



EXECUTIVE OFFICER’S REPORT
December 1, 2024 – December 31, 2024

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1. Personnel Report – *Sandra Lopez*

Promotions

- Mary Fiore-Wagner, Environmental Program Manager I (Supervisor), Compliance and Planning Division, South Lake Tahoe. This position will manage the Division consisting of the following technical programs: Basin Planning & Assessment, Surface Water Ambient Monitoring Program, Non-Point Source, Forestry/Dredge & Fill, Lake Tahoe Total Maximum Daily Load (TMDL), and Regional Monitoring/Climate Change coordination.

New Hires

- Jasmine Enerson, Staff Services Analyst, South Lake Tahoe. This position will provide support to technical and administrative staff, ensure documents comply with accessibility standards, assist with process improvements, prepare agenda items and staff documents for distribution, and provide administrative support at regional board meetings held throughout the region.

Vacancies

- Environmental Scientist, Forestry-Dredge & Fill Unit. The position will apply scientific methods and principles necessary for the protection of water quality within the Lahontan Region. Responsibilities will include such activities as field work, drafting permits, providing technical expertise, evaluating and assisting in

the drafting of environmental documents, making policy recommendations, and performing sensitive assignments throughout the Lahontan Region.

- Water Resource Control Engineer, Forestry-Dredge & Fill Unit. This position will coordinate with the federal land management agencies and the California Department of Forestry and Fire Protection in reviewing timber harvest plans (THPs), Working Forest Management Plans (WFMPs), Non-industrial Timber Management Plans (NTMPs), utility corridor vegetation management plans, and timber harvest exemptions to evaluate the impact of logging operations and other forest practices on the quality and beneficial uses of water. Review projects that may affect waters of the US and state to ensure compliance with the requirements of the Water Quality Control Plan for the Lahontan Region (Basin Plan). Prepare Clean Water Action Section 401 water quality certifications and/or waste discharge requirements (WDRs) for project compliance with all regulatory requirements.
- Environmental Scientist, Cannabis Unit. This position provides regulatory oversight of cannabis cultivation projects under the statewide Cannabis General order.
- Scientific Aid, Regulatory and Enforcement Unit. This position will be reviewing Self-Monitoring Reports submitted from facilities under permit. The reports will be associated with discharges to land, and surface water. The facilities vary from construction sites to wastewater treatment plants.
- Scientific Aid, Non-Point Source and Forestry/Dredge & Fill Units, South Lake Tahoe. This position will review and evaluate water quality data, assist with harmful algal bloom response, and assess compliance with water quality orders and permits associated with grazing, restoration, timber, and forestry activities.
- Senior Environmental Scientist (Sup), Non-Point Source Unit, South Lake Tahoe. This position will provide Senior level responsibility and oversight of NPS Unit staff in making policy recommendations, providing technical expertise, evaluating and drafting environmental documents, and performing sensitive assignments related to NPS water quality issues throughout the Lahontan region and the Lake Tahoe Basin. Project specific work in the Lake Tahoe Basin includes oversight of the implementation of the Lake Tahoe Total Maximum Daily Load and Lake Tahoe's nearshore water quality.

Departures

- Jennifer Watts, Environmental Scientist, South Lake Tahoe. Retired.

2. Restoration Advisory Board and China Lake Partnering Meeting (Ridgecrest, CA), December 3-5, 2024 – Omar Pacheco and Chris Avalos

Lahontan Water Board staff, Jan Zimmerman, Alonzo Poach, Omar Pacheco and Christopher Avalos attended a Naval Facilities Engineering Systems Command, Southwest Division (Navy) Restoration Advisory Board (RAB) meeting on December 3, 2024. The RAB is a way the Navy seeks input from members of the public and shares information on the restoration activities on Naval Air Weapons Station China Lake (NAWS China Lake). The RAB members are made up of four Ridgecrest community members who have volunteered to help oversee the Navy's environmental cleanup at China Lake. RAB members typically review and provide comments for Navy documents on behalf of Ridgecrest community members. The meeting marked the commencement of Navy-lead RAB Meetings. The last RAB meeting was held on March 10, 2020. RAB meetings were suspended during the COVID-19 pandemic. The Navy presented an update on the following ongoing China Lake projects to the RAB members and other members of the public that were in attendance.

Basewide Per- and Polyfluoroalkyl Substances (PFAS) Site Inspection - An overview of the nature of PFAS compounds was provided as well as a historical outline of PFAS investigations at China Lake. In addition, the Navy consultant provided an outline of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process for the RAB members and how each PFAS investigation phase fits into the CERCLA process. A total of 53 Areas of Interest (AOIs) were identified during the preliminary assessment (desktop investigation reviewing historical information from all China Lake sites, area of concerns, and areas of interest). Out of the 53 AOIs identified during the preliminary assessment, 30 were investigated as part of the basewide site inspection (to determine the absence or presence of PFAS compounds), 8 AOIs were previously confirmed to have PFAS releases and were automatically moved forward to the remedial investigation phase of the CERCLA process, and 15 AOIs are aircraft crash sites whose locations were not documented. Based on the Basewide PFAS site inspection, 14 AOIs (as well as the 8 AOIs that were previously confirmed to have PFAS impacts) were recommended by the Navy to move forward to the remedial investigation state of CERCLA, where nature and extent of contamination will be determined; three AOIs were determined to have limited, low-level PFAS impacts to the environment; and 13 AOIs were determined to have no impacts greater than PFAS screening levels. The Navy is prioritizing sites with the highest PFAS impact before cycling back to investigate the lesser impacted sites. Crash PFAS impacts will be assessed in the future if or when the crash sites are identified.

Landfill Operable Unit (OU) Remedial Investigation/Feasibility Study - The Landfill OU is comprised of 24 Installation Restoration Program (IRP) Sites and Areas of Concern (AOCs) and is composed of disposal sites (buried and surface wastes) throughout China Lake. The Landfill OU was formally organized in 2016; prior to that, a limited number of landfill sites had been investigated independently of each other. Between 2016 and 2021, sampling plans for site inspections and remedial investigations were developed. Due to contractual issues, implementation of these sampling plans was performed at most, but not all the planned Landfill OU sites. Implementation of

remaining Landfill OU site sampling plans is on-going in 2024. A new sampling plan was developed and finalized in August 2024 and included the following goals:

- Fill in existing data gaps at all sites;
- Complete sampling that was planned in 2021 that could not be completed due to contractual limitations; and
- Collect additional rounds of groundwater and soil vapor samples

Installation Restoration Program (IRP) Site 87-B Time-Critical Removal Action - IRP Site 87-B is a former Navy residential housing area that was demolished in the late 1990s and early 2000s. Building demolition debris remained at the site including asbestos-containing material and lead-containing paint. The Navy initiated a time-critical removal action (TCRA) at the site to remove the asbestos containing material and lead paint materials. The Navy consultant provided a summary of this time-critical removal action. The TCRA involved setting up grids across the site and systematically inspecting those grids. While crews walked/inspected the grids across the site they manually removed surface debris across approximately 53 acres. In total, 22,000 pounds of asbestos and 250 pounds of lead containing materials were picked up off the ground surface and transported offsite for proper disposal (Photo 2.1).



Photo 2.1: Photo showing a Navy consultant field crew collecting asbestos-containing material and lead-containing paint during the time-critical removal action at Site 87-B.

Lahontan Water Board staff, Jan Zimmerman, Alonzo Poach, Omar Pacheco and Christopher Avalos also attended an all Tiers I/II/III China Lake Partnering meeting on December 4 and December 5, 2024, at NAWS China Lake. The Tiers I/II/III group is comprised of 13 members with Tier I designated as DTSC, Water Board, and Navy remedial project managers, Tier II designated as DTSC, Water Board, and Navy first-line supervisors, and Tier III designated as DTSC, Water Board, and Navy managers. Nancy Rouse and Wayne Richard from *The Management Edge* facilitated the meeting with scribes Krysten DeBroka and Kristy Gonzales taking meeting notes and documenting consensus decisions. We discussed the following meeting topics.

Organization Updates – The Tier III Navy manager, Alison Cantu, provided organizational updates. We discussed the departure of the Navy’s first-line supervisor, Si Le, who plans to retire at the end of December 2024. The open position has not been backfilled but will be filled with interim manager rotation.

Per-and polyfluoroalkyl substances (PFAS) Update – The Tier III Navy manager discussed the September 2024 Department of Defense (DoD) Memorandum for Prioritization of DoD Cleanup Actions to Implement Federal Drinking Water for PFAS under Defense Environmental Restoration Program. This memorandum describes DoD’s plans to incorporate the drinking water rule into DoD’s ongoing PFAS cleanups and directs DoD to initiate removal actions to address off-base drinking water wells/systems where levels of PFAS chemicals are at or above three times the federal drinking water standard for PFAS.

Mojave Tui Chub Update – The Tier III Navy manager, Donna Ogilvie, and Tier I Navy manager, Samantha Knolle, provided the status of the on-base Mojave Tui Chub population, last surveyed at 6,000 fish, and the forthcoming Ground and Surface Water Interaction Study for Portions of the Lark Seep System near active restoration/cleanup sites. The Lark Seep system is a series of natural springs and man-made channels that exist on China Lake that serve as habitat for the Tui Chub. The United States Forest Service and California Department of Fish and Game introduced approximately 400 Tui Chub to the Lark Seep system in 1971 and the Navy has maintained the population since that time.

Site Tour – All Tiers I/II/III toured several cleanup sites, including the asbestos removal site (IRP Site 87-B), the soil stockpiles at AOC 213 (NOTS Construction Camp), and various sites that are located throughout NAWS China Lake, such as Main Site, Main Gate, George Range, and Propulsion Laboratories. The tour group also visited several landfill sites and portions of the Lark Seep system that is habitat for the Tui Chub.

FY25 Goals and Execution Plan – The Tier III Navy manager, Alison Cantu, and Tier I Navy manager, Samantha Knolle, discussed the goal of finalizing several documents in FY25, such as *Site Inspection Report for Basewide PFAS*, *Management and Monitoring Approach Sampling and Analysis Plan for Basewide Groundwater Monitoring Program*, and *Sampling and Analysis Plan Remedial Investigation, IRP Site 80*. They also discussed proposed projects, such as the Data Gap Investigation for IRP Sites 31 and 32, that are awaiting funding.

Partnering Exercise/Teambuilding – Nancy Rouse and Wayne Richard from *The Management Edge* facilitated an active Team exercise to facilitate team building and partnering. As part of that exercise, we celebrated the contributions of the soon to be retired Navy Tier II supervisor, Si Le, to the success of the partnering program and to the ongoing restoration efforts at NAWS China Lake. Mr. Le will be missed by the group.

3. New Dairy Strategy for Regulating Confined Dairy and other Cattle Facilities Presentation at the Mojave Water Agency – John Morales

Water Board staff, John Morales and Reginald Tan, participated in the bi-monthly Mojave Technical Advisory Committee (TAC) meeting held at the Mojave Water Agency headquarters in Apple Valley on December 5, 2024. Staff presented the “New Dairy Strategy for Regulating Confined Dairy and Other Cattle Facilities” as an agenda item during the meeting.

The meeting was called to order at 10:00 a.m. Attendees included members of the Mojave TAC, stakeholders, personnel, and directors from the Mojave Water Agency, High Desert Water, Big Horn Desert View Water Agency, and private residents from Newberry Springs. Among the attendees were dairyman Jack Van der Hulst of Desert Oasis Dairy and his consultant, Jim Griffin.

During the meeting, John Morales, P.E., delivered a PowerPoint presentation outlining the new dairy strategy, which involves pivoting from adopting a General Order to issuing individual Orders to dairies in the Region. Following the presentation, staff addressed numerous questions from the audience. Topics included an explanation of nitrate-N time-series plots using data from a closed dairy, potential financial incentives or considerations for implementing extensive Best Management Practices (BMPs), ensuring fairness in requirements for active and closed dairy sites, proper BMPs for dairy operations, the general handling and destination of manure removed from dairies, and whether facilities other than dairies might be subject to regulation. Mr. Morales provided comprehensive answers to all questions, and the public expressed satisfaction with the responses. The next Mojave TAC meeting is scheduled for February 6, 2025. The agenda for that meeting has not yet been published.

4. Eagle Lake Newsletter (January 2025)—Ben Letton and NPS Staff

In 2018, the Lahontan Water Board received public complaints and documentation of potential threats to water quality from livestock grazing activities along the shores of Eagle Lake, California. As required by the Lahontan Basin Plan, Lahontan Water Board staff inspected the Eagle Lake Basin in late 2018, documenting evidence of potential Eagle Lake shoreline grazing impacts. In response, the Lahontan Water Board has required all private and federal shoreline grazing operations along Eagle Lake to submit either existing or newly developed Grazing Management Plans to protect water quality.

Since May 2019, Eagle Lake shorefront property managers and owners who maintain livestock are required to submit annual grazing plans to the Water Board before the start of grazing operations each year. The Water Board has received adequate plans every year to date. Federal land managers submit Annual Operation Instructions for each allotment, while private property owners submit Rangeland Water Quality Management Plans each season. The grazing management plans should demonstrate an overall reduction of animal waste to the shore of Eagle Lake through the application of management techniques.

Since 2019, Water Board staff have developed a newsletter to communicate our efforts to protect water quality in the Eagle Lake watershed. For more information, please see each year's issue here: [2019](#), [2020](#), [2021](#), [2022](#), [2023](#), [2024](#). And, if interested, check out our Non Point Source web page on Rangelands and Grazing [Rangelands and Grazing | Lahontan Regional Water Quality Control Board](#) and please [subscribe](#) to receive the annual Eagle Lake newsletter. Below is the most recent issue of the Eagle Lake Newsletter. [2024-eagle-lake.pdf](#)

Welcome

The Lahontan Regional Water Quality Control Board developed this newsletter to communicate our efforts to protect water quality in Eagle Lake. For more information, visit our [Rangelands and Grazing webpage](#).

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2024 Grazing Management Plans and Inspections

This was the 6th year the Lahontan Water Board received grazing management plans from property owners and managers with lakefront grazing operations along Eagle Lake. The goal of these plans is to minimize livestock waste from entering the lake. All plans have been received before the grazing operation began each year.

In late September, Water Board staff conducted four site inspections with private and public grazing owners and/or managers.

Observations indicated that overall livestock grazing is being managed in a sustainable manner and contact with lake water is minimal.

Ranchers are using a variety of strategies to keep cattle away from the lake's edge, such as setting up alternative water sources and mineral licks, keeping gates closed, and using fencing. In some spots, the shoreline's deep mud naturally prevents cattle from accessing the lake. However, on firmer, rocky shorelines, like those southwest of Spalding, cattle have easier access to the water.

It's essential to maintain drinking water alternatives, like the one shown here, in both rocky and muddy areas, not only to keep cattle safe and hydrated, but also to protect water quality. Similar to last season, the Water Board received no complaints regarding grazing this year.



Nutrient Trends & Future Monitoring Plans

From 2019 to 2023, water quality monitoring in Eagle Lake showed that nutrient levels did not meet the standards set by the [Lahontan Basin Plan](#) to protect the intended water uses. Both total nitrogen and total phosphorus levels regularly exceeded the limits at all testing sites, with phosphorus surpassing the thresholds during all sampling events. Sources of nutrients may be naturally occurring or stem from human causes in Eagle Lake, but as of today, more data is needed to accurately determine the specific origins. Due to the limited availability of partners and Water Board staff, nutrient monitoring was discontinued in 2024, and no nutrient

Partner Update

By Paul Divine, CA Department of Fish and Wildlife (CDFW)

Angler Update: Last year's fishing season, from 05/27/23 to 02/29/24, provided the best angler results observed in 20+ years with the highest percentage of trout over 3, 4, and 5 lbs. While the 2024 fishing data hasn't been fully analyzed yet, early comparisons to Sept and Oct 2023 show lower success rates for anglers this year, with fewer fish being caught per hour. On a positive note, the average size of the fish has increased by more than half an inch (now averaging 18.64 inches), though their weight remains the same at an average of 2.85 pounds. The growth rates for recently stocked trout appear similar to last year, with most growing about 1.5 to 2 pounds per year.

2024 Spawning Efforts: In March, trout were captured at the fish trap on Pine Creek to collect eggs and help with artificial spawning. CDFW caught and released 1,315 adult trout, which spawned 412 pairs and produced about 1.5 million fertilized eggs. Once these eggs hatch, some of the trout will be raised for a year and then released into Eagle Lake. In 2024, around 185,000 trout were released into the lake. During March and April, the fish ladder was open to let trout migrate upstream for natural spawning. Some of these fish successfully spawned, and young trout were seen swimming downstream to Eagle Lake.

sampling is planned for 2025 because of a decrease in state funding for monitoring programs due to the ongoing budget deficit. If you are interested in viewing Eagle Lake water quality data, visit the [CEDEN Query Tool](#), or see the new and more user friendly, [SWAMP Data Dashboard](#). The nutrient data will likely keep Eagle Lake on the 303(d) list, which is a list of waterbodies that aren't meeting water quality standards and need extra attention to fix pollution or other problems.

