CALIFORNIA WATER BOARDS Lahontan - R6

Eagle Lake Newsletter

Issue No. 7, February 2026

Welcome

The Lahontan Regional Water Quality Control Board developed this newsletter to communicate various efforts to protect water quality in Eagle Lake.

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In This Issue

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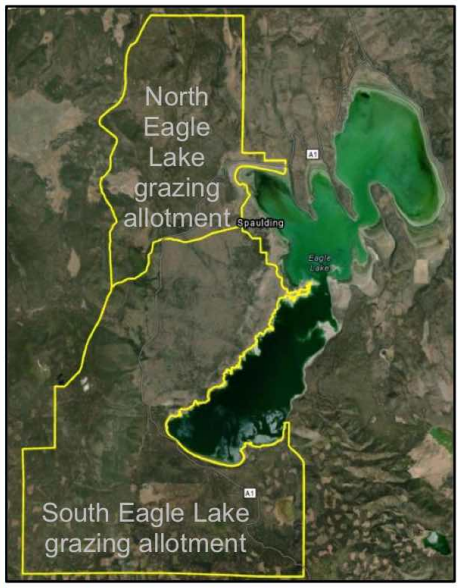
2025 Grazing Management Plans and Inspections

In 2025, lakefront operators submitted updated grazing management plans, which Water Board staff reviewed and deemed adequate for minimizing the potential of livestock waste to reach Eagle Lake.



In late August, Water Board staff inspected the South Eagle Lake grazing allotment, which is managed by the U.S. Forest Service's Lassen National Forest Eagle Lake Ranger District. Historically, this area generated the most concerns about cattle. However, since 2022, no complaints have been reported for this allotment or anywhere else in the Eagle Lake area. Only eight cows utilized the allotment this season, leading to minimal cattle impact. This is evident in the photo below, where the shoreline shows no hoof prints.

During the inspection, Water Board staff noted that the allotment's only upland water source was not functioning, making Eagle Lake the primary drinking water option for livestock. Forest Service staff indicated that plans to repair the off-lake drinking water system will be considered during next year's budget discussions. Even so, Water Board staff found the grazing allotment to be responsibly managed, noting adequate stubble height along the shoreline, supplements appropriately placed to draw cattle far away from the lake, and fences and gates in good condition. No cattle grazed the North Eagle Lake allotment in 2025.

For more information, please see the January Executive Officer's Report or visit our Rangelands and Grazing webpage.

Science at Eagle Lake: Linking Water Quality, Fish, and the Watershed

By Katie Senft, Senior Specialist, University of Nevada, Reno

Eagle Lake, California, is a special place. Not only is it the second-largest natural lake in the state and a destination for world-class angling, it is also home to one of California's last remaining entirely native fish communities. At a time when invasive and introduced species dominate many lakes and rivers, Eagle Lake stands apart.

Along the shallow edges of the lake, speckled dace and Lahontan redside shiners, both native minnows, move through the tule beds. In deeper waters, Tahoe suckers, tui chub, and the iconic Eagle Lake rainbow trout complete this unique ecosystem. Protecting and understanding this native assemblage is a priority for scientists and managers alike.

To better understand the current health of Eagle Lake and identify challenges that may lie ahead, the University of Nevada, Reno (UNR), in collaboration with the California Department of Fish and Wildlife (CDFW) and Trout Unlimited, has launched a comprehensive research and education effort focused on the lake's fishery, food web, water quality, and watershed.

UNR research teams began fieldwork in April 2025 and will continue quarterly monitoring of the lake's ecosystem. Fish populations are studied using nets set along the shoreline and at different depths to learn which species are present, where they are found, and how those patterns change through the seasons. Scientists collect information on fish size, age, and diet to compare today's populations with those documented in past studies.

To better understand what supports these fish populations, researchers also collect small aquatic organisms, such as plankton and insects, that form the base of the lake's food web. These samples help determine which food sources are most important to different species. In addition, approximately 400 adult Eagle Lake rainbow trout were tagged and released last spring, with plans to tag thousands of additional sub-adult trout in 2026. Tracking these fish over time will help scientists understand growth rates and survival of this endemic trout.

Water quality is another key focus of the project. Researchers measure temperature, clarity, algae levels, and other indicators that influence fish habitat. As Eagle Lake's water levels have declined in recent years, understanding how these changes affect the lake and its aquatic life has become increasingly important. The project also includes work on Pine Creek, the lake's largest inflow, to better understand historical water use and how ongoing and future restoration efforts could improve flows into the lake.

At the conclusion of the study, data collected during this project will be combined with historical records to provide a clearer picture of how Eagle Lake has changed over time. These findings will help resource managers and partners make informed decisions to support a healthy fishery, guide restoration investments, and ensure the long-term future of Eagle Lake's native trout and the ecosystem they depend on.

Overview of Wastewater Systems & Compliance Efforts

Protecting Eagle Lake's water quality requires oversight of several sewer treatment and collection systems serving the surrounding communities and recreation areas. In 2025, inspections were performed on these systems to ensure ongoing compliance with permit requirements.

Treatment System Inspections

Eagle Lake Recreation Area Wastewater Treatment Ponds, operated by the U.S. Forest Service, provide wastewater treatment services for the south shore campgrounds and marina at Eagle Lake. Wastewater collected in the campground area is pumped uphill through a two-mile pipeline to the treatment site and then flows through two settling ponds and four evaporation ponds. The ponds are lined with heavy-duty plastic to protect groundwater, and the liners installed in 2012 continue to perform as intended. In June 2025, Water Board staff inspected the facility and confirmed compliance with its discharge permit. Although the pond liners show signs of weathering, the U.S. Forest Service closely monitors liner condition as part of routine maintenance to ensure long-term protection of water quality.

June 2025 Inspection

Spaulding Aug 2025 Inspection

Collection System Inspections

The State Water Board in Sacramento has been making recent efforts to inform service districts and other public entities of the requirements of the Statewide Sanitary Sewer Systems General Order. Staff from the Lahontan Water Board in South Lake Tahoe joined the State Water Board on wastewater collection system (sewer) inspections for both Stones-Bengard Community Services District and Spalding Community Services District (CSD). These sewer systems are unique in that they rely primarily on pressurized pipes and pumps to move wastewater, rather than gravity-fed, unpressurized pipes.

Stones-Bengard Community Services District owns and operates a sanitary sewer collection system and wastewater disposal pond that serves the Stones-Bengard subdivision. Inspection of this system occurred on August 18th. The inspection was centered around a questionnaire developed by State Water Board staff related specifically to the sanitary sewer collection system. The goal of the inspection was to determine if Stones-Bengard CSD was complying with all components of the Sanitary Sewer General Order. While there were violations identified throughout the course of the inspection, there were no imminent water quality threats identified.

Spalding Community Services District owns and operates the sanitary sewer collection system and wastewater evaporation ponds that serve Spalding Tract. Inspection of this system occurred on August 19th. The inspection was centered around the same questionnaire developed by State Water Board staff related specifically to the sanitary sewer collection system. The goal of the inspection was to determine if Spalding CSD was complying with all components of the Sanitary Sewer General Order. While there were violations identified throughout the course of the inspection, there were no imminent water quality threats identified.

Staff at the Lahontan Water Board have also been working with the State Water Board's Division of Financial Assistance to evaluate grant opportunities for improvements to the Spalding CSD wastewater collection and treatment systems. Staff are currently reviewing eligibility criteria for Spalding to determine if the CSD would qualify for the State grant program.

For treatment system questions, email kristin.tokheim@waterboards.ca.gov

For collection system questions, email michael.reese@waterboards.ca.gov

Spot a Bloom? Here's What to Do

You are the first line of defense against harmful algal blooms. Knowing what they look like and how to respond is essential.

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

Stay Away from Blooms
Follow posted advisories and avoid algae or scum on the water or shore.

Keep Children and Pets Safe
Do not allow swimming, drinking, or eating scum from the water or shore.

Avoid Harmful Mist
Stay clear of areas downwind of a bloom to avoid inhaling spray or mist.

Be Cautious with Activities
Skip high-speed boating, water skiing, or anything that stirs up toxins.

Don't Drink or Cook with Contaminated Water
Use clean water for drinking and cooking, and rinse off after water play.

Handle Fish Carefully
Discard guts and rinse fillets with tap or bottled water before cooking.

From Sampling to Satellites: How We Detect 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 cause health issues from skin irritation to severe illness. Green or blue scum on the water may indicate a bloom, but only lab testing can confirm the presence of toxins.

To protect public health in 2025, Eagle Lake HAB monitoring was conducted ahead of the 4th of July holiday at Spaulding Boat Ramp and Christie Day Use area. The samples showed the presence of cyanobacteria and a low amount of microcystin, a toxin they can produce, at Christie Day Use. Because microcystin can pose health risks to people and pets, a caution advisory was issued for that location.


Christie Day Use June 2025

Beyond local sampling, the Water Board sponsors a satellite-based mapping tool that estimates cyanobacteria and chlorophyll-a (Chl-a) levels in large waterbodies across California. Chl-a is a pigment that cyanobacteria often produce and can sometimes be an early indicator of cyanobacteria growth. The tool displays data for about 250 waterbodies, showing bloom extent and how bloom concentrations vary over time.

Users can view statewide conditions or zoom into specific waterbodies, toggling between cyanobacteria and Chl-a data or comparing both under the "comparison graphs" tab. Additional help and instructions are available within the tool.

It's important to understand its limitations of this tool. Satellite data can prompt field verification but should not be used for regulatory decisions or health advisories.

- The map estimates cyanobacteria and Chl-a near the surface.
- It does not show toxin concentrations or advisory status.
- Data reflects 1- and 10-day windows, not real-time conditions, and may be impacted by cloud cover.
- All data is provisional.

Managed by the San Francisco Estuary Institute under contract with the Water Boards and using NOAA data, this tool provides helpful provisional information for planning recreation and identifying potential HABs before heading out.

Questions or Comments about HABs?
Email Sabrina Rice at sabrina.rice@waterboards.ca.gov

2025 Angler and Spawning Updates

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

Angler Update

Last year's fishing season continued to provide some of the best fish quality in the last 20 years, shown by length vs weight relationships (Table 1). However, catch rates dropped substantially from 2023.

While the 2025 fishing data hasn't been fully analyzed yet, early comparisons to Sept and Oct 2024 show much higher success rates for anglers this year, with more fish being caught per hour.

On the other hand, a high percentage of young (recently stocked) fish were caught this season. This resulted in the average size decreasing to 17.36 inches and 2.34 pounds, but fish are maintaining a very healthy condition factor.

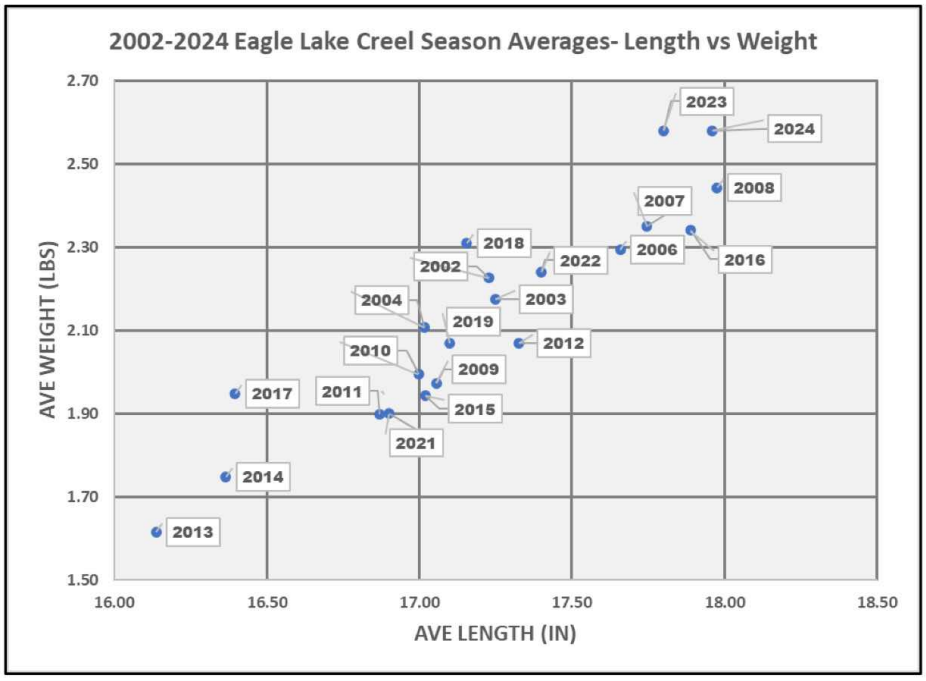


Table 1: Creel season is opening day to the end of October (no data for 2005 and 2020)

This is a good indication, showing there is a large proportion of younger fish that will be out there for next year, and will be much larger. The growth rates for recently stocked trout appear similar to last year, with most growing about 1.5 to 2 pounds per year.

Spawning Efforts

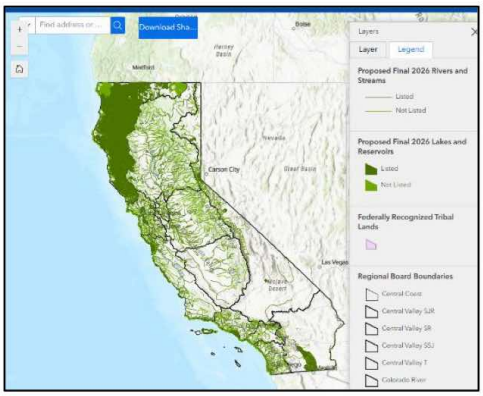
In March and April, trout were captured at the fish trap on Pine Creek and within Eagle Lake to collect eggs for the hatchery rearing program. CDFW caught and released 1,690 adult trout, spawned 322 pairs which produced about 1.05 million fertilized eggs.

Once these eggs hatch, some of the trout will be raised for a year and then released into Eagle Lake. In 2025, 160,000 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.

2026 Integrated Report: Updates to the 303(d) List

Clean Water Act (CWA) Section 303(d) requires states to identify waterbodies that do not meet water quality standards. Waterbodies which do not meet water quality standards are placed on the CWA Section 303(d) List (303(d) List). The 303(d) list identifies the pollutants, or stressors, causing water quality impairments and establishes a schedule for developing Total Maximum Daily Loads or TMDLs to restore and maintain water quality. CWA section 305(b) requires States to prepare and submit to USEPA a report on the overall water quality conditions for all navigable water bodies in the State. California develops an Integrated Report which satisfies the requirements of CWA Sections 303(d) and 305(b).



Click the map above to access the Visualization Tool for the 2026 California Integrated Report

The 2026 Integrated Report was adopted by the State Water Resources Control Board at its February 3, 2026, public meeting. Next, the report will be submitted to the U.S. Environmental Protection Agency for approval. The development of the 2026 Integrated Report was previously discussed in the January 2023 edition of this newsletter.

To determine if water quality standards are being attained, development of the Integrated Report includes assessment of all surface water quality data made readily available prior to the Integrated Report data solicitation cutoff period (which for the 2026 Integrated Report ended in October 2022). Readily available data includes all data submitted to the state's ambient water quality database, data collected by the State's Surface Water Ambient Monitoring Program, data from the USGS National Water Information System, and data from the USEPA's Water Quality Exchange database, which includes tribal data and sites in California sampled by the Nevada Division of Environmental Protection. Assessed data is screened for data quality.

The table below shows the current and proposed new 303(d) listings for Eagle Lake. The new listings do not necessarily indicate that water quality is getting worse in Eagle Lake but are more likely due to increased availability of high-quality water quality data for Eagle Lake since previous Integrated Report cycles. All the listings for Eagle Lake are currently prioritized as "low" in the draft 2026 Integrated Report– meaning the Lahontan Water Board does not plan to develop TMDLs to address these impairments within the next 10 years. To learn more about the Integrated Report evaluation process and the proposed 303(d) listing changes, please visit the 2026 Integrated Report website.

***Current* Eagle Lake 303(d)-listings**	***Proposed* New Eagle Lake 303(d)-listings**
phosphorus nitrogen	boron, chloride, total dissolved solids, specific conductivity, total Kjeldahl nitrogen, nitrate, sodium adsorption ratio

To stay informed on the 303(d) list and Integrated Report for the Lahontan Region go to the subscription link atop the Water Board homepage and click on 303(d) List – Impaired Waters subscription under Total Maximum Daily Load (TMDL).

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