

Basin Monitoring Program Task Force and the Declaration of Conformance with the State's Recycled Water Policy

SAWPA Commission

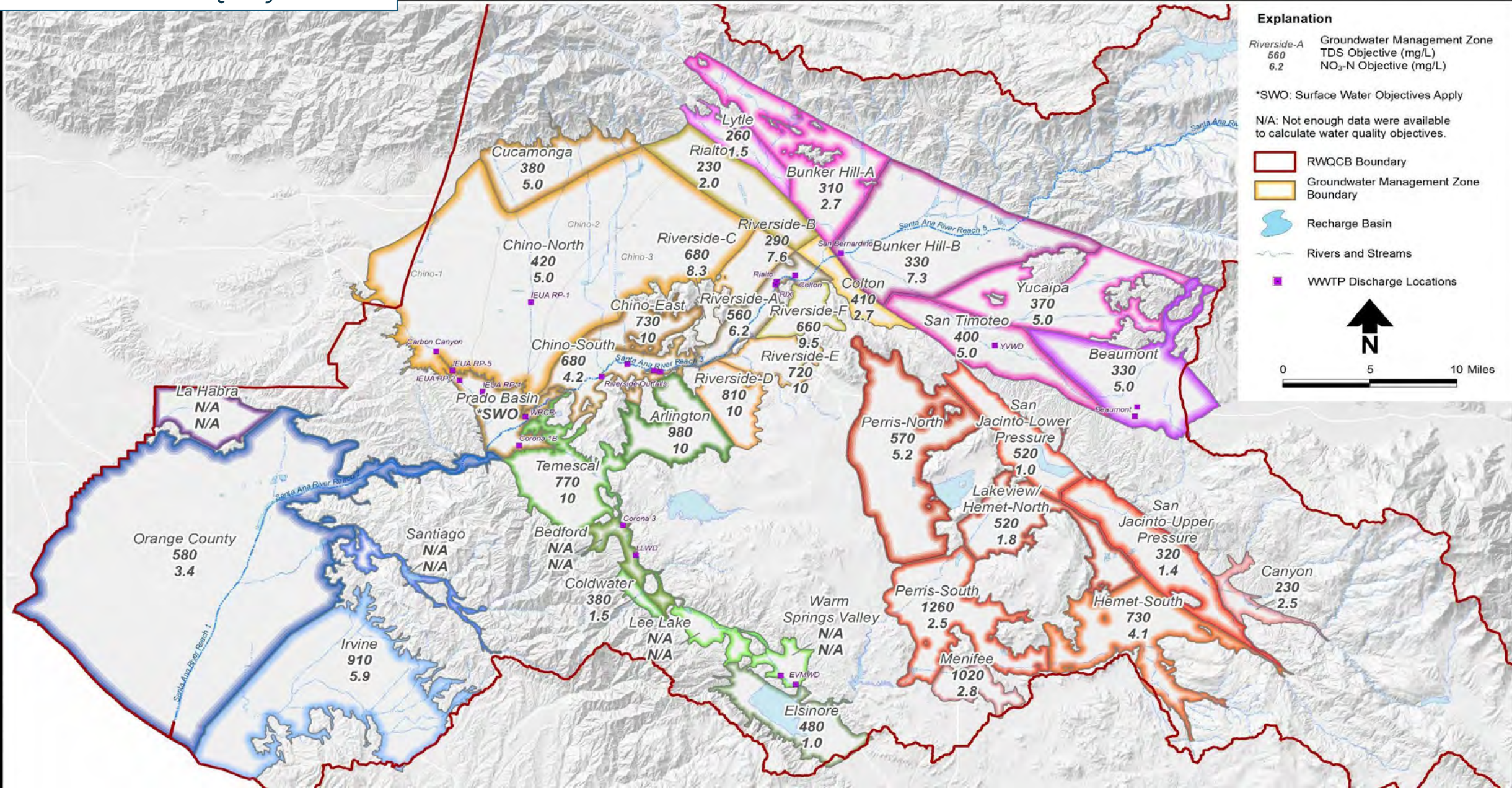
March 19, 2024

Presented by: Tess Dunham, Regulatory Facilitator on behalf of Basin Monitoring
Task Force

Total Dissolved Solids and Nitrogen Management Plan (TDS/N Management Plan) for the Santa Ana River Basin

- Adopted in 2004
- Multi-year collaborative effort that took 10-years
- Relied on best available scientific information
- Identified discrete groundwater management zones
- Established TDS and N water quality objectives for each zone
- Included implementation measures to manage salt and nutrient loading in each basin
- Performed comprehensive antidegradation analysis

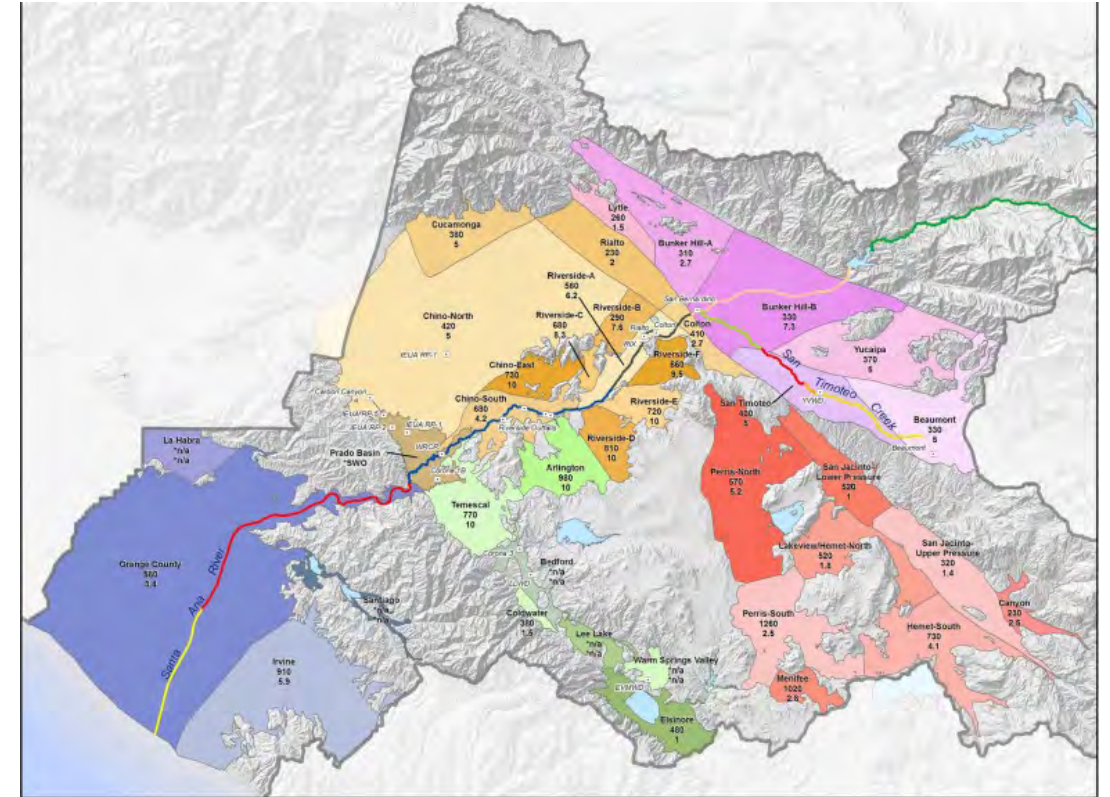
Groundwater Management Zone Boundaries and AWQ Objectives



SAWPA Basin Monitoring Program Task Force Formed to Implement TDS/N Management Plan in 2004

Roles & Activities

- Conducts analysis of TDS and nitrate in watershed groundwater every three (now five) years to identify trends
- Prepares Annual Santa Ana River surface water quality report
- Creates and updates Santa Ana River Wasteload Allocation model to confirm compliance of river discharges with ground water quality objectives
- Conducts salt and nitrogen investigations as necessary



Eastern Municipal Water District	Chino Basin Watermaster
Inland Empire Utilities Agency	Yucaipa Valley Water District
Orange County Water District	City of Beaumont
City of Riverside	City of Corona
Lee Lake Water District	City of Redlands
Elsinore Valley Municipal Water District	City of Rialto
Irvine Ranch Water District	Jurupa Community Services District
Colton/San Bernardino Regional Tertiary Treatment and Wastewater Reclamation	Western Riverside Co Regional Wastewater Authority/WMWD
*San Bernardino Valley Municipal Water District	*City of Banning
* San Gorgonio Pass Water Agency	* Beaumont Cherry Valley Water District

Basin Monitoring Program Task Force Members

- Four new agencies added in 2015 (*)
- Santa Ana Regional Board also a non-funding task force member

Basin Monitoring Task Force Accomplishments

- Triennial Ambient Water Quality Update (2006, 2009, 2012, 2015, 2018, 2021) = real-time monitoring; vadose zone; interpretative tools
- Updated original Wasteload Allocation Model (2008-2015)
- Nitrogen loss studies (2005-6) Default = 25%, Special =50%, EMWD=60%
- Special TDS trends studies (2014-15)
- New Wasteload Allocation Model (2017-18)
- Updated Basin Plan and Wasteload Allocations (2021)
- Updated Santa Ana River surface water monitoring program (2023)
- Updated Groundwater Ambient Water Quality Monitoring (2023-2024)
- Implementing Santa Ana River surface water monitoring program (2024)





Keys to Success

- Process before results; willingness to live with science-based approach
- Rigorous attention to detail
- Litigation Alternative, go directly to negotiations
- Water Board owned/endorsed process (esp. participation = credibility)
- Separate policy and technical work
- SAWPA, watershed and regional JPA, serves as neutral facilitator and administrator
- Collaborate, negotiate, compromise
- Regular monthly meetings, sharing, colleague comradery
- Reflect consensus in writing
- Experienced regulatory advisors to Task Force, Tim Moore of Risk Sciences and Tess Dunham, KSC

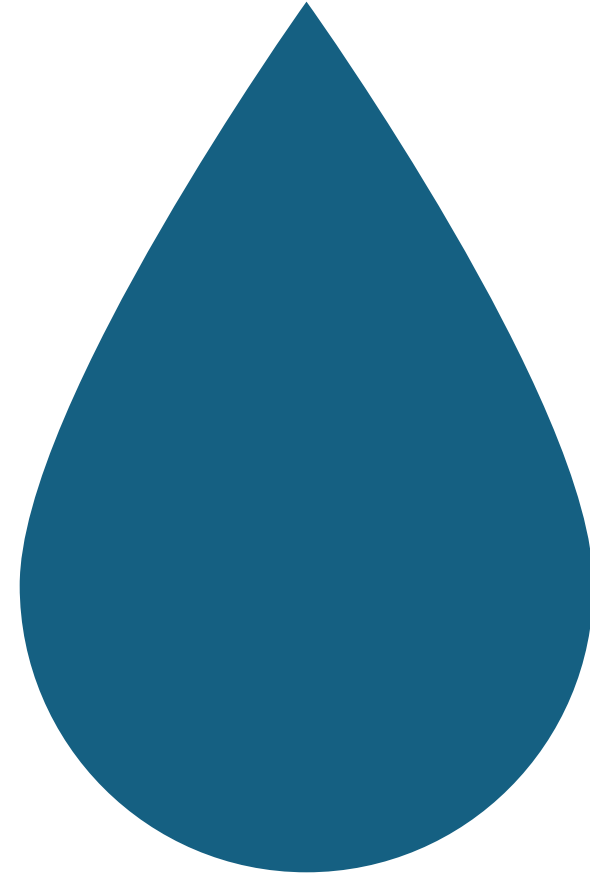
State Water Board's Policy for Water Quality Control for Recycled Water - 2009



- 2009 – State Water Board adopted Resolution No. 2009-11
 - Directed regional water boards: 1) to develop and adopt salt and nutrient management plans through collaborative stakeholder processes; 2) establish monitoring programs; and, 3) streamline permitting process
- 2010 – Santa Ana Water Board adopted Resolution R8-2010-0012
 - Resolution declared agreement with 2010 Declaration of Conformance
 - 2010 Declaration of Conformance demonstrated that Santa Ana Region's TDS/N Management Plan was consistent with and fulfilled requirements of the 2009 Recycled Water Policy
 - Resolution and 2010 Declaration submitted to State Water Board April 10, 2010

State Water Board's Policy for Water Quality Control for Recycled Water - 2019

- Starting in December 2017, held public consultation meetings
- June 19, 2018, held hearing on proposed amendments
- November 13, 2018, released revised draft of amendments
- December 11, 2018, State Water Board adopted revised policy
- April 8, 2019, approved by Office of Administrative Law



WATER QUALITY CONTROL POLICY FOR RECYCLED WATER



Adopted December 11, 2018

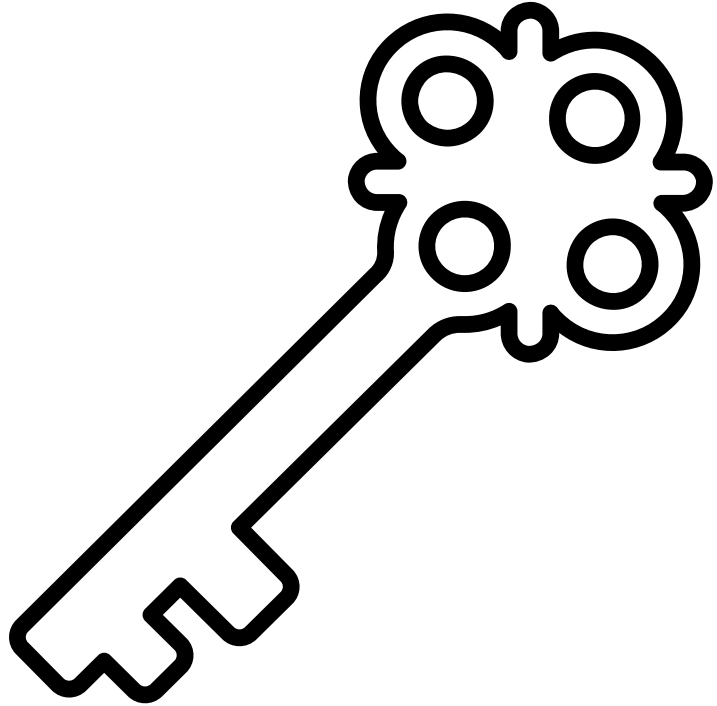
Effective April 8, 2019

STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY



State-Wide Goals

- Increase use of recycled water to 2.5 million acre-feet per year by 2030
- Reuse all dry weather direct discharges of treated wastewater
- Maximize use of recycled water where groundwater supplies are in state of overdraft



Key Requirements of the 2019 Recycled Water Policy

- Manage salts and nutrients on a watershed or basin basis
- Ensure attainment of water quality objectives
- Protect beneficial uses

Regional Water Board Review of Existing Plans By April 8, 2024



Assess and review monitoring data from existing plans



Using data assessment - update available assimilative capacity, trends and concentrations



Determine if revisions are warranted as a result of data assessment

2019 Recycled Water Policy Requirements for Salt and Nutrient Management Plans

- 1) basin or subbasin wide monitoring plan
- 2) water recycling use goals and objectives
- 3) salt and nutrient source identification, basin or subbasin assimilative capacity and loading estimates along with fate and transport of salts and nutrients
- 4) implementation measures to manage or reduce salt and nutrient loading in basin on a sustainable basis
- 5) antidegradation analysis that satisfies Resolution 68-16

Requirement 1: Basin or subbasin wide monitoring plan

- Section V of TDS/N Management Plan
- Two monitoring programs:
 - Surface Water – Annual Surface Water Quality Report for Santa Ana River (2004 -)
 - Groundwater – Triennial Ambient Water Quality Recomputation (2004 – 2023); Quinquennial Ambient Water Quality Recomputation (2023 – forward)
- Updated monitoring program plans submitted March 2023
- Task Force collecting Santa Ana River surface water samples to address data gaps (starting 2024)



Requirement 2: Water recycling goals & objectives

- TDS/N Management Plan in its entirety encourages water recycling while protecting the region's groundwater basins
- Predominant recycled water uses:
 - Irrigation of agricultural land
 - Urban/commercial landscaping
 - Discharges to Santa Ana River (95% of River's dry weather flow)
 - Groundwater recharge through percolation or injection



Requirement 3: Salt and nutrient source identification, assimilative capacity & loading estimates

