EXECUTIVE OFFICER'S REPORT
September 1, 2025 – September 30, 2025

Contents

1. Personnel Report — *Sandra Lopez*

Vacancies

- Executive Assistant (Associate Governmental Program Analyst), South Lake Tahoe or Victorville. This position is responsible for providing timely and professional analytical assistance to the public and Executive staff within the Board, by phone, email, mail and in person. The AGPA is required to work independently, communicate effectively, manage multiple tasks, formulate recommendations, apply a high level of analytical thinking and problem solve.

- Supervising Engineering Geologist, Victorville. This position will manage the Victorville office. It will plan, organize, manage, coordinate, and report the work of the Protection, Restoration, and Sustainability Division (former South Lahontan Basin Division).

2. **San Bernardino County Local Work Group Meeting in Hinkley** — *Anna Garcia*

The Mojave Desert Resource Conservation District (MDRCD) and the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) hosted the annual San Bernardino County Local Work Group (LWG) meeting at the Hinkley Community Center on September 9, 2025. LWG meetings are a valuable part of the NRCS planning process, providing an opportunity for local land managers to be part of a collaborative effort to improve natural resources within their county. LWG participants help identify where the best investments can be made to address natural resource problems, share the work that has already been done in the county, and share their vision for what the county will look like when these natural resource concerns have been addressed. This locally led process helps inform California's conservation priorities and strategy across the state.

The NRCS Victorville Service Center covers most of San Bernardino County and provides financial and technical assistance to support the resource needs of farmers, ranchers, forest landowners, and agricultural producers. Holly Shiralipour, District Conservationist for the NRCS Victorville Service Center, reported that there are 809 farms, with an average size of 45 acres, identified across their service area. She also identified a decrease in farmed land from 514,234 acres in 2007 to 36,569 acres in 2022. She noted that the USDA is currently undergoing a reorganization, with funding has been removed for climate smart practices implemented under the Climate Change Inflation Reduction Act and for socially disadvantaged categories.

Elizabeth Bickham, Soil Conservationist with the NRCS Victorville Service Center, provided an overview of NRCS Environmental Conservation Programs, including the Emergency Watershed Protection Program (EWPP), Mojave Desert Sentinel Landscape Program (MDSL), Environmental Quality Incentives Program (EQIP), and the Conservation Stewardship Program (CSP). The EWPP is a federal program that offers technical and financial assistance to help local communities relieve imminent threats to life and property caused by floods, fires, windstorms and other natural disasters that impair a watershed. The MDSL unites a broad coalition of state, federal, tribal county, local and non-governmental partners to tackle challenges from incompatible development and climate change. The EQIP provides technical and financial assistance to agricultural producers to address natural resource concerns, such as improved water and air quality, conserved ground and surface water, increased soil health, reduced soil erosion and sedimentation, and improved or created wildlife habitat, and mitigation against drought and increasing weather volatility. Through the CSP, the NRCS helps farmers identify natural resource problems in their operation and provides technical and financial assistance to solve those problems or attain higher stewardship levels in an environmentally beneficial and cost-effective manner.

Tony Winkel, Principal Hydrogeologist for Mojave Water Agency (MWA), gave a presentation entitled “A Tale of Two Dams and A Mostly Dry River”. He described the history and function of the Mojave Forks Dam and the Silverwood Reservoir. He reported on historical stormflows in the Mojave River and discussed water level trends across the MWA service area. He also noted that under the Mojave Basin Adjudication,

groundwater pumpers in the MWA's Alto Subarea were charged almost $15 million during Water Year 2023-2024. The Alto Subarea includes the cities of Victorville, Hesperia, and Adelanto. He encouraged attendees to participate in outreach events related to MWA's upcoming Urban Water Management Plan update and Master Planning efforts.

Susan Kennedy, Chief Executive Officer of Cadiz, Inc., gave a presentation on the Mojave Groundwater Bank. She noted that the extreme drought in the southwest and precipitation falling as rain rather than snowpack will put additional stress on the State Water Project. The Mojave Groundwater Bank proposed by Cadiz, Inc. intends to deliver water from a closed basin system that reportedly receives 10 to 13 inches of rain per year above 4,000 feet. She reported there are 30-to-50-million-acre feet of water available in their system. A stakeholder that grew up in Newberry Springs asked if MWA is working with Cadiz, Inc. to deliver water from Cadiz and refill the Baja Subbasin. Tony Winkel from MWA reported there is no formal agreement between MWA and Cadiz, Inc., but encouraged public participation in MWA's planning efforts.

During the LWG, presentations were also provided by the University of California Agriculture and Natural Resources on selling locally grown produce and the Farm Service Agency (FSA) on farm loans and disaster assistance programs. NRCS staff also requested attendees participate in a survey with the question of "What are the most important resource concerns for the area?" The top five results from the Local Resource Concerns survey were: 1. Source water depletion, 2. Soil limitations, 3. Air quality, 4. Wind and water erosion, and 5. Long-term protection of the land. These prioritized concerns will be shared with state and federal partners to guide future conservation efforts. There may also be future opportunities for collaboration between the NRCS Victorville Service Center, MDRCD, and the Lahontan Water Board on protecting water quality.

3. **Cal State University San Bernardino (CSUSB) STEM and Health Career and Internship Fair** — *John Yu*

On September 17, 2025, I, along with Jagbir Mavi, Staff Services Manager I with the State Water Board's Recruitment Unit, had the privilege of representing the Water Boards at the CSUSB STEM & Health Career and Internship Fair (Figure 3.1). STEM stands for Science, Technology, Engineering, and Math. Our goal was to inform students on understanding the role of the Water Boards in protecting water quality, navigating the CalCareers website, and providing information on potential job openings. We connected with a total of 38 candidates at the fair ranging from various fields:

- Environmental Sciences – 12 students
- Engineering – 10 students
- Information Technology – 10 students
- Administration and Data Science – 14 students

I noted three observations during my discussions with the students (Photo 3.1). First, nearly half of the students were recent graduates and expressed their struggles finding

careers with the current job market. I encouraged them to visit the CalCareers website for openings because though it requires taking an eligibility exam and filling out supplemental questionnaires, this also allows an opportunity for a less competitive pool compared to other career websites such as Indeed or LinkedIn where it is simply uploading a resume and clicking a submit button.

Second, all the engineering students were Computer Science majors. While the Water Board has limited Information Technology (IT) positions, I referred these students to the Research Data Analyst job postings offered at other State of California departments. I recommend that the Water Boards attend career fairs at universities such as University of California in Riverside and Cal Poly Pomona that emphasize all fields of engineering such as mechanical, environmental, chemical, and civil engineering.

Third, CSUSB does have a Department of Geological Sciences, but none of the geology students attended the event. A staff member from the geology department asked me if we can host an event or seminar for the geology students. She mentioned that the students are shy and are more interested in going to events that are geology focused. I replied saying, “They must live under a rock!” and that we would be glad to because the Water Boards are always in need of groundwater experts.

Photo 3.1: CSUSB Career Fair Booth. Water Resource Control Engineer, John Yu, talking to students at the event.

Figure 3.1: CSUSB Career Fair Flyer

4. **I'm a Geologist for the Lahontan Regional Water Quality Control Board** — *Christina Guerra*

Lahontan Regional Water Quality Control Board staff member Christina Guerra, Senior Engineering Geologist, had the privilege of participating in Career Week at Gus Franklin Jr STEM Elementary School, in Adelanto (Photo 4.1). On September 30, 2025, and October 2, 2025, Christina spoke to approximately 140 students in 2nd, 4th, and 5th grades on being a geologist. To engage students, Christina shared photographs of local recent flash flood events from Barstow and Big Bear, landmarks, the Victorville Landfill, the Mormon Rocks in the Cajon Pass, and the CalPortland Oro Grande Cement Plant. Asking the students if they had heard of or were familiar with these landmarks, then sharing how a geologist is involved with the study of and/or construction of the events and landmarks. Information was shared with the students on the education needed to become a geologist and the different geological career fields. Christina discussed her role at the Water Board, emphasizing how much reading and writing her work entails and the importance of communicating well, also detailing her involvement in cleanup, stormwater, and land disposal program sites to ensure water quality protection. Christina concluded the presentation by sharing her love for geology, including being in nature, learning earth's history, resource exploration, protecting water and the environment, working with college friends, and sharing her passion with family.

Photo 4.2 - Christina Guerra sharing her passion for geology with students at Gus Franklin Jr STEM Elementary School, Adelanto.

Students asked several questions: What is your favorite part of your job? What are your hours like? Where have you traveled? What is the oldest rock? How long did you have to go to school for? What made you want to become a geologist? How long does it take

to clean up the groundwater? How are mountains made? Is the trash juice (landfill leachate) in the dirt? Christina's presentation was both informative and engaging, making geology inspiring to young students. The students received Water Board pencils and bookmarks. Students also presented Christina with thank you cards, thanking her for sharing (Figure 4.1).

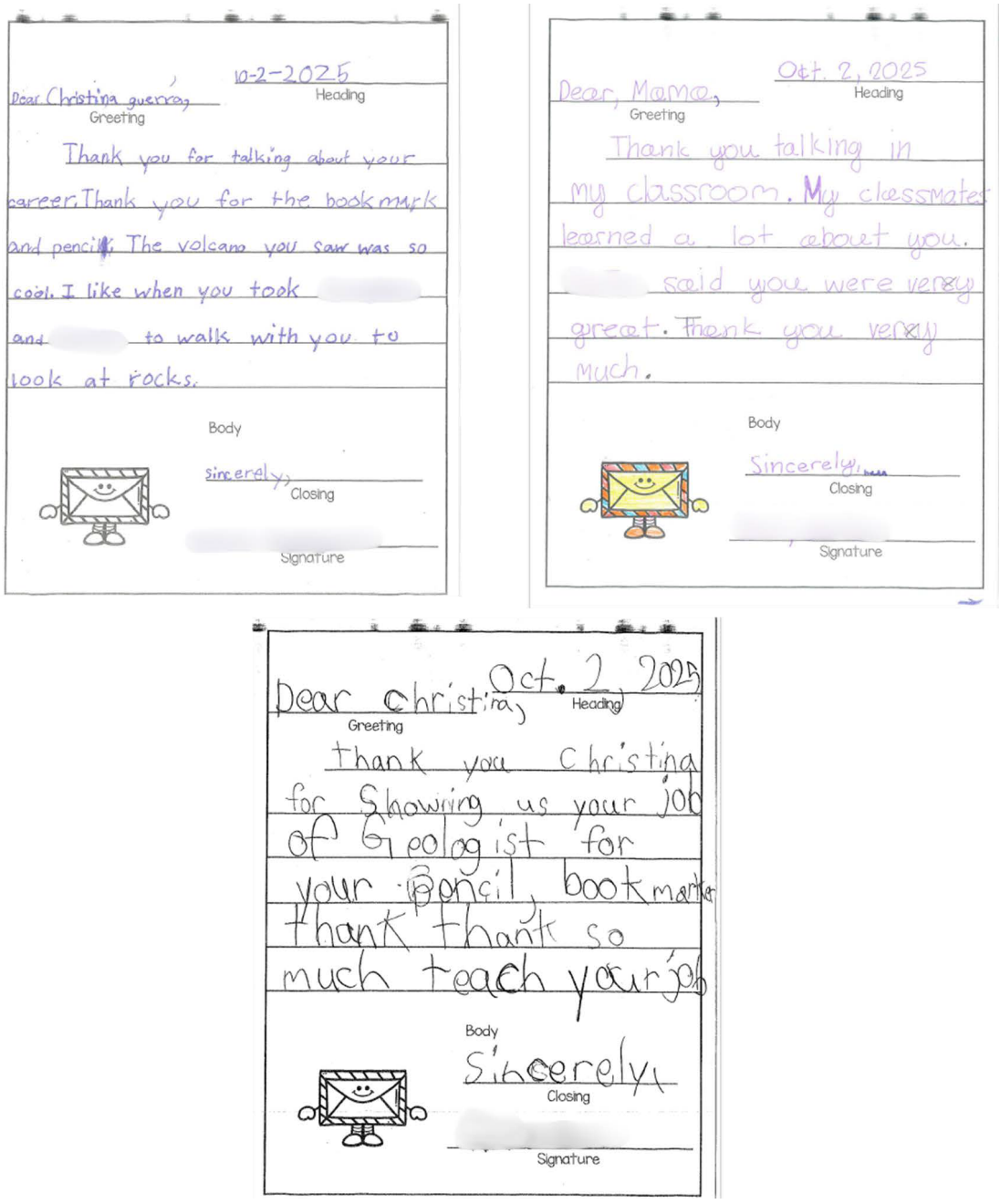


Figure 4.1 - Student thank you cards.

5. Fiscal Year 2024-2025 Climate Change Annual Report — *Laurie Scribe*

This Climate Change Action Plan Annual Report (Annual Report) presents information on progress related to implementation of Resolution No. R6T-2019-0277, the Climate Change Mitigation and Adaptation Strategy (Climate Change Strategy) and Climate Change Mitigation and Adaptation Action Plan (Action Plan), collectively referred to as our Climate Change Program. Resolution No. R6T-2019-0277 directs staff to focus its efforts, as resources allow, to address the impacts of climate change on the four key resource areas identified in the Policy Statements: (1) Protection of Wetlands, Floodplains and Headwaters (2) Protection of Infrastructure (3) Protection of Groundwater Quality & Supply (4) Protection of Headwater Forests and Promoting Fire Resiliency. Water Board staff accomplish this using internal actions related to permitting, enforcement, monitoring, and policy development and through partnerships and support of external efforts.

This Annual Report includes updates on:

- Actions that were completed from July 2024- June 2025 (FY 24/25); see Tables 1 and 4
- Actions that are ongoing and proposed for July 2025-June 2026 (FY 25/25); see Table 2
- Statewide climate-related updates (Table 3)

Table 1. Status Update on Actions Proposed for Fiscal Year 24/25.

FY 24/25 Proposed Actions	Status Update
Updating the Program Plan for the Regional Surface Water Ambient Monitoring Program (SWAMP)	The Program Plan was completed in March 2025. The Program Plan presents driving management concerns, monitoring questions, and specific monitoring focus areas to guide the regional SWAMP and includes a monitoring question related to climate impacts.
Internal Aquatic Invasive Species (AIS) Workgroup	Internal AIS workgroup provides a forum for information sharing and collaboration. The group is working towards developing a consistent approach to permitting the various AIS control measures.
Outreach to partners for Supplemental Environmental Projects	This work was postponed due to position vacancy

In addition to the topics in Table 1, during the 12-month reporting period for this update the Water Board approved five Orders that have a connection to one or more of the Policy Statements. These Board Orders and their nexus to the Climate Change Program are summarized in Table 4 at the bottom of this article.

Table 2. Proposed Actions for Fiscal Year 2025/2026

FY 25/26 Proposed Actions	Description
Surface Water Ambient Monitoring Program, New Monitoring Plan Development	Working with a contractor, the regional SWAMP is developing a new probabilistic based ambient survey design that will help fill regional data gaps, better assess climate impacts, and improve program flexibility in the face of decreased funding.
Finding partners for Supplemental Environmental Projects (SEPs)	There are portions of the Lahontan Region where we lack partners who may be able to implement SEPs. Expanding the network of partners could allow for implementation of additional restoration and water quality improvement projects.
Ongoing participation in the State Board Climate Change Roundtable	Participation in the State Board convened quarterly Climate Change Roundtable to maintain awareness of statewide climate updates and actions taken by other Regional Water Boards. Participation also includes providing comments on updates to climate related statewide plans and policies.

Table 3. Statewide Climate Related Updates

Statewide Program	Description
California's Fifth Climate Assessment – lead by the Office of Land Use and Climate Innovation	The Fifth climate assessment will contribute to the scientific foundation for understanding climate related vulnerability throughout California. This assessment period began in 2022, and final research reports and regional, topical, and statewide synthesis reports are due to be completed in 2026
California's Water Supply Strategy – direct potable reuse (DPR) regulations	In October 2024 the regulations adopted in December 2023 for DPR of treated wastewater became effective. The DPR regulations create new opportunities for the future of water

Statewide Program	Description
	management and resiliency by allowing water system to develop treatment protocols to convert wastewater into high quality drinking water.

Table 4. Summary of Fiscal Year 24/25 Board Orders Supporting the Climate Change Program

Board Order	Description
Board Order R6T-2024-0004	Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order, Sugar Pine Housing Partners LP and Deacon Construction for the Sugar Pine Village Construction Project. The Climate Change Action Plan describes use of enforcement as a tool to ensure protection of water quality. This settlement includes completion of a Supplemental Environmental Project. (September 2024)
Board Order R6-2024-0035	Conditional Waiver of Waste Discharge Requirements for Waste Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (2024 Timber Waiver). The 2024 Timber Waiver is consistent with the Climate Change Program in the following Policy Statements: protection of wetlands, floodplains and headwaters; infrastructure protection; and protection of headwater forests and promoting fire resiliency. Specifically, the 2024 Timber Waiver includes the following requirements and revisions in support of the above resource areas: 1. Inclusion of wetlands within the definition of Waterbody, to provide appropriate protections for wetlands. 2. Operational limitations for work planned within 100-year floodplains. 3. A wide range of infrastructure protection projects are eligible under Category 1 and do not require an application or monitoring and reporting. 4. The expanded scope of vegetation management and prescribed fire allowed under Category 1 and 2 supports the expedience of project implementation in headwater forests and supports climate change resilience. 5. Expand the eligibility of Category 3 to allow responses to all emergency types. 6. Expedited Enrollment supports post fire salvage harvest and recovery. (August 2024)

Board Order	Description
Board Order R6-2025-0016	Revised Waste Discharge Requirements for Desert Oasis Dairy, WDID No. 6B368010002. The revised permit is consistent with the Climate Change Program in that it directly supports the Policy Statement related to protection of groundwater quality and supply. Dairies in the Lahontan Region are in areas where Mountain Front Recharge occurs, and thus, it is important for this dairy (and others) to implement effective source control best management practices to protect groundwater quality. Mountain Front Recharge is the process by which snow melt and rainfall flow through alluvial soils at the base of the mountains to recharge groundwater. Climate Change has significantly affected the source of groundwater replenishment through Mountain Front Recharge, thus putting a higher demand on groundwater resources. With Climate Change, we are also seeing flashier storms and more frequent and stronger flash flood events. With a higher rate of runoff, these types of events limit the amount of Mountain Front Recharge that can occur. (May 2025)
Resolution R6-2025-0018	Resolution approving the revised Local Agency Management Program (LAMP) for San Bernardino County. The revised LAMP is consistent with the Climate Change Program in that it supports the Policy Statement related to protection of groundwater quality and supply and protection of sensitive habitats.

6. **Lahontan Executive Staff Engaged in Regional Septage Disposal Issue in Inyo and Mono Counties** — *Ben Letton*

On September 16, 2025, Lahontan Water Board executive staff virtually attended the regular meeting of the Bishop Area Wastewater Authority (BAWA) to listen in on a discussion about BAWA's potential role in addressing a regional issue associated with septage disposal. The BAWA is a Joint Powers Authority consisting of the City of Bishop and Eastern Sierra Community Services District. The result of the discussion was direction from BAWA's Board of Directors to staff to include consideration of septage receiving capacity in long-term wastewater treatment plant planning and design, both as a contingency and as an opportunity to serve broader regional needs.

The City of Bishop and the Eastern Sierra Community Services District have both been approached by Lahontan Water Board staff to discuss regional septage disposal. Currently, Inyo County's Bishop-Sunland landfill is the only permitted facility that accepts septage in the county. That facility has exceeded capacity for several years, creating the potential need for additional wastewater agencies to assist Inyo County with this issue. The existing septage ponds were designed for a total holding capacity of

approximately 0.1 million gallons and an annual discharge of 450,000 gallons. Since 2001, the demand for septage disposal in the county has exceeded the capacity of the existing ponds. Since 2015, approximately 1 million gallons of septage is disposed of in the ponds annually. In 2024, the Inyo County reported that approximately 1.1 million gallons were accepted and disposed of. Inyo County is currently designing new septage ponds that, if constructed, will have a combined capacity of almost 2 million gallons. The landfill routinely turns away septage haulers, which then reportedly go out of state to Nevada. Lahontan Water Board staff have emphasized the need for redundancy in disposal infrastructure and suggested a 10-year planning horizon would be appropriate.

Mammoth Community Water District (MCWD) located in Mono County, has agreed to temporarily accept out-of-district septage through at least June 2025. They currently have a dedicated septage acceptance process and separate receiving area. MCWD's temporary acceptance demonstrates regional willingness to adapt in times of need. The Water Board has no restrictions other than MCWD must be able to manage the volume of septage they receive and meet the treatment and discharge requirements in their Board Order.

Funding would need to be identified to support new or expanded septage receiving capacity by BAWA. It is the perspective of BAWA that any investment must be revenue-positive (i.e. costs must not be borne by rate payers). The State's Wastewater Needs Assessment may help elevate this issue as a regional priority which may better position The City of Bishop and the Eastern Sierra Community Services District for future grant or low interest low funding from Department of Financial Assistance.

7. **Surface Water Ambient Monitoring Program (SWAMP) Bioassessment** — State Water Board's Surface Water Ambient Monitoring Program Staff

   The following article was written by the State Water Board's Surface Water Ambient Monitoring Program Staff. The article is included in the Executive Officer's Report because it features Lahontan Water Board staff and discusses bioassessment. Historically, bioassessment has been a key component of our region's SWAMP program, used to evaluate stream health and guide management decisions.

CALIFORNIA Water Boards

SURFACE WATER AMBIENT MONITORING PROGRAM (SWAMP)

BIOASSESSMENT

CALIFORNIA'S STATEWIDE PROGRAM

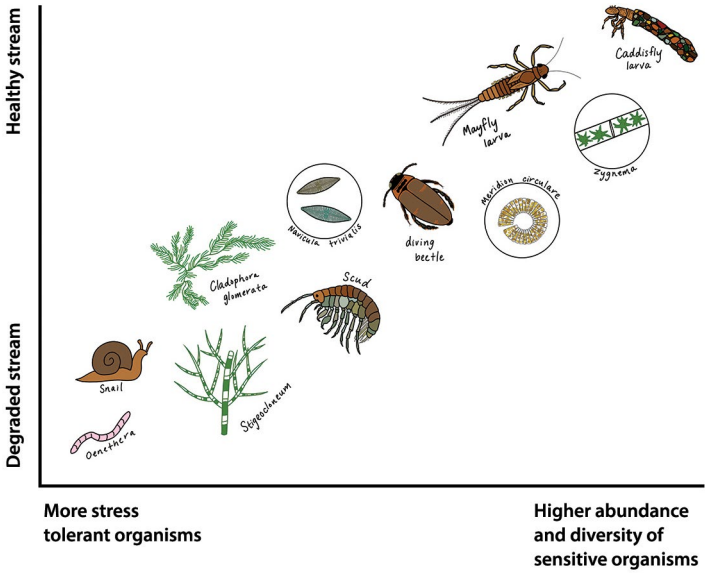
What is the Bioassessment Program?

The Bioassessment Program uses biological data to understand stream health and inform management decisions. Organisms like benthic macroinvertebrates and algae respond to stressors like pollution in predictable ways, so scientists can use this information to evaluate the impacts of environmental stressors on surface waters, such as streams. The Bioassessment Program was established in 2002 to monitor waterbodies statewide and support the State Water Resources Control Board (State Water Board) in its mission to protect and restore the ecological integrity of California's unique and biodiverse waterbodies.

What does the Program do?

First, trained crews collect organisms in the field and take them back to the lab for taxonomists to identify and count. Next, data managers check the results for quality and upload the data to our centralized database. Then, data analysts compare the ecological diversity and composition of the organisms that were collected with what we expect to see in healthy streams to evaluate the condition of the waterbody. Scientists use this information to calculate numerical indices of biological health which can be used to classify waterbodies as healthy or degraded. Finally, we communicate our findings to water quality managers who use these classifications to make decisions regarding whether and how to protect healthy waterbodies and improve the health of degraded waterbodies.

Stream Biology Along a Stress Gradient



This diagram shows examples of algae and animal species that are more prevalent in degraded versus healthy streams. Benthic macroinvertebrates (BMIs) are a group of small but visible animals that live at the bottom of rivers and streams. They are comprised mostly of aquatic insects, crustaceans, mollusks, and worms. BMIs are found in most waterbodies and are reliable indicators of stream health because they are relatively stationary and reflect the combined impact of stressors affecting a waterbody, allowing us to gain an overall understanding of stream conditions. Similarly, algae respond rapidly to nutrient inputs like nitrogen and phosphorus, so changes in their composition may indicate increases or decreases in nutrient runoff.

Illustrations by Elena Suglia

What do we use bioassessment data for?

Calculating biological indices

We synthesize data into biological indices that tell us about stream health, such as the California Stream Condition Index (*see example on next page*) and Algal Stream Condition Index. Some of the ways we use biological indices include evaluating effectiveness of restoration projects and stream protection actions as well as detecting trends in stream health over time. The State Water Board also reports these scores in an Integrated Report that is submitted to the U.S. EPA every two years to identify high quality or impaired waterbodies throughout the state.

Informing statewide policy

Historically, the State Water Board's regulatory policy has focused on reducing chemical pollution, but recently scientists have begun to find innovative ways to use bioassessment data to improve biological health in watersheds.

For example, scientists are developing **Biological Objectives** to include in the Water Quality Control Plan for the San Diego Region. In addition, we are working to incorporate bioassessment data into formal statewide policies such as the **Biostimulation, Cyanotoxins, and Biological Condition Provisions**. This policy aims to regulate the effects of harmful algal blooms and nutrient inputs on waterbody health and ultimately protect the biological integrity of California's waters.

Biological Programs at the Water Boards

Bioassessment is just one of the Water Board programs that uses ecology to understand water quality and its impacts on human health and wildlife. The following programs complement our use of bioassessment data and enable a holistic approach to understanding and improving watershed health throughout California.

SeMMAP
SWAMP eDNA Metabarcoding Monitoring and Analysis Project

Environmental DNA Monitoring

The **SWAMP eDNA Metabarcoding Monitoring and Analysis Project (SeMMAP)** uses cutting-edge technology to assess biodiversity in water-bodies from DNA fragments in the water column.

Healthy Watersheds Protection

SWAMP has led efforts to use biological data to identify and protect high quality and healthy watersheds statewide. This effort has been closely coordinated with the California Water Quality Monitoring Council and the **Healthy Watersheds Workgroup**. The goal is to create a data layer and dashboard that can be used to identify high quality streams, their vulnerabilities to stressors, and help prioritize areas for protection or management intervention.

Case Study: Using the California Stream Condition Index (CSCI)

Field Work

Collect critters

Cache Creek

Taxonomy

Identify critters at lab

Dragonfly...
Caddisfly...
Beetle...

Insects like dragonflies have a larval stage during which they live at the bottom of streams

Assess species present at site

Cache Creek

How many native critters are there? How stress tolerant are the species present?

Calculate CA Stream Condition Index

Cache Creek VS *Healthy site*

Compare the critters found at the site of interest (here, Cache Creek) with the diversity and composition of species expected from similar healthy sites. Healthy streams have more diverse, native species that tend to be more sensitive to environmental stress

Index Score

degraded — *healthy*

Cache Creek

Illustrations by Elena Suglia

Photo credit: Regions 6 and 9 SWAMP Coordinators

Accessing bioassessment data

Data collected by the SWAMP program is summarized in the **SWAMP Data Dashboard**. To use the Dashboard, apply the filters on the left side of the webpage to refine your search. The map on the right will update to display monitoring sites that match your criteria. Click on a site to view or download data for that location. For broader downloads, use the "Data" tab above the map to access data for multiple sites statewide or regionally. All data is pulled from the **California Environmental Data Exchange Network** (CEDEN) database.

Additional Resources

Questions?

Please contact **swamp@waterboards.ca.gov**

- SWAMP Bioassessment Program webpage: **https://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/**
- Bioassessment field work and taxonomy resources: **https://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/taxonomic_resources.html**
- SWAMP home webpage: **https://www.waterboards.ca.gov/water_issues/programs/swamp/**

Our partners

The Bioassessment Program continues to work closely with the California Department of Fish and Wildlife's (CDFW) Aquatic Bioassessment Laboratory, which has been the primary producer of this technical work. SWAMP also collaborates with the following partners to achieve the program's objectives: