



DRAFT STAFF REPORT

2025 TRIENNIAL REVIEW OF THE LAHONTAN WATER QUALITY CONTROL PLAN

April 2025



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Introduction

The California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) is the state agency with primary responsibility for setting and implementing water quality standards in the part of California located east of the Sierra Nevada crest, from the Oregon border into the northern Mojave Desert. The Lahontan Region encompasses roughly 24 percent of California and includes 700 lakes and over 3,000 miles of rivers and streams. The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) defines and designates beneficial uses of surface waters and groundwaters (i.e., waters of the state), establishes narrative or numeric water quality objectives (WQOs) to protect beneficial uses, and contains provisions to protect high quality waters from degradation (i.e., antidegradation). The Basin Plan also includes programs of implementation for achieving WQOs. The current Basin Plan took effect in 1995. The current Basin Plan, complete with approved amendments, can be accessed from the [Lahontan Water Board Basin Plan Program webpage](#).

California Water Code section 13240 states that basin plans “shall be periodically reviewed and may be revised.” Additionally, section 303(c)(1) of the federal Clean Water Act (CWA) instructs that a State review its water quality standards and, as appropriate, modify and adopt standards, at least once every three years. This process is known as the *Triennial Review*. The Lahontan Water Board’s Triennial Review process produces a prioritized list of basin planning issues. The prioritized Triennial Review List serves as the three-year work plan for the Lahontan Water Board’s Basin Planning Program. This will be used to direct Basin Planning efforts over the next three years, with projects and priorities subject to re-evaluation during the next triennial review, anticipated in 2028. Issues can be re-evaluated by staff and brought to the Board to reconsider issue priority at any time.

Implementation depends upon the Lahontan Water Board’s program priorities, resources, and other mandates and commitments. The Lahontan Water Board’s current Triennial Review List was adopted in March 2022 and has been used to prioritize resources allocation for basin planning efforts. The status of 2022 Triennial Review priorities is presented in Appendix B. In addition, this Report, in the section “Triennial Review Considerations,” contains an evaluation consistent with Code of Federal Regulations, title 40, part 131.20(a). The Triennial Review does not require environmental analysis under the California Environmental Quality Act.

Water Quality Standards

Under the Clean Water Act, water quality standards include designated uses, water quality criteria, and an antidegradation policy. The Porter-Cologne Water Quality Control Act (Porter-Cologne) and state law parlance refers to the components of a water quality standard as beneficial uses, water quality objectives, and the antidegradation policy (Resolution 68-16). Porter-Cologne authorizes the Lahontan Water Board to establish a program of implementation for water quality protection in California. A program of implementation includes a description of actions necessary to achieve objectives, a time schedule for the actions to be taken, and a description of monitoring to determine

compliance with WQOs. Changes to water quality standards by the Lahontan Water Board require a Basin Plan amendment.

Water quality standards (beneficial uses and WQOs) are set forth in Basin Plan Chapters 2, 3, and 5 and can be viewed at:

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml).

The Basin Plan's beneficial use tables (Tables 2-1 and 2-2) include both existing and potential beneficial uses.

Triennial Review Process

The Triennial Review is a public process. Water quality issues with a potential basin planning nexus are solicited from multiple sources. These include State Board requirements, Lahontan Water Board staff, permittees, Tribal governments, and an assortment of stakeholders.

The Triennial Review process will result in a generalized priority ranking of issues that may be addressed by the basin planning program.

The Triennial Review list of basin planning priorities (Appendix A) includes a description of each issue and an estimate of the time required to complete a project to address the issue.

Public Engagement

Triennial Review is a public process. The 2025 Triennial Review process has so far included the following steps:

- Informational item at the November 13, 2024, Lahontan Water Board meeting describing the purpose and process of the Triennial Review, providing an update of the 2022 Triennial Review priorities, and seeking input and additions from the Lahontan Water Board and public on a list of ten unprioritized issues
- Public solicitation of issues: a 30-day online survey, with a January 10, 2025, deadline, to receive public input on the November 2024 list of unprioritized issues and to solicit additional issues for consideration
- Public Comment on this Draft Triennial Review staff report and draft Triennial Review list of basin planning priorities (Appendix A)

After receiving comments, staff will produce a final staff report and a response to comments document. The Lahontan Water Board will consider a resolution approving the Triennial Review during a Lahontan Water Board hearing. The hearing, currently scheduled for the July 9, 2025, Board meeting, will be publicly noticed at least 45 days

prior to the hearing date. Staff will also transmit an adopted resolution and Triennial Review staff report to the U.S. Environmental Protection Agency.

Input Received During Public Solicitation

Staