

**CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
COLORADO RIVER BASIN REGION**

2014 TRIENNIAL REVIEW FINAL WORK-PLAN

**Prepared By
Basin Planning Unit**

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INTRODUCTION

Section 303(c) of the Federal Clean Water Act (CWA) (33 U.S.C. § 1313(c)) and Section 130 of Title 40 of the Code of Federal Regulations (CFR) require states to hold public hearings to review applicable water quality standards (WQSs), and modify and adopt standards as necessary. Water quality standards include beneficial uses and water quality objectives (WQOs). Section 13240 of the California Water Code (CWC) requires the State of California (State) to formulate and periodically update Regional Water Quality Control Plans (Basin Plans). The Basin Plan is a master-planning document for ground and surface waters in the Region. The Basin Plan has five major components:

1. Identifies the waters of the Region;
2. Designates beneficial uses of those waters;
3. Establishes WQOs for the protection of those uses;
4. Prescribes an implementation plan; and
5. Establishes a monitoring and surveillance program to assess implementation efforts.

Pursuant to State and Federal regulations, the Regional Water Board holds public hearings to evaluate WQSs and their need for revision at least every three years, hence the term "Triennial Review." The purpose of the Triennial Review is twofold: to identify potential water quality problems/issues, and to reaffirm parts of the Basin Plan where no potential problems are identified. Reviewing Basin Plan and WQSs involves several procedural steps that are summarized below:

- Prepare a preliminary list of potential water quality concerns (i.e., Triennial Review List);
- Notice a public hearing to review WQSs (CWC 13244), adopt the Draft Triennial Review List, and reaffirm parts of the Basin Plan not included in the list as adequate;
- Conduct workshops if necessary, and a Public Hearing;
- Respond to comments identified during the public comment period, and the hearing;
- Finalize the list of potential water quality issues;
- Prepare a Work-plan to address those issues, including the need for Basin Plan amendments, and resources needed to complete the amendments;
- Adopt a Board Resolution that specifies the findings and intent of the Triennial Review, reaffirms parts of the Basin Plan not included in the Triennial Review List, specifies that the Basin Plan remains in effect in its entirety until amendments are adopted, and concludes the 2014 Triennial Review process; and
- Forward the Board Resolution and Administrative Record to the State Water Resources Control Board for review and approval.

The review does not necessarily mean that the Basin Plan will be revised. While a major part of the review concerns identifying potential water quality issues that may require a Basin Plan amendment, an important part of the Triennial review is the reaffirmation of those portions of the Basin Plan where no potential problems are identified.

Regional Water Board staff notified interested persons and potentially affected parties of the intent to conduct a Triennial Review in a Public Notice, dated October 29, 2014 and February 23, 2015. The Public Notice included a draft list of potential water quality issues for investigation and review.

Regional Water Board staff revised the Draft 2014 Triennial Review List based on public

comments received during the public comment period. In a Public Notice, dated July 27, 2015, staff notified interested persons and potentially affected parties of these revisions. The Public Notice also stated the Regional Water Board's intent to: (a) conduct a public hearing on September 17, 2015 to review the findings of the 2014 Triennial Review List, (b) adopt the Triennial Review List and the Work-plan, and (c) conclude the 2014 Triennial Review process.

2014 TRIENNIAL REVIEW LIST

Except as noted hereinafter, staff proposes the Regional Water Board reaffirm all beneficial uses of ground and surface waters as part of the Triennial Review. Also, for this Triennial Review cycle, staff has identified the following five priority issues for review and/or update:

1. ASSESS BENEFICIAL USES OF THE CONSTRUCTED WETLANDS IN IMPERIAL AND COACHELLA VALLEYS

Conduct a surface water survey to identify beneficial uses and water quality objectives for the Region's constructed wetlands, and update the Basin Plan. These include the Torrez-Martinez wetlands in Coachella Valley, and the Brawley, Imperial, and Shank Road wetlands in the Imperial Valley.

2. UPDATE DISCUSSION OF SALTON SEA IN BASIN PLAN

Update the Basin Plan to reflect the current status of the Salton Sea; identify projects that accelerate its decline, and identify salient policy and legislative developments that call for restoration of the Sea.

3. RESEARCH THREATS TO GROUNDWATER QUALITY FROM SEPTIC SYSTEM WASTEWATER DISCHARGES IN THE LA QUINTA COVE

Assess available water quality data for impacts from septic system wastewater discharges in areas without sewer. Evaluate the need for septic tank prohibitions, density restrictions, and other strategies to protect water quality.

4. FISH TISSUE STUDY FOR PUBLIC CONSUMPTION ADVISORY

Collaborate with the Office of Environmental Health Hazard Assessment (OEHHA) to conduct a Region-wide tissue study to characterize the biological health of the Region's fishable waters, and examine the safety of fish consumption by the public.

5. BIOASSESSMENT STUDY AS A FOUNDATION FOR ESTABLISHING WATER QUALITY BIO-OBJECTIVES

Characterize the chemical and biological health of the Region's natural non-perennial and intermittent waters, the majority of which are located in the western half of the region.

ISSUE 1: ASSESS BENEFICIAL USES OF THE CONSTRUCTED WETLANDS IN IMPERIAL AND COACHELLA VALLEYS

BACKGROUND: Four artificial wetlands have been constructed in the last fifteen years: the Brawley, Imperial, and Shank Road wetlands in the Imperial Valley; and the Torrez-Martinez wetlands in the Coachella Valley. The current Basin Plan does not include these artificial wetlands; hence, beneficial uses of these wetlands are undefined, and need to be established. The Brawley and Imperial Wetlands were developed by partnerships between private and public stakeholders as pilot projects to assess their ability to remove pollutants in the New River from agricultural and other point and nonpoint sources. Similarly, a wetland in the Coachella Valley was constructed by the Torrez-Martinez Cahuilla Indians as a demonstration project to treat agricultural runoff.

RECOMMENDATION: Staff is proposing to characterize the water quality of these wetlands, and examine the beneficial uses supported by these systems as part of this triennial review. The outcome will lead to a Basin Plan amendment that will establish water quality standards for these water bodies.

RESOURCES REQUIRED: Approximately 0.5 PYs of existing staff resources.

PRIORITY: High

PROPOSED COMPLETION DATE: Mid to late 2018

ISSUE 2: UPDATE DISCUSSION OF SALTON SEA IN BASIN PLAN

BACKGROUND: The Salton Sea is California’s largest inland lake. The Sea supports a diverse ecosystem, including rare and endangered species. The Sea is on the Pacific Flyway and winter home for migratory birds. Salts concentrate in the Sea because it is a closed basin. As the Sea becomes saltier, its’ ecosystem changes dramatically. Without implementation of a restoration project, the Sea’s fishery is projected to disappear. This in turn will have a significant adverse impact on migratory birds. The last update to the Basin Plan concerning the Sea occurred in 1992. Since that time, salinity has increased beyond 45,000

parts per million, and substantive legislative developments have occurred that significantly impact the fate of the Sea.

In 1998, for example, the Salton Sea Reclamation Act was enacted into law (Public Law 105-372). The Act directed the US Department of Interior to study options for managing the salinity and elevation of the Sea to preserve fish and wildlife health and to enhance opportunities for recreation use and economic development, while continuing the Sea's use as a reservoir for irrigation drainage. In 2003, the Department of Interior released the Salton Sea Study Status Report, which identifies a series of alternatives to control salinity and the Sea's elevation. No funding has been appropriated to implement any of the viable alternatives.

In 2003, the Imperial Irrigation District, Coachella Valley Water District, San Diego County Water Authority, and Metropolitan Water District of Southern California signed the Quantification Settlement Agreement (Agreement) for Colorado River water. The Agreement quantifies the rights of California to 4.4 million acre-feet per year of Colorado River water, and provides for the transfer of up to 200,000 ACFY of water from the IID to the SDCWA. Under the terms of the Agreement and enabling legislation, the State of California assumed responsibility to plan for and fund measures that would address the projects adverse environmental impacts from the transfer, and restore the Salton Sea. In 2007, the California [Natural] Resources Agency released its Salton Sea Restoration Programmatic Environmental Impact Report for Restoring the Salton Sea (PEIR). The PEIR also identify a comprehensive restoration preferred alternative that the State has not funded.

In 2013, Assembly Bill 71 was signed into law. The law gives local stakeholders control over restoration efforts and directs the Natural Resources Agency to work directly with the Salton Sea Authority (Authority) on restoration efforts. The Authority and the Natural Resources Agency are developing a Financial Feasibility action plan to fund restoration efforts.

In spite of the accelerated decline of the Salton Sea and its' ecosystem, implementation of the water transfers provided for in the QSA, and other projects in the Imperial Valley with the potential to adversely impact the Sea, have proceeded unabated. These, coupled with the absence of meaningful restoration alternatives in place, have caused additional adverse water quality impacts to the Sea, including localized loss of beneficial uses.

RECOMMENDATION:

As part of this Triennial Review, staff proposes to update the Basin Plan to reflect: (a) the aforementioned policy and legislative developments, (b) the current water quality of the

Salton Sea, (c) and environmental impacts to the sea caused by the above projects. Staff also proposes to provide the Regional Water Board with a range of policy options to address these impacts.

RESOURCES REQUIRED: Approximately 0.5 PYs of existing staff resources.

PRIORITY: High

PROPOSED COMPLETION DATE: January 2017

ISSUE 3: RESEARCH THREATS TO GROUNDWATER QUALITY FROM SEPTIC SYSTEM WASTEWATER DISCHARGES IN THE LA QUINTA COVE

BACKGROUND: Groundwater is a valuable resource subject to increasing quality and quantity demands. With California facing an unprecedented drought and several aquifers in significant overdraft, the need to develop and promote sustainable water supplies is especially urgent, particularly in areas like Coachella Valley that rely solely on groundwater for local water supply. The Regional Water Board has a pivotal role in this effort by fulfilling its mission to preserve, enhance, and restore groundwater quality.

Recently the local water agencies (primarily Coachella Valley Water District and Desert Water Agency) collaborated to complete a Salt and Nutrient Management Plan for the Coachella Valley pursuant to the State Recycle Water Policy. Groundwater data collected in support of this effort shows high levels of nitrate occurring sporadically throughout the Valley, mostly within the upper aquifer where impacts from waste dischargers are first observed. These impacts likely result from anthropogenic activities given that natural nitrate levels in groundwater are generally low (typically under 10 mg/l). Activities in the Valley that may contribute nitrate to groundwater include: (1) excess fertilization of agricultural lands, golf courses or general landscape maintenance, and (2) domestic effluents from septic systems, leaky sewer lines, wastewater ponds, and agricultural ponds.

Eliminating nitrate sources to the Valley's groundwater is paramount to the long term efforts to protect this valuable resource, given that current polluting activities are likely to affect nitrate levels in groundwater for several decades. This is because nitrates typically migrate slowly in soil and

groundwater, with a lag time of several years between the pollution activity and the detection of the pollutant in groundwater, where it may remain for decades.

RECOMMENDATION:

In light of the above and in support of the Regional Water Board's effort to eliminate wastewater discharges from septic systems in the Region to the extent feasible and reasonable, staff proposes to evaluate groundwater data in populated areas of Coachella Valley that are without a community sewer system to determine if a nexus exists between septic systems and nitrate impacts to groundwater. If data indicates "substantive evidence" of degradation, a septic system prohibition may be recommended to the Regional Water Board to protect groundwater in the subject area, as was done in other parts of the Region with groundwater impacts from nitrate (e.g., City of Yucca Valley, Cathedral City Cove). Alternatively, if water quality data is inconclusive, staff may require responsible parties to conduct a subsurface investigation pursuant to the California Water Code (section 13267), or contract with an outside agency (e.g., United States Geological Survey) if funding is available.

Staff proposes to begin groundwater studies in the cove area of La Quinta. This is a residential area with a high density of homes that use septic tanks as the primary method of wastewater disposal. In addition, the cove is located at the toe of the Santa Rosa Mountains where soils are characteristically coarse grained and highly porous/permeable; optimal conditions for the downward migration of wastewater to the Valley's drinking water supply.

RESOURCES REQUIRED:

Approximately 1.5 PYs of existing staff resources.

PRIORITY:

High

PROPOSED COMPLETION DATE:

Mid to late 2018

ISSUE 4: FISH TISSUE STUDY FOR PUBLIC CONSUMPTION ADVISORY

BACKGROUND:

Surface waters located throughout the region support multiple species of game fish. The majority of these waters are impaired, and bioaccumulation of contaminants has been observed in the past. It is known that anglers are taking fish from these waters, and so there exists the potential for consumption of contaminated fish. Currently, there is

insufficient data to establish a useable consumption advisory. Without sufficient data, it cannot be determined if, or to what degree, the consumption of fish is a threat to human health.

RECOMMENDATION: Staff proposes working in collaboration with the Office of Environmental Health Hazard Assessment (OEHHA) to conduct a Region-wide tissue study to characterize the biological health of the Region's fishable waters, and examine the safety of fish consumption by the public. The findings will support the development of fish consumption advisories for the public. The advisories will serve to protect human health by providing the information people need in order to make informed decisions regarding fish consumption.

RESOURCES REQUIRED: At least 1.0 PYs of additional staff resources.

PRIORITY: Medium

ISSUE 5: BIOASSESSMENT STUDY AS A FOUNDATION FOR ESTABLISHING WATER QUALITY BIO-OBJECTIVES

BACKGROUND: There are several natural water ways located within the boundaries of Region 7, some of which have never been monitored nor characterized by the Regional Water Board. Most of these non-perennial and intermittent streams are expected to be relatively pristine, and should be protected.

RECOMMENDATION: Staff proposes to conduct a three-year aquatic ecological assessment of (17) non-perennial and intermittent streams using a core suite of biological, chemical, and physical habitat indicators. The goal is to characterize the chemical and biological health of the Region's natural non-perennial and intermittent waters, the majority of which are located in the western half of the Region. This entails screening for indications of water quality and sediment degradation for aquatic life and related uses, benthic community condition, habitat condition, and physical and chemical condition. It also involves the use of in-situ pressure transducers for the purpose of determining when waters are drying up, and examining how flow conditions are changing over time. The outcome will result in a final summary report, providing the foundation for the establishment of biological objectives for the Region's non-perennial and intermittent streams.

RESOURCES REQUIRED: At least 1.0 PYs of additional staff resources.

PRIORITY:

Medium

SUMMARY

The table below summarizes the issues proposed for the 2014 Triennial Review of the Basin Plan. The table also summarizes resources required to complete each task and their priority.

Issue	Priority	Required Resources
1. ASSESS BENEFICIAL USES OF THE CONSTRUCTED WETLANDS IN IMPERIAL AND COACHELLA VALLEYS	High	Approximately 0.5 PYs of existing staff resources
2. UPDATE DISCUSSION OF SALTON SEA	High	Approximately 0.5 PYs of existing staff resources
3. RESEARCH THREATS TO GROUNDWATER FROM SEPTIC SYSTEM WASTEWATER DISCHARGES IN THE LA QUINTA COVE	High	Approximately 1.5 PYs of existing staff resources
4. FISH TISSUE STUDY FOR PUBLIC CONSUMPTION ADVISORY	Medium	At least 1.0 PYs of additional staff resources
5. BIOASSESSMENT STUDY AS A FOUNDATION FOR ESTABLISHING WATER QUALITY BIO-OBJECTIVES	Medium	At least 1.0 PYs of additional staff resources
Total Resources Required		At least 2.5 PYs of existing staff resources And at least 2 PYs of additional resources