Eagle Lake Partnership Summit

On November 19, the Eagle Lake Partnership held its annual summit, bringing together representatives from eight land management agencies, three non-profit organizations, two Native American tribes, and a private timber company to clarify organizational structures, establish goals, and determine next steps for the group. This partnership is focused on improving forest and watershed restoration to help protect and strengthen the Lassen National Forest Eagle Lake Ranger District's natural resources.



The Eagle Lake Partnership's roots go back to 1987 with the formation of the Coordinated Resources Management Planning Group to improve Eagle Lake Rainbow Trout habitat through meadow and upland restoration work. Since then, the partnership has grown to address wider land management goals, including wildfire recovery, grazing, and the changing needs of the local community.

Jennifer Callahan, a Lahontan Water Board Environmental Scientist, has been involved in the partnership efforts for several years. She gave a presentation at the November summit to help clarify permitting processes and environmental laws related to restoration work, making it easier for the group to navigate these requirements.

Other groups involved in the summit included American Rivers, Pit River Tribe, Forest Creek Restoration, Trout Unlimited, and several other organizations. Presentations covered a variety of topics, ranging from the introduction of the new Pine Creek Project tracker, which helps agencies stay up to date across the watershed, to informational items, and data summaries. By the end of the summit, the group had clarified important next steps, such as defining the partnership's project scope and geographic boundaries.

Fast Facts

- Eagle Lake is one of the largest natural lakes in California.
- It is also home to the rare Eagle Lake trout, which is found nowhere else in the world.
- Eagle Lake is named after the bald eagles that call it home.
- Pine Creek is the main tributary of Eagle Lake and is 39 miles long, but only the upper approximate 6 miles have year-round flows.
- The lake is "endorheic," which means it doesn't have any natural way for water to flow out. As a result, the water becomes very salty and full of minerals, creating a unique environment for plants and animals.



Overview of Wastewater Systems & Compliance Efforts

The Lahontan Water Board helps protect Eagle Lake's water quality from untreated domestic wastewater through the rules and restrictions outlined in the [Statewide Sanitary Sewer Systems General Order](#).

For example, water that comes from everyday household activities, like flushing toilets, taking showers, washing dishes, and doing laundry would all be considered domestic wastewater. This includes everything that goes down the drains from sinks, tubs, and toilets in homes and businesses. This water often contains things like soap, food particles, and human waste, and needs to be treated before being released back into the environment. There are three domestic wastewater collection and treatment systems in the area subject to the statewide requirements:

Spalding Community Services District owns and operates the sanitary sewer collection system and wastewater evaporation ponds that serve Spalding Tract. In May of 2024, after notification of spills from the collection system, the Water Board performed a compliance inspection of the collection system and the wastewater evaporation ponds. While there were violations identified during the inspection, there is no imminent threat to water quality. The Water Board is working with Spalding Community Services District to identify solutions to repair the aging infrastructure and identify potential funding sources available.

Stones-Bengard Community Services District owns and operates a sanitary sewer collection system and wastewater disposal pond that serves the Stones-Bengard subdivision. Water Board staff inspected both in May 2024 and found no violations. The collection system is functioning as designed and the treatment ponds have adequate capacity to treat and dispose of the domestic wastewater.

Eagle Lake Recreation Area Collection System and Wastewater Treatment Plant, run by the U.S. Forest Service, serves the Merrill Campground. The wastewater treatment ponds were last inspected by Water Board staff in 2019 and no violations were identified. This facility is scheduled to be inspected in 2025 when the campground opens for the summer months.

For more details about these systems, you can visit the [California Integrated Water Quality System Project](#) or reach out to Trevor Miller at 530-542-5430 or via email at trevor.miller@waterboards.ca.gov.



Monitoring HABs for Safe Recreation

In 2024, HAB monitoring took place at Eagle Lake prior to Labor Day, as part of the State's efforts to gather data from popular recreational sites before busy holiday weekends. Samples were collected from the Spaulding Boat Ramp and Christie Day Use areas, revealing the presence of cyanobacteria but no genes capable of producing toxins.

A second sampling event occurred after a report of a dog death at Gallatin Beach, with analysis again showing the presence of cyanobacteria but no toxins. Despite these findings, the illness workgroup could not definitively link the dog's death to HAB exposure due to insufficient information.

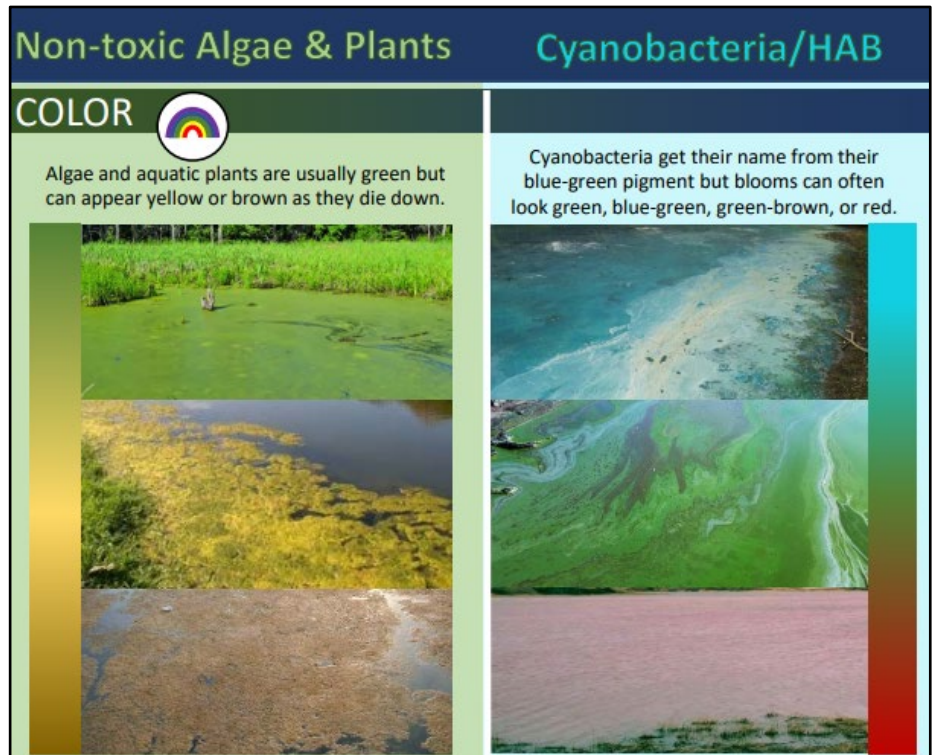
These isolated monitoring efforts highlight the importance of regular sampling and collaboration to protect Eagle Lake's ecological and recreational health. Visually, cyanobacteria were present at all sampled locations, including the North Basin, prompting caution advisories due to the potential for rapid changes in toxin levels.



Bucks Bay in Eagle Lake July 2024

Understanding Harmful Algal Blooms

Harmful Algal Blooms (HABs), caused by cyanobacteria, thrive in warm, nutrient-rich waters and can pose risks to humans, pets, and wildlife. While not all cyanobacteria produce toxins, those that do can lead to health issues ranging from skin irritation to severe illnesses. Visual indicators, such as green or blue scum on the water's surface, may suggest a bloom, but laboratory testing is necessary to confirm the presence of toxins. Toxin conditions can change rapidly from location to location and even during different times of the day. Because of this you are your first line in defense against the dangers of HABs, and it is important to understand what they look like and what to do if you encounter them.



How to protect yourself and your pets if you think a HAB is present?

- **Stay Away from Blooms:** Always follow posted advisories and avoid algae and scum on the water or on shore.
- **Keep Children and Pets Safe:** Don't allow children or pets, especially dogs, to swim, drink, or eat scum from the water or shore.
- **Avoid Harmful Mist:** Stay clear of areas downwind of a bloom to avoid inhaling any harmful sprays or mists.
- **Be Cautious with Activities:** Skip high-speed boating, water skiing, or any activity that might stir up the toxins.
- **Don't Drink or Cook with Contaminated Water:** Always use clean water for drinking and cooking and wash off with fresh water after swimming or playing in the water.
- **Handle Fish Carefully:** If you catch fish, discard the guts and clean the fillets with tap or bottled water before cooking.

Questions or Comments about HABs in the Lahontan Region?

Please email Sabrina Rice at sabrina.rice@waterboards.ca.gov.