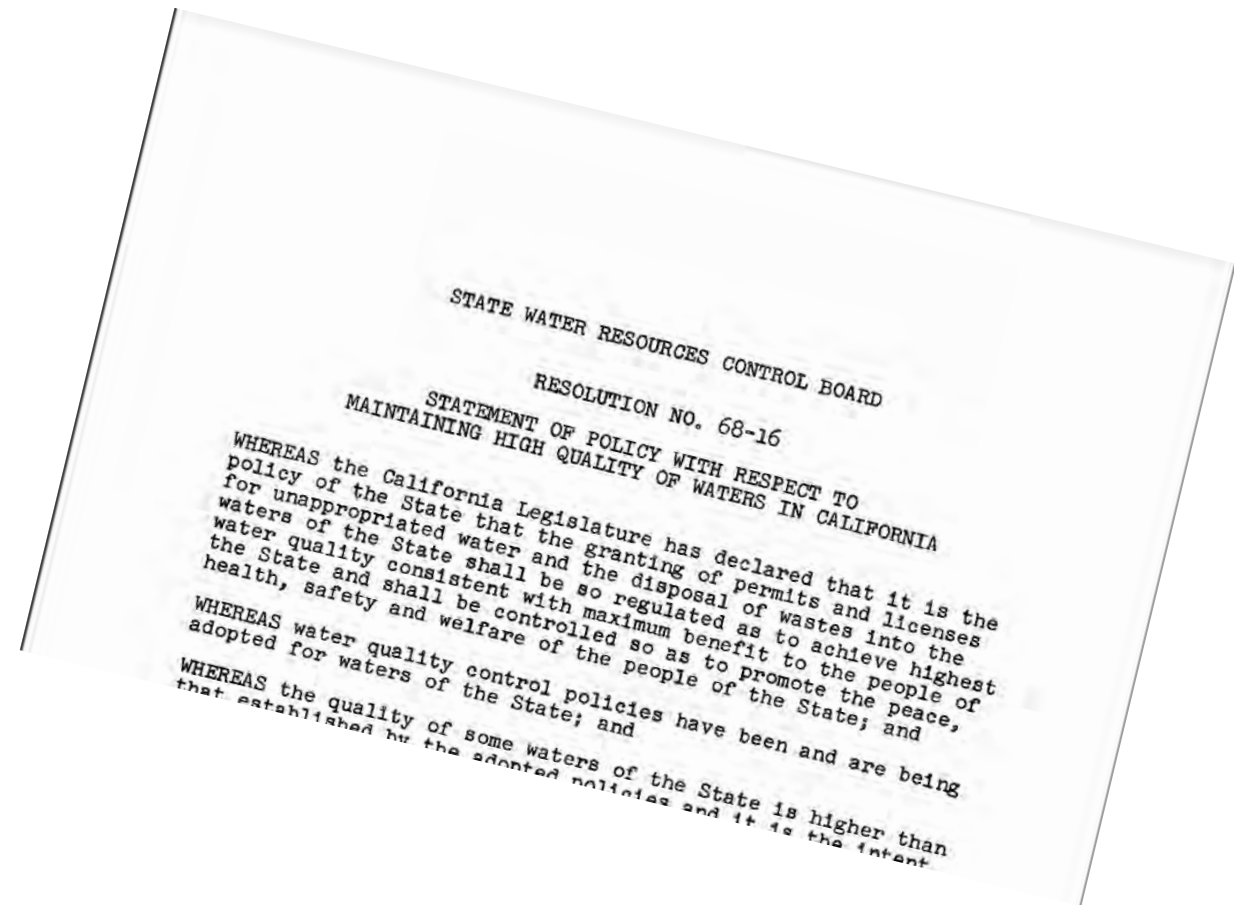
- Discharges of TDS and TIN to Santa Ana River that recharge groundwater subject to Wasteload allocations
- Wasteload allocations developed through use of Wasteload Allocation Model
- Wasteload allocations calculated so that permitted discharges ensure compliance with water quality objectives
- Wasteload allocations updated periodically to reflect best available data and science
- Most recent Wasteload allocations updated in 2021
- Ambient Groundwater Recomputation evaluates available assimilative capacity on a 5-year basis

Requirement 4: Implementation measures to manage or reduce salt and nutrient loading

- Update of Wasteload Allocation model & application of Wasteload allocations on treated effluent discharged to Santa Ana River
- Regulatory approach for permitting newly proposed recycled water projects
- Maximum benefit demonstrations to accommodate new recycled water projects
- Offset mitigations – net concentration of pollutants not increased
- Brine lines, regional desalters, recharge, sea water intrusion barriers
- Robust monitoring program

Requirement 5: Antidegradation analysis that satisfies Resolution 68-16

- Santa Ana Water Board's TDS/N Management Plan approach encompasses Resolution 68-16 and its requirements
 - Basin Plans Water Quality Objectives adopted in 2004 represent historical ambient water quality conditions, i.e., antidegradation objectives
 - Basin Plan includes alternative "Maximum Benefit Objectives," which allow for some degradation when assimilative capacity exists - consistent with the State Board's Resolution 68-16
- Ambient water quality conditions and assimilative capacity findings updated every three years (once every five years starting after 2023)



Santa Ana Region's TDS/N Management Plan Complies with 2019 Recycled Water Policy Salt and Nutrient Management Plan Requirements

Requirements	Conformance with 2019 Recycled Water Policy
1. Basin Wide Monitoring Plan	<i>Includes two basin wide programs: Annual Surface Water for Santa Ana River & Periodic Ambient Recomputation for Groundwater</i>
2. Water recycling use goals and objectives	<i>Encourages efficient use of all water resources, including recycled water.</i>
3. Salt and nutrient source identification, assimilative capacity, loading estimates	<i>Periodic updates to Wasteload Allocation Model and Wasteload allocations; Ambient Recomputation for Groundwater</i>
4. Implementation measures to manage loading	<i>Ongoing implementation of TDS/N Management Plan for over twenty-years</i>
5. Antidegradation Analysis	<i>TDS/N Management Plan approach embodies the approach set forth in Resolution No. 68-16</i>



SANTA ANA WATERSHED
PROJECT AUTHORITY

Integrated Climate Adaptation and Resiliency Program (ICARP) Regional Resilience Planning and Implementation Grant Program (RRGP)

Item No. 6.B

Rachel Gray

Water Resources and Planning Manager

March 19, 2024

Recommendation

That the Commission adopt Resolution No. 2024-4 authorizing the General Manager, or designee:

1. The SAWPA General Manager, or designee is hereby authorized and directed to execute the funding agreement with the Governor's Office of Planning and Research (OPR) and any amendments thereto.
2. The SAWPA General Manager, or designee, will serve the function of Authorized Signatory, as shown in the attached Authorized Signatory Form.
3. The SAWPA must keep Authorized Signatory Forms up to date. SAWPA shall notify OPR in writing of the any change in Authorized Signatory within seven (7) working days.



Agenda

- SAWPA Strategy for Future Funding
- ICARP Regional Resilience Grant Program (RRGP)
- Timeline
- Schedule
- Recommendation



SAWPA Strategy for Future Funding

- **SAWPA efforts** are focused on:
 - Building on past efforts to perform **integrated watershed management**
 - Building on **SAWPA's OWOW efforts**
 - **Engage** with member agencies
 - **Positioning region** for future funding opportunities
 - Building on state priorities related to **climate change risks, watershed resilience, and equity in water resources**
- **Approach** aligns with:
 - DWR's IRWM Program
 - Office of Planning and Research (OPR) Integrated Climate Adaptation & Resiliency Program (ICARP)



ICARP

INTEGRATED CLIMATE ADAPTATION & RESILIENCY PROGRAM

ICARP Regional Resilience Grant Program

- Governor's Office of Planning and Research (OPR) **Integrated Climate Adaptation and Resiliency Program (ICARP)**
- **Regional Resilience Grant Program (RRGP)**
- **RRGP** funds effort to:
 - ✓ Review climate risks
 - ✓ Identify climate resilience priorities
 - ✓ Build capacity
 - ✓ Implement projects that respond to a region's greatest climate risks



