2025 Triennial Review List of Prioritized Basin Planning Priorities

The order the issues appear in does not indicate the priority of ranking within each category.

Contents

List Summary

Triennial Review Priorities

- Update Total Nitrogen WQO for Hot Creek
- Designation of Tribal Beneficial Uses – Mono Basin
- Designation of Tribal Beneficial Uses – Waterbodies To Be Determined
- Editorial Clean-up and format update of the Basin Plan
- Expand Project Categories in Table 4.1-1

Regional Issues in Reserve

- Update Aquatic Pesticide Prohibition Exemption
- Designate Hot Creek as an ONRW

Issues not Recommended for Resource Prioritization

- Update the Regionwide Turbidity WQO
- Setbacks from Wetlands or other Waters
- High Quality Beneficial Use
- Update WQOs for Salinity (TDS, chloride)
- Evaluate and Update WQOs for ammonia

Issue Descriptions

High Priority

Update Total Nitrogen Site Specific Water Quality Objective at Hot Creek
Project underway – 2022 Triennial Review Priority
Estimated Personnel-Years: 1.0
Estimated duration to Lahontan 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,annual average) is routinely exceeded. The NPDES permit for the California Department of Fish and Wildlife (CDFW) Hot Creek Hatchery (Board Order No. R6V-2021-0014) contains an effluent limitation for total nitrogen of 0.30 mg/L as an annual average. The Lahontan Water Board issued a Time Schedule Order to the hatchery. Compliance with the Time Schedule Order exempts the Discharger from mandatory minimum penalties (MMPs) for violations of the final effluent limitation found in Board Order No. R6V-2021-0014 for total nitrogen. During the 2022 Triennial Review, the Water 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 to CDFW. The site includes a number of complicated factors. Among these, water in the springs, from which the hatchery raceways are fed, fails to meet the Hot Creek WQO. The TN WQO applies to a segment of the river that extends 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.

Designation of Tribal Beneficial Uses – Mono Basin
Recurring Issue (2018 Triennial Review and 2022 Triennial Review)
Estimated Personnel-Years: 0.5
Estimated duration to Lahontan Water Board consideration: 0.5-1 year

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. Two of the uses are Tribal-specific (Tribal Culture and Tradition (CUL); Tribal Subsistence Fishing(T-SUB)); the third (Subsistence Fishing (SUB)) is not Tribal focused but generally protects disadvantaged communities. The Lahontan Water Board prioritized Tribal Beneficial Use designations in the 2018 and 2022 Triennial Reviews. Staff have been developing a Basin Plan amendment to designate Tribal Beneficial Uses in the Mono Basin (Mono TBU Project) for several years. Prioritizing this issue would continue the effort to designate TBU in the Mono Basin, something staff anticipate bringing to the Lahontan Water Board for consideration in the 2025-2026 fiscal year.

Designation of Tribal Beneficial Uses – Waterbodies To Be Determined
Recurring Issue (2018 Triennial Review and 2022 Triennial Review)
Estimated Personnel-Years: 1.5-5
Estimated duration to Lahontan Water Board consideration: 2-10 years

The Lahontan Water Board prioritized Tribal Beneficial Use designations in the 2018 and 2022 Triennial Reviews. A number of Tribal governments (e.g. Bridgeport Indian Colony, Bishop Paiute Tribe, Washoe Tribe of Nevada and California, Cedarville Rancheria, etc.) have expressed interest in the Lahontan Water Board designating TBU to waters of importance to their people, with several of the tribes sharing documents identifying specific waterbodies for designation. The basin planning team will consult with tribes towards designating waters with TBU(s), either in a single Basin Plan amendment or multiple amendments. Staff will work with the tribe(s) to identify waters for designation, identify which TBU to designate, identify supporting information for the designation and update the Basin Plan to include the TBU designations. This issue is termed “Waterbodies To Be Determined”, however in future discussions the Basin Plan amendments will be referred to by the waterbody or basin names.

Editorial Clean-up and format Basin Plan Amendment
Recurring Issue
Estimated Personnel-Years: 0.5
Estimated duration to Lahontan 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 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 made 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: 1.0
Estimated duration to Lahontan Water Board consideration: 3 years

The Lahontan 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.

Regional Issues in Reserve

Update Aquatic Pesticide Prohibition Exemption
New Issue for 2025 Triennial Review
Estimated Personnel-Years: 2.0
Estimated duration to Lahontan Water Board consideration: 4-6 years

This issue would consider reviewing and revising the Aquatic Pesticide Prohibition and Exemption Criteria. The Basin Plan 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.

Designate Hot Creek as an Outstanding National Resource Water
New Issue for 2025 Triennial Review
Estimated Personnel-Years: 2.5
Estimated duration to Lahontan Water Board consideration: 3-4 years

This issue was proposed as a basin planning project by the organization Trout Unlimited (TU) during the Triennial Review public solicitation period ending January 10, 2025. TU requested the Lahontan Water Board prioritize designating Hot Creek (including Little Hot Creek) as an Outstanding National Resource Water (ONRW) due to its exceptional ecological significance and esteemed trout fishery. Hot Creek is located in the Long Valley Caldera and receives water from Mammoth Creek and springs supplying the Hot Creek Fish Hatchery before flowing into Owens River. Other uses of the Hot Creek area include recreation, grazing, and geothermal power generation. States have the ability to designate waterbodies as ONRW, a designation that affords the waterbody the highest level of water quality protection under the antidegradation policy. Where high quality waters constitute an Outstanding National Resource, that water quality shall be maintained and protected. States may allow discharges which result in temporary and short-term changes in water quality, provided those changes do not permanently

degrade water quality or result in water quality lower than that necessary to protect the existing uses in the ONRW. The term “temporary and short-term” is undefined and is dependent on the activity involved. “Temporary” and “short-term” timeframes are generally thought of as weeks or months, not years.

The State of California has two ONRWs, Lake Tahoe and Mono Lake, both in the Lahontan Region. These waters were designated as ONRW by the State Water Resources Control Board, and the designations were done through different processes. While the Lahontan Water Board and the State Water Resources Control Board do not have an established guidance or protocol for ONRW designation, other Regional Boards (North Coast and Central Valley) have prioritized investigating ONRW designations as a result of their own Triennial Review processes.

Issues Not Recommended for Resource Prioritization

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

New Issue for 2025 Triennial Review
Estimated Personnel-Years: 1.0
Estimated duration to Lahontan 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 Lahontan 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 Lahontan 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 meeting 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 Lahontan 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 have 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.

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

Recurring Issue
Estimated Personnel-Years: 1.25
Estimated duration to Lahontan 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 and Update WQOs for ammonia

New Issue for 2025 Triennial Review
Estimated Personnel-Years: 1.25
Estimated duration to Lahontan Water Board consideration: 5 years

Consider amending water quality objectives for ammonia to Clean Water Act section 304(a) recommended criteria. In 2013 the USEPA updated the 1999 ammonia criteria for the protection of aquatic life from the toxic effects of ammonia in freshwater. The 2013 ammonia criteria vary based on pH and temperature and reflect the latest scientific knowledge on the toxicity of ammonia to freshwater aquatic life, including new data on sensitive freshwater mussels and gill-breathing snails. USEPA recommended a single national acute and a single national chronic criterion be applied to all waters rather than different criteria based on the presence or absence of mussels. However, these freshwater mussel species included in the 2013 ammonia criteria may be different than the freshwater mussel species in the Lahontan Region. The water quality standards regulation at 40 CFR § 131.11(b)(1)(ii) provides states with the opportunity to adopt water quality criteria that are "…modified to reflect site- specific conditions." As with any criteria, site-specific criteria must be based on a sound scientific rationale to protect the designated use and are subject to review and approval or disapproval by USEPA. The 2013 ammonia criteria provide recalculation procedures for site-specific criteria derivation. In the case of ammonia, where a state can demonstrate that mussels are not present on a site-specific basis, the recalculation procedure may be used to remove the mussel species from the national criteria dataset to better represent the species present at the site. This issue would involve evaluating the presence of mussel species in the Lahontan Region and possibly updating water quality objectives for ammonia in the region.