

California Regional Water Quality Control Board Lahontan Region

CANDIDATE PROJECTS FOR THE 2025 LAHONTAN WATER QUALITY CONTROL PLAN TRIENNIAL REVIEW

NOVEMBER 2024

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1. Introduction

The Triennial Review of the Water Quality Control Plan (Basin Plan) is a public process to consider changes to water quality standards and other basin planning needs. With limited resources—amounting to 2.6 PY shared across the Basin Planning and TMDL programs—the Water Board must make difficult decisions to prioritize a limited number of issues for basin planning work. Additionally, not reflected in the list of candidate issues, are resources dedicated to participating in the planning of State Water Board standards actions, and Lahontan Water Board policy development. This document describes a series of candidate issues for the 2025 Triennial Review list of prioritized issues. The order of issues presented does not denote prioritization.

Description of Next Steps

On November 13, 2024, staff will present an informational agenda item to the Lahontan Water Board reviewing the status of the 2022 Triennial Review and discussing the candidate list for the 2025 Triennial Review. Subsequently, staff will solicit public input on the 2025 Triennial Review candidate issues, during which interested parties can propose additional issues to consider. All these issues will be evaluated using the prioritization criteria, including available program resources, and considering Board input. Finally, staff will circulate a proposed 2025 Triennial Review staff report for consideration by the Water Board in Spring 2025.

2. Candidate Issues for the 2025 Lahontan Triennial Review

The term “issue” means a basin planning need under consideration. The term “project” means an active basin planning effort.

- **Update Total Nitrogen Site Specific Objective at Hot Creek Project underway – 2022 Triennial Review Priority**
Estimated Personnel-Years: 1.0
Estimated duration to Water Board consideration: 2 years

This project would consider modifying the Total Nitrogen site specific water quality objective for Hot Creek. The Hot Creek water quality objective for Total Nitrogen (0.3 mg/L, AA) is routinely exceeded. This WQO is included in the NPDES permit for the California Department of Fish and Wildlife (CDFW) Hot Creek Hatchery. Inability to meet the permit condition results in mandatory minimum penalties levied to CDFW. To avoid the MMPs, R6 issued a Time Schedule Order to the hatchery. During the 2022 Triennial Review, the Board prioritized creation of an updated TN WQO for Hot Creek. Since being prioritized in the 2022 Triennial Review, basin planning staff began investigations in support of a possible Basin Plan amendment. This includes obtaining data through field work and by requests of the CDFW. The site offers a number of complicating factors. Among these, water in the springs, from which the hatchery raceways are fed, fails to meet the Hot Creek WQO. The location of compliance for the WQO is downstream of the hatchery and downstream of the Hot Creek Geologic Site, where boiling water bubbling up from the creek bed, fumaroles and periodic geyser eruptions occur, complicating the water chemistry. Additionally, there are potential nitrogen inputs to upgradient groundwaters. For these reasons, basin planning staff are coordinating with multiple regulatory programs.

- **Update Aquatic Pesticide Prohibition Exemption**
New Issue for 2025 Triennial Review
Estimated Personnel-Years: 2.0
Estimated duration to Water Board consideration: 3-4 years

This issue would consider reviewing and revising the Aquatic Pesticide Prohibition and Exemption Criteria. The Regional Board limits pesticide applications subject to the exemption to those conducted for purposes that serve the public interest. However, the exemption process creates a resource intensive process that adds time and cost to beneficial projects that may protect public health and safety (e.g., algae blooms), or provide ecological preservation (e.g., aquatic invasive species eradication). This project would update the Aquatic Pesticide Prohibition and Exemption Criteria to increase clarity regarding the applicability of the exemptions; further define terms and the scope of the required considerations; and make other changes that would allow the Lahontan Water Board to more efficiently address water quality issues that are accelerating, in part, by factors associated with climate change and warming temperatures.

- **Designation of Tribal Beneficial Uses**
Recurring Issue (2018 Triennial Review and 2022 Triennial Review)
Estimated Personnel-Years: 1.5-5
Estimated duration to Water Board consideration: 2-10

In 2017 the State Water Board adopted definitions for three new beneficial uses and, at the same time, new mercury water quality objectives to protect those beneficial uses and other specified BUs. The State Board left it to the Regional Boards to designate waterbodies with the uses. Two of the uses are Tribal-specific (Tribal Culture and Tradition; Tribal Subsistence Fishing); the third (Subsistence Fishing) is not Tribal focused, but generally protects disadvantaged communities. The Lahontan Board prioritized Tribal Beneficial Use designations in the 2018 and 2022 Triennial Reviews. Staff has been working to develop a Basin Plan amendment to designate Tribal Beneficial Uses in the Mono Basin (Mono TBU Project) for several years. Other Tribes (e.g. Bridgeport, Bishop, Washoe, Cedarville, etc.) have expressed interest in the Board designating TBU to waters of importance to their people. This Project will identify one or more tribe to work with towards designating waters with TBU(s). Staff will then consult with the Tribe(s) to research supporting information for the designation and update the Basin Plan to include TBU designation. Supporting information could be assembled both through primary research efforts (interviews of tribal members), or secondary research.

- **Editorial Clean-up and format Basin Plan Amendment**
Recurring Issue
Estimated Personnel-Years: 0.5
Estimated duration to Water Board consideration: 1.5 years

Update the format of the Basin Plan, update outdated information, and other potential changes to make the Basin Plan more user friendly. The Basin Plan was last updated, wholesale, in 1995 (USEPA approval 2000). It contains outdated information, sometimes about outside programs. In other instances, there are typos or other edits that can be made to clarify the content without changing the meaning or purpose of the text, including formatting changes, or changes to help with ADA accessibility. (Such edits can be termed non-substantive, or not requiring CEQA analysis, while acting to improve the usability of the Basin Plan.) An example of a formatting change already undertaken by several other Regional Water Boards is converting the text from two columns to one. Another suggested improvement is to add the coordinates to go along with the arrows for the maps in Chapter 3 Water Quality Objectives, that accompany site specific objective tables. Such improvements could be done one chapter at a time, in combination with another BPA, or all at once. Improving clarity of requirements is known to help in improving compliance - and this would likely be the case for our Basin Plan.

- **Expand Project Categories on Table 4.1-1 - LOW THREAT DISCHARGES THAT ARE CONDITIONALLY EXEMPT FROM WASTE DISCHARGE PROHIBITIONS**

New Issue for 2025 Triennial Review

Estimated Personnel-Years: 0.75

Estimated duration to Water Board consideration: 2 years

The Water Board can grant exemptions from waste discharge prohibitions that allow permitted discharge to surface waters. Table 4.1-1 includes a suite of low-threat discharge categories that are conditionally exempt from waste discharge prohibitions. This issue would consider expanding the project categories in Table 4.1-1, so that more project types could be exempt from prohibitions in this manner, thereby increasing efficiency and reducing resource load dedicated to projects that do not pose a high risk of water quality impact. Examples of categories to consider include low impact restoration projects such as Beaver Dam Analogs that are hand implemented, culvert replacement, reconstructed piers, installation of buoy anchor blocks and fish habitat pyramids, and installation of revetment walls. Limitation on size or type of each category could be included. An update of Table 4.1-1 would employ the expertise of the Dredge and Fill program staff, and possibly other programs, as well.

- **Amend the Turbidity Water Quality Objective to Project or Situation-Specific Tolerances**

New Issue for 2025 Triennial Review

Estimated Personnel-Years: 0.75

Estimated duration to Water Board consideration: 2 years

Consider updating the turbidity water quality objectives to account for the episodic nature of turbidity and to improve permitting of restoration projects. The existing regionwide turbidity water quality objective reads, "Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity shall not exceed natural levels by more than 10 percent." Natural levels of turbidity vary depending on such factors as precipitation, spring runoff contribution, and flow levels. However, many of the region's streams and lakes have very low ambient turbidity level in the low single digits Nephelometric turbidity units (NTU). In a permitting context, having a hard limit of an increase of 10 percent over a pre-project measurement severely limits staff's ability to provide useful permit requirements that both protect beneficial uses, allow for project implementation, and allow for a limited amount of short-duration turbidity to realize the long-term benefit of the restoration project. While the Water Board has been able to permit restoration projects, for example, an amendment to the water quality objective could improve staff ability to permit environmentally positive projects, thereby aligning with California's Cutting the Green Tape initiative. For example, language, see the North Coast Region's Turbidity WQO (emphasis added), "Turbidity shall not be increased more than 20 percent above naturally occurring background levels. *Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.*"

- **Setbacks from Wetlands or other Waters**
Issue identified in 2022 Triennial Review as sub-issue of *Riparian, Floodplain, and Wetland Protection Updates*
Estimated Personnel-Years: 2.5
Estimated duration to Water Board consideration: 5 years

Consider developing setbacks from wetlands or other waters, such as groundwater infiltration zones in the more arid parts of the Lahontan Region. This issue was originally proposed to increase protection of sensitive waters and provide source water protection in response to anticipated climate change impacts. Requiring setbacks would likely be in the form of new discharge prohibitions, perhaps using the Tahoe Basin and Truckee River watershed prohibitions as models. Creating new prohibitions could be quite controversial and would be a considerable lift in terms of staff resources and public process. As heard at the October 2 Board agenda item on Climate Change, this issue needs additional work to determine if a Basin Plan amendment is the appropriate path forward, or if these protections are better addressed through other methods.

- **High Quality Beneficial Use**
Issue identified in 2022 Triennial Review
Estimated Personnel-Years: 2.5
Estimated duration to Water Board consideration: 5 years

Identified in the 2022 Triennial Review, this issue would result in the development of a new beneficial use. The Lahontan Region contains an abundance of exceptionally high-quality waters. This project would explore the creation of a beneficial use connected to high quality waters. Designation of waters with the beneficial use could be associated with commensurately protective water quality objectives. The protection of high-quality waters is important for preserving water quality, water supply, hydrologic function, and habitat in the face of climate change and population pressures, including recreational pressures. Staff has spent a considerable amount of time exploring this issue from several angles to develop a more focused problem statement. While staff concluded that some aspects of this issue associated with the protection of headwaters may be addressed without a basin planning effort, the issue may need more development before prioritizing it as a Basin Plan amendment.

- **Consider Adopting Various National Recommended Water Quality Criteria as WQOs**
New Issue for 2025 Triennial Review
Estimated Personnel-Years: 0.5-5.0
Estimated duration to Water Board consideration: 1-5 years

Federal regulations at 40 CFR 131.20(a) require states to consider, as part of their triennial review process, the adoption of new or revised Clean Water Act section 304(a) water quality criteria recommendations for human health, and for the protection of aquatic life from toxicants (WQS) into their state plans. Called 304(a) Criteria, in shorthand, these criteria have been scientifically developed and have undergone peer review. Criteria published by the United States Environmental Protection Agency

(USEPA) since May 30, 2000, are required to be evaluated. The criteria are available for viewing at the USEPA website <https://www.epa.gov/wqc/national-recommended-water-quality-criteria-tables>.

- **Update WQOs for Salinity (TDS, Cl, etc.)**

Recurring Issue

Estimated Personnel-Years: 1.25

Estimated duration to Water Board consideration: 3 years

Consider amending water quality objectives for multiple salinity-related constituents to be more realistically attainable, yet still protective of beneficial uses. The Basin Plan has numerous site-specific water quality objectives for total dissolved solids, electrical conductivity, chloride and other naturally occurring salts which are well below (in some cases orders of magnitude below) drinking water, aquatic life, agricultural or other beneficial use protection-based criteria. These objectives are not always attained, resulting in several impairments on the State's 303(d) list of impaired waters. These impairments may not, in many cases, represent a likely threat to beneficial uses, and the water quality objectives can be amended to be more attainable, consistent with the State's Water Quality Control Policy for Addressing Impaired Waters (SWRCB 2005)

Updating salinity-related objectives has been a longstanding request for the Susan River, as discussed in the 2022 Triennial Review. Updating these objectives could be appropriate in multiple other watersheds as well. Addressing salinity objectives in one or more Basin Plan Amendments with a large scope could be the most efficient way to address this issue.

- **Evaluate Attainability of Clean Water Act section 101(a)(2) Uses**

New Issue for 2025 Triennial Review

Estimated Personnel-Years: 1.5

Estimated duration to Water Board consideration: 3 years

This issue would require evaluation of surface waters for the ability to attain the Commercial and Sportfishing (COMM) and the Contact Recreation (REC-1) beneficial uses. Clean Water Act section 101(a)(2) states, "it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water..." 40 CFR 131.20 requires that every three years states review any new information available to determine if waterbodies that do not have standards for the uses specified in CWA section 101(a)(2) do, in fact, have attainable these "fishable and swimmable" uses. All but a handful of Lahontan surface waters are designated REC-1. Many Lahontan Region waters are designated COMM, a characteristic of the Basin Plan that is not shared by all other Regions' Basin Plans.

3. Prioritization Criteria

Protect human health: An issue has a nexus with the protection of human health and such protections can be improved by addressing the issue. Examples could include protecting or restoring beneficial uses, such as REC-1, MUN or COMM, or incorporating updated human health water quality objectives into the Basin Plan.

Protect aquatic life: An issue has a nexus with improving the Water Board's ability to protect aquatic life beneficial uses, such as COLD, WARM, or SPWN. Examples include standards actions or improving or updating implementation tools available to regulatory staff.

Outstanding National Resource Waters: A nexus to restoring, maintaining, or enhancing the water quality of Lake Tahoe or Mono Lake, California's two ONRWs.

Climate Change Adaptation and Mitigation: Changes to the Basin Plan which help the Water Board implement the Climate Change Adaptation and Mitigation Strategy and support the Water Board's ability to restore, enhance, and preserve water resources in the face of climate change. Examples include protections for source waters, changes to encourage meadow restoration, and floodplain protections.

Seek Environmental Justice and intentional support of Disadvantaged Communities: Actions that allow for proactive and intentional support of Disadvantaged Communities or historically disenfranchised populations, including Native American residents of the Lahontan Region. Such populations are often more susceptible to the human health risks associated with drinking water pollution, climate change, and land use patterns, and are often the least financially able to adapt to such challenges.

Improve communication by promoting clarity and consistency: Opportunities to improve issues of clarity or consistency within the Basin Plan. Benefits of such efforts include consistent interpretation of the Basin Plan by staff. Such changes will help improve internal communication, communication with stakeholders, and will ease personnel succession planning and training. Inaction on these issues will have a negative impact on the effectiveness of Water Board programs. Promoting clarity and consistency will help create a psychologically safe workplace.

Customer service responsiveness by improving process, efficiency and seeking agreeable water quality improvements: Addressing an issue helps the Water Board be responsive to stakeholder input and assists with, or provides for, agreeable water quality improvements. This criterion also seeks to improve efficiency in core regulatory programs and avoid actions that place unnecessary burden on public resources without the benefit of commensurate water quality protections.

Previous Priority with Allocated Resources: Issues were previously prioritized and allocated resources. Basin planning projects do not often begin and end on the exact cycle of a Triennial Review. Similarly, many projects take more than three years to be completed. This criterion supports the continued work on issues supported by Board action and/or Executive direction.

Basin Planning Need Aligns with Triennial Review Period: The issue is ripe to evaluate and address. It will not be dependent on outside information or on resources unavailable in the three-year period of this Triennial Review.

References

SWRCB. 2005. Water Quality Control Policy of Addressing Impaired Waters. State Water Resources Control Board Resolution No. 2005-0050. Sacramento, CA.