Timeline

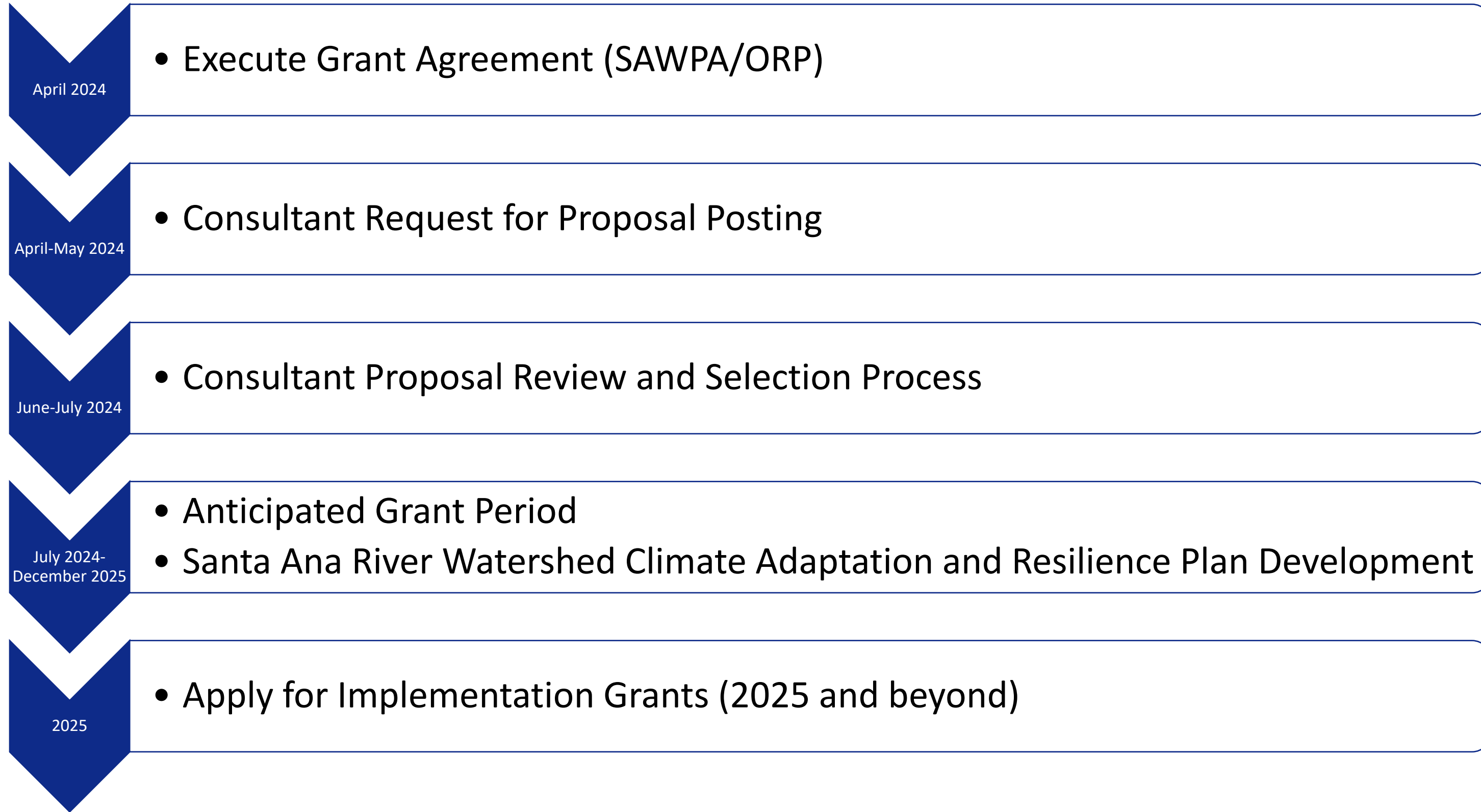
June 6, 2023: Presented Commission with an informational item on ICARP RRGP grant opportunity.

July 18, 2023: Commission approved staff's request to submit a grant application under ICARP RRGP to develop a Climate Adaptation and Resilience Plan for the Santa Ana River Watershed.

August 25, 2023: Staff successfully submitted grant application to Governor's Office of Planning and Research in advance of August 29, 2023, deadline.

December 21, 2023: Award Notification from Governor's Office of Planning and Research that SAWPA was selected as a Grantee with an award of \$644,190 to develop Santa Ana River Watershed Climate Adaptation and Resilience Plan.

Schedule



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Questions?

Thank You

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