	Sunday following the adoption date of the Order	Sunday through Saturday	Submit with monthly SMR
Monthly	First day of calendar month following the adoption date of the Order	1 st day of calendar month through last day of calendar month	The first day of the second calendar month following the month of sampling.
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) the adoption date of the Order	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	The first day of the second calendar month following the quarter of sampling.
Annually	January 1 following the adoption date of the Order	January 1 through December 31	March 1

- 4.2.5. The Discharger shall submit SMRs by the due dates and with contents specified in Table E-5:

Table E-5. Required Contents in SMRs

SMR Type	Required Contents
Monthly	- Cover letter (see section 4.2.2.2. of this MRP) - Results of monitoring for internal, influent, and effluent parameters with continuous, weekly, or monthly monitoring frequencies.
Quarterly	- Cover letter (see section 4.2.2.2. of this MRP) - Results for monitoring for effluent parameters with quarterly monitoring frequency.
Annual	- Cover letter (see section 4.2.2.2. of this MRP) - Results of all effluent monitoring parameters and a summary of compliance for the year (see section 4.1.3. of this MRP).

4.3. Volumetric Reporting

- 4.3.1. The Discharger, in coordination with Padre Dam, must submit annual volumetric data to the State Water Resources Control Board by April 30 of each year. The Discharger's volumetric reporting requirements for the ECWRF are contained in Order No. R9-2025-0003, *Waste Discharge Requirements for the East County Advanced Water Purification Joint Powers Authority East County Advanced Water Purification Project Discharges to Lake Jennings and Sycamore Creek*.

4.4 Nonrecurring Reports Required to be Submitted

- 4.4.1. The following reports are required by the Order and/or this MRP. The reports must be signed and certified as required by the Standard Provisions in section 5 of the Order.

Table E-6. Required Other Plans and Reports

Plan/Report	Reference Section	Reviewing/Approving Agency	Due Date
SOP for Granular Media Filters	Section 4.2.3. of the Order	San Diego Water Board and DDW	120 days prior to discharge of recycled water
SOP for Chlorine Contact Basins	Section 4.2.6. of the Order	San Diego Water Board and DDW	120 days prior to discharge of recycled water
Report of Waste Discharge	Section 5.1.11 of the Order	San Diego Water Board	120 days prior to major changes to the ECWRF

Plan/Report	Reference Section	Reviewing/Approving Agency	Due Date
Spill Report	Section 5.1.3. and 5.1.4. of the Order	San Diego Water Board	Notification within 24 hours of spill; Written report within 5 days of spill

ATTACHMENT F – FACT SHEET

CONTENTS

1. PERMIT INFORMATION	1
2. FACILITY DESCRIPTION.....	3
2.1. Description of Wastewater and Biosolids Treatment and Controls	3
3. APPLICABLE PLANS, POLICIES, AND REGULATIONS.....	4
3.1. Legal Authorities	4
3.2. California Environmental Quality Act (CEQA).....	4
3.3. Water Quality Control Plan	4
3.4. Domestic Water Quality	5
3.5. Antidegradation Policy	5
3.6. State Recycled Water Policy.....	5
3.7. Water Reclamation Statute.....	6
3.8. California Code of Regulations Title 22.....	6
3.9. Other Plans, Policies and Regulations	6
4. RATIONALE FOR PROHIBITIONS, EFFLUENT LIMITATIONS, AND RECYCLING SPECIFICATIONS	7
4.1. Rationale for Discharge Prohibitions.....	7
4.2. Rationale for Effluent Limitations	7
4.3. Water Recycling Specifications.....	9
5. RATIONALE FOR PROVISIONS.....	9
5.1. Standard Provisions.....	9
5.3 Special Provisions	9
6. RATIONALE FOR MONITORING AND REPORTING PROVISIONS.....	9
7. PUBLIC PARTICIPATION	11
7.1. Notification of Interested Parties	11
7.2. Written Comments	11
7.3. Public Hearing	11
7.4. Reconsideration of Waste Discharge Requirements	12
7.5. Information and Copying.....	12
7.6. Register of Interested Persons	12
7.7. Additional Information	12

TABLES

Table F-1. Facility Information.....	1
Table F-2. Basin Plan Beneficial Uses	5
Table F-3. Basin-Specific Groundwater WQOs.....	8

ATTACHMENT F – FACT SHEET

California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) staff prepared this Fact Sheet to incorporate findings that support the issuance of Order No. R9-2025-0060 *Waste Discharge Requirements for the East County Advanced Water Purification Joint Powers Authority, East County Water Recycling Facility, San Diego County* (Order). This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of the Order.

1. PERMIT INFORMATION

The following table summarizes administrative information related to the East County Water Recycling Facility (ECWRF).

Table F-1. Facility Information

WDID	9000004083
Discharger	East County Advanced Water Purification Joint Powers Authority
Name of Facility	East County Water Recycling Facility (ECWRF)
Facility Address	12001 North Fanita Parkway, Santee, CA 92071
County	San Diego
Facility Contact, Title and Phone	Robert Northcote, Plant Manager, (619) 258-4697
Authorized Person to Sign and Submit Reports	Same as Facility Contact
Mailing Address	9300 Fanita Parkway, Santee, CA 92071
Billing Address	Same as mailing address
Type of Facility	Publicly-owned Treatment Works (POTW)
Threat to Water Quality	2
Complexity	B
Pretreatment Program	Member of City of San Diego's pretreatment program
Recycling Requirements	Producer recycled water distribution and use under separate water reclamation requirements (WRRs)
Facility Permitted Flow	16 million gallons per day (MGD)
Facility Design Flow	Maximum Design Capacity: 22 MGD, Annual Average Flow: 16 MGD
Hydrologic Unit	San Diego Hydrologic Unit (HU, 907)
Hydrologic Area	Lower San Diego Hydrologic Area (HA, 907.1)

Hydrologic Subarea	Santee Hydrologic Subarea (HSA, 907.12) El Cajon HSA (907.13)
Receiving Water Type	Groundwater

- 1.1. The Discharger is a public joint powers authority established pursuant to California Government Code section 6500 et seq. which consists of the following member agencies: Padre Dam Municipal Water District (Padre Dam), the City of El Cajon, and the County of San Diego. The Discharger is the owner of the East County Advanced Water Purification (ECAWP) project which consists of the ECWRF, a solids handling facility, the ECAWP Facility, a dechlorination facility, and potable reuse conveyance facilities, which are collectively referred to as the Facilities. Attachment B provides a map of the Facilities. Attachment C provides a flow schematic of the Facilities.

For the purposes of the Order, references to the “discharger” or “permittee” in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- 1.2. The new ECWRF will replace the Padre Dam Ray Stoyer Water Recycling Facility (Ray Stoyer WRF). The San Diego Water Board regulated the Ray Stoyer WRF under the following Orders:
- Order No. 97-49, *Waste Discharge and Water Recycling Requirements for the Production and Purveyance of Recycled Water for Padre Dam Municipal Water District, San Diego County* (Order No. 97-49); and
 - Order No. R9-2022-0003 NPDES No. CA0107492, *Waste Discharge Requirements for the Padre Dam Municipal Water District, Ray Stoyer Water Recycling Facility, Discharges to Sycamore Creek, San Diego County* (Order No. R9-2022-0003).

The Order establishes requirements for the treatment of domestic wastewater at the ECWRF and replaces and supersedes Order No. 97-49. The ECWRF will serve as source water for the ECAWP Facility. Most of the advanced treated recycled water from the ECAWP Facility will be discharged to Lake Jennings, with a smaller volume discharged to Santee Lakes and Sycamore Creek. Lake Jennings and Sycamore Creek are both waters of the United States. Discharges of advanced treated recycled water from the ECAWP Facility to Lake Jennings and Sycamore Creek are regulated under Order No. R9-2025-0003 NPDES No. CA 9000001, *Waste Discharge Requirements for the East County Advanced Water Purification Joint Powers Authority East County Advanced Water Purification Project Discharge to Lake Jennings and Sycamore Creek* (Order No. R9-2025-0003).

- 1.3. The Discharger filed a report of waste discharge (ROWD) and applied for issuance of waste discharge requirements (WDRs) on June 7, 2024.
- 1.4. The Order contains a delayed effective date due to construction activities and related non-discharge until construction is completed and the ECWRF is

operational. The Discharger anticipates completing construction of the ECWRF Facility in late summer of 2026 or early fall of 2026 and plans to initiate the production of non-potable recycled water, shortly thereafter. Therefore, the effective date of the Order has been delayed until June 1, 2026.

2. FACILITY DESCRIPTION

2.1. Description of Wastewater and Biosolids Treatment and Controls

The ECAWP Project is a potable reuse project that will produce advanced treated water to augment Lake Jennings, which serves as a water supply source for the Helix Water District's (Helix WD) R.M. Levy Drinking Water Treatment Plant. The ECAWP Project will also provide a new water supply to maintain Santee Lakes. Currently, wastewater from the eastern portion of San Diego County is discharged to the City of San Diego's Metropolitan Sewerage System (Metro System). A portion of the East County wastewater flow was diverted by Padre Dam for treatment at the 2.0 MGD Ray Stoyer WRF. Padre Dam used tertiary treated recycled water from the Ray Stoyer WRF to supply water to Santee Lakes, which is a regional recreational area and park owned and operated by Padre Dam. Padre Dam also supplied tertiary treated recycled water from the Ray Stoyer WRF for reuse via a non-potable (purple pipe) conveyance system. The discharge of tertiary treated recycled water from the Ray Stoyer WRF to Santee Lakes and Sycamore Creek was regulated under Order No. R9-2022-0003. Order No. R9-2022-0003 is superseded and replaced by Order No. R9-2025-0003.

As part of the ECAWP Project, wastewater flows from Padre Dam, the City of El Cajon, and the San Diego County Sanitation District are diverted to the 16 MGD ECWRF, which replaced the Ray Stoyer WRF. Most of the flow from the ECWRF is directed to the ECAWP Facility for advanced treatment. However, a small portion of the effluent from the ECWRF is chlorinated and purveyed by the ECAWP JPA to Padre Dam for distribution to recycled water users, via Padre Dam's non-potable conveyance system. Treatment of domestic wastewater at the ECWRF is regulated under the Order, while distribution of recycled water by Padre Dam for non-potable purposes is regulated under Order WQ 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use*.

2.1.1. East County Water Recycling Facility

The new 16 MGD ECWRF replaces and is located south of the former Ray Stoyer WRF. Treatment processes at the ECWRF include:

- Screening and grit removal units at a headworks facility;
- Primary clarifiers with ferric chloride for chemical phosphorus removal;
- An equalization tank;
- A 4-Stage Bardenpho process for biological nutrient removal;
- Secondary clarifiers with ferric chloride for chemical phosphorus removal;

- Granular media filters (GMFs);
- Chlorine contact basins (the former Ray Stoyer WRF chlorine contact basins will be used), and;
- An odor control facility.

2.1.2. **Solids Handling Facility**

Sludge from the ECWRF primary and secondary clarifiers is treated at a solids handling facility. The solids handling facility produces Class B biosolids, which may be: (1) beneficially used outside California or (2) appropriately discharged to permitted landfill. Treatment processes at the solids handling facility include rotary drum sludge thickening, anaerobic digestion, digested sludge storage, centrifuge dewatering, cake storage and loadout facilities, and biogas handling.

Sludge is thickened before being fed to the anaerobic digesters. The digested sludge is then dewatered and the centrate from dewatering gravity flows to a residuals bypass pump station. Thickened supernatant is returned to the ECWRF for treatment, while centrate is discharged to the Metro System via a residuals bypass pipeline and East County Residual Line.

3. **APPLICABLE PLANS, POLICIES, AND REGULATIONS**

The requirements contained in the Order are based on the requirements and authorities described in this section.

3.1. **Legal Authorities**

The Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code, commencing with section 13260.

3.2. **California Environmental Quality Act (CEQA)**

Padre Dam adopted a Mitigated Negative Declaration for the ECAWP Project on December 5, 2018. On February 20, 2020, the ECAWP JPA considered the Mitigated Negative Declaration adopted by Padre Dam for the ECAWP Project. On July 21, 2022, the ECAWP JPA filed a Notice of Determination for an Amendment to the Mitigated Negative Declaration for the ECAWP Project. The Mitigated Negative Declaration and Amendment to the Mitigated Negative Declaration both concluded that there were no significant impacts to hydrology and water quality. The San Diego Water Board, as a responsible agency, is responsible for reviewing the Mitigated Negative Declaration. The San Diego Water Board independently reviewed the Mitigated Negative Declaration and Amendment to the Mitigated Negative Declaration for adequacy and concluded it was adequate.

3.3. **Water Quality Control Plan**

The San Diego Water Board adopted the *Water Quality Control Plan for the San Diego Basin* (Basin Plan) on September 8, 1994, that designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve those objectives. Subsequent revisions to the Basin Plan have also been adopted by the San Diego Water Board and approved

by the State Water Resources Control Board (State Water Board). Beneficial uses listed in the Basin Plan which apply to groundwater within the Santee and El Cajon HSAs are as follows:

Table F-2. Basin Plan Beneficial Uses

Hydrologic Unit	Hydrologic Area	Hydrologic Subarea	Beneficial Use(s)
San Diego HU (907)	Lower San Diego HA (907.1)	Santee HSA (907.12)	<u>Existing:</u> • Municipal and Domestic Supply (MUN); • Agricultural Supply (AGR); • Industrial Service Supply (IND); and • Industrial Process Supply (PROC).
		El Cajon HSA (907.13)	<u>Existing:</u> • MUN; and • AGR. <u>Potential:</u> • IND; and • PROC.

3.4. Domestic Water Quality

In compliance with Water Code section 106.3, 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 Order promotes that policy by requiring discharges to protect groundwater basins with designated in the Basin Plan with the MUN beneficial use.

3.5. Antidegradation Policy

The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Resolution 68-16). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The permitted discharge must be consistent with Resolution 68-16.

3.6. State Recycled Water Policy

The State Water Board adopted the *Policy for Water Quality Control for Recycled Water* (Recycled Water Policy) on February 3, 2009, and amended it on January 22, 2013, and December 11, 2018. The purpose of the Recycled Water Policy is to increase the use of recycled water from municipal wastewater sources in a manner that implements state and federal water quality laws. The Recycled

Water Policy provides direction to the Regional Water Boards, proponents of recycled water projects, and to the public regarding the methodology and appropriate criteria for the State Water Board and the Regional Water Boards to use when issuing permits for recycled water projects. The 2018 Amendment included permitting guidance for reservoir augmentation projects, and updates monitoring requirements for contaminants of emerging concern (CECs) in recycled water used for reservoir water augmentation. The Order includes volumetric reporting requirements which are consistent with the Recycled Water Policy.

3.7. Water Reclamation Statute

The California Legislature declared in Water Code section 13511 that a substantial portion of the future water requirements of the state of California may be economically met by the beneficial use of recycled water. The Legislature also expressed in Water Code section 13512, the State's intent to undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water requirements of the State. The adoption of the Order is consistent with the Legislature's declaration because it facilitates the use of recycled water to supplement potable water supplies.

3.8. California Code of Regulations Title 22

California Code of Regulations (CCR) title 22 (title 22 CCR), Division 4, Chapter 3 includes water recycling criteria, particularly focused on wastewater reclamation and the use of recycled water in specific settings. The regulations set forth the standards for ensuring water recycling practices are protective of public health.

3.9. Other Plans, Policies and Regulations

3.9.1. Stormwater

Pursuant to Order No 2014-0057-DWQ, NPDES Permit No. CAS000001, *Statewide General Permit for Stormwater Discharges Associated with Industrial Activities* (Industrial General Permit), sewerage treatment plants are assigned (per Occupational Safety and Health Administration) Standard Industrial Classification (SIC) code 4952 (for Sewerage Systems). SIC code 4952 (https://www.waterboards.ca.gov/water_issues/programs/stormwater/sicnum.shtml) falls within the Regulated SIC Code for enrollment under the Industrial General Permit. The eligibility for enrollment under the Industrial General Permit is not based on treatment design flow or capacity of the sewerage treatment plants. It is industrial activity that is regulated. The ECWRF has the same SIC code (4952) and is enrolled under the Industrial General Permit. The list of SIC codes can be found at https://www.waterboards.ca.gov/water_issues/programs/stormwater/sicnum.shtml.

3.9.2. Pretreatment/Wastewater Source Control

Discharges of pollutants that may interfere with the operation of a POTW are regulated by the United States Environmental Protection Agency's pretreatment regulations at Code of Federal Regulations title 40 (40 CFR) part 403. These regulations require dischargers to develop and implement pretreatment programs that impose limitations on industrial users of the POTW. The Discharger's pretreatment requirements for the ECWRF are contained in Order No. R9-2025-0003.

3.9.3. Sewage Sludge and Biosolids

The Order does not regulate the treatment, storage, or disposal of biosolids. The Discharger's treatment and disposal of biosolids are regulated under Order No. R9-2025-0003.

4. RATIONALE FOR PROHIBITIONS, EFFLUENT LIMITATIONS, AND RECYCLING SPECIFICATIONS

The Order establishes requirements based on the Basin Plan, Recycled Water Policy, and title 22 CCR for the discharge of disinfected tertiary recycled water from the ECWRF.

4.1. Rationale for Discharge Prohibitions

The Order establishes discharge prohibitions for the ECWRF as described in section 3. of the Order. The prohibitions require the Discharger to comply with the applicable sections of the Water Code and the Basin Plan. Discharges from the ECWRF to land in violation of prohibitions contained in the Order are violations of the Water Code and can result in enforcement actions taken by the San Diego Water Board.

4.2. Rationale for Effluent Limitations

The Order establishes technology and water quality-based effluent limitations. Rationale for the technology and water quality-based effluent limitations is explained below.

4.2.1. Technology-Based Effluent Limitations

The Order establishes technology-based effluent limitations for biological oxygen demand 5-day @ 20 °C (BOD₅), total suspended solids (TSS), and pH. These effluent limitations are based on design criteria for removal of these constituents by secondary wastewater treatment technology and are necessary to ensure the secondary treatment processes are functioning properly.

4.2.2. Water Quality-Based Effluent Limitations

The Basin Plan establishes WQOs and a program of implementation to protect the beneficial uses. The Order establishes water quality-based effluent limitations based on the basin specific WQOs for the Santee HSA (907.12) and the El Cajon HSA (907.13) listed in table 3-10 of the Basin Plan and summarized below:

Table F-3. Basin-Specific Groundwater WQOs

Constituent^{1,2}											
TDS	CL	SO₄	%NA	NO₃	Fe	Mn	MBAS	B	TURB (NTU)	COLOR (Units)	F
Santee HSA (907.12):											
1,000	400	500	60	45	0.3	0.05	0.5	0.75	5	15	1.0
Santee HSA (907.12, alluvial aquifer for lower Sycamore Canyon):											
2,000	800	600	60	45	0.3	0.05	0.5	2.0	5	15	1.0
El Cajon HSA (907.13):											
1,200	250	500	60	45	0.3	0.05	0.5	0.75	5	15	1.0

Notes for table F-3:

1. Constituent concentrations are in milligrams per liter (mg/L) unless otherwise noted.
2. Table F-3 abbreviations:
TDS – Total dissolved solids, CL – Chloride, SO₄ – Sulfate, %NA – Percent sodium, NO₃ – Nitrate (expressed as nitrate), Fe – Iron, Mn – Manganese, MBAS - Methylene Blue Active Substances, B – Boron, TURB – Turbidity, NTU - Nephelometric Turbidity Units, and F – Fluoride
- 4.2.1.1. The implementation chapter of the Basin Plan permits effluent limitations for recycled water projects to exceed WQOs if the Discharger demonstrates that assimilative capacity exists in the groundwater basin. The nutrient balance also establishes a total nitrogen limitation to ensure the recycled water produced at the ECWRF does not contribute to exceeding the nitrate water quality objective set in the Basin Plan.
- 4.2.1.1.1. The Order establishes a monthly average effluent limitation for total nitrogen of 15 mg/L. The San Diego Water Board adopted a Basin Plan amendment in 2015 which raised the groundwater quality objective for nitrate to the drinking water standard of 45 mg/L, or 10 mg/L nitrate expressed as total nitrogen, for all basins in the Region except the Warner Basin. A concentration of 10 mg/L total nitrogen ensures that the concentration of nitrate cannot exceed 45 mg/L. If 10 mg/L of total nitrogen were to completely nitrify in the environment it would equal 45 mg/L nitrate. However, the Discharger submitted a total nitrogen balance, which demonstrates that the concentration of nitrogen in groundwater will not exceed 10 mg/L total nitrogen if the monthly average total nitrogen concentration in recycled water discharged is 15 mg/L or lower. Nutrient

uptake by vegetation at the recycled water use areas allows for recycled water discharges containing up to 15 mg/L total nitrogen (as a monthly average). By adding up the total nitrogen applied through recycled water and fertilizer use, and subtracting the nutrient uptake within the root zone, the Discharger calculated that no excess nutrients should percolate into the underlying groundwater.

4.3. Water Recycling Specifications

Water recycling specifications are included in the Order pursuant to Water Code section 13523 and based on recommendations from DDW. In accordance with title 22 CCR, DDW reviews engineering reports for the production, distribution, and use of recycled water. The Order and WDRs contained within are solely for the treatment and disinfection of domestic wastewater to produce recycled water. The purveyance and use requirements for recycled water produced are issued to Padre Dam through an enrollment in State Water Board Order WQ 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use*, as the administrator of the recycled water distribution system.

5. RATIONALE FOR PROVISIONS

5.1. Standard Provisions

The standard provisions contain requirements that allow the San Diego Water Board to enforce the Order. Provisions include requirements for inspection, spill and emergency reporting, records maintenance, and reporting of changes. Standard provisions apply to all WDRs and are consistent with San Diego Water Board findings. The standard provisions incorporate the reporting requirements in Water Code sections 13271 and 13529.2.

5.3 Special Provisions

These requirements ensure the Discharger protects the ECWRF from storm events to not cause or contribute to a condition of pollution or nuisance and to protect beneficial uses.

6. RATIONALE FOR MONITORING AND REPORTING PROVISIONS

- 6.1. The purpose of the MRP is to determine and ensure compliance with discharge specifications, effluent limitations, and other requirements set in this Order. It helps both the San Diego Water Board, and the Discharger assess treatment efficiency, evaluate effluent quality, protect WQOs and beneficial uses of the groundwater basins, and minimize the discharge's impact on receiving water quality. The MRP also outlines requirements for proper use, maintenance, methods, and monitoring intervals and frequencies necessary to collect data that accurately reflect the activities and discharges regulated under this Order.
- 6.2. The San Diego Water Board issued the MRP pursuant to Water Code sections 13267 and 13383, which authorize the San Diego Water Board to require dischargers to submit technical and monitoring reports. The San Diego Water Board Executive Officer can modify the MRP as appropriate pursuant to Water Code sections 13267 and 13383.

- 6.3. The Recycled Water Policy requires monitoring and reporting of volumetric data as prescribed in the MRP. The State Water Board uses this volumetric data to track and report to the public the percentage of wastewater recycled throughout California.
- 6.4. The MRP has three main components, influent monitoring, effluent monitoring and volumetric reporting. Specific monitoring questions related to the questions above for each component are provided below.
- 6.4.1. Influent monitoring consists of the collection and analysis of samples or measurements of wastewater prior to the treatment processes. Influent monitoring of a wastewater stream prior to entering the treatment plant is necessary to address the following questions:
- Is the pretreatment program effectively controlling pollutant loads from industrial facilities?
 - What is the frequency of unexpected industrial discharges or pollutants loads which can cause or contribute to an upset in wastewater treatment processes at the ECWRF?
 - Is the influent inhibiting or disrupting the ECWRF, its treatment processes, or its operations?
 - Is the ECWRF complying with the conditions of the Order, including but not limited to the BOD₅ and TSS effluent limitations?
- 6.4.2. Effluent monitoring consists of the basic site-specific monitoring necessary to measure compliance with effluent limitations and/or assess potential impacts to receiving water quality. Effluent monitoring is typically conducted at the end of the treatment process and prior to distribution of recycled water to use sites. Effluent monitoring will answer the following questions:
- Does the effluent comply with effluent limitations and other requirements of the Order, thereby ensuring that WQOs are achieved in the groundwater?
 - Does the effluent comply with the statewide treatment standards for recycled water, as required by title 22 CCR?
 - Is the ECWRF being properly operated and maintained to ensure compliance with the conditions of the Order?
- 6.4.3. Volumetric reporting provides information on the amount of wastewater treated at the ECWRF and the amount of recycled water used. This information provides an essential part of a cumulative picture of the distribution and use of recycled water within the San Diego Region. Collection and analysis of recycled water production will help answer the following questions:
- What are the total volumes of wastewater treated and recycled water produced at the ECWRF?

- What is the total volume of recycled water distributed for each specific use?

7. PUBLIC PARTICIPATION

The San Diego Water Board has considered the issuance of WDRs for the ECWRF. As a step in the WDR adoption process, the San Diego Water Board staff developed tentative WDRs and encouraged public participation in the WDR adoption process by providing a 30-day period for public review and comment on the Tentative Order.

7.1. Notification of Interested Parties

The San Diego Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided by posting a Notice of Public Hearing and Comment and the tentative WDRs on the San Diego Water Board's website for the duration of the public comment period. The Tentative Order was posted on the San Diego Water Board website and emailed to the Discharger and all known interested parties on July 31, 2025.

The public also had access to the meeting agenda including all supporting documents and any changes in meeting dates and locations through the San Diego Water Board's website at: <https://www.waterboards.ca.gov/sandiego/>.

7.2. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the San Diego Water Board at 2375 Northside Drive, Suite 100, San Diego, CA 92108.

To be fully responded to by staff and considered by the San Diego Water Board, the written comments were due at the San Diego Water Board office by 5:00 p.m. on September 1, 2025.

7.3. Public Hearing

The San Diego Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:	November 12, 2025
Time:	9:00 AM
Location:	San Diego Regional Water Quality Control Board San Diego Water Board Meeting Room 2375 Northside Drive, Suite 108 San Diego, CA 92108

Interested persons were invited to attend. At the public hearing, the San Diego Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

7.4. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and CCR, title 23, sections 2050. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of the Order at the following address, except that if the thirtieth day following the date of the Order falls on a Saturday, Sunday, or State holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Petitions may be submitted as follows:

By mail:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

In Person:

State Water Resources Control Board
Office of Chief Counsel
1001 I Street
Sacramento, California 95814

By email:

waterqualitypetitions@waterboards.ca.gov

By fax:(916) 341-5199

For instructions on how to file a petition for review, see:

https://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

7.5. Information and Copying

The ROWD, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the San Diego Water Board by calling (619) 516-1990.

7.6. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs should contact the San Diego Water Board, reference this facility, and provide a name, address, and phone number.

7.7. Additional Information

Requests for additional information or questions regarding the Order should be directed to Mr. Brandon Bushnell by email at brandon.bushnell@waterboards.ca.gov or by phone at (619) 521-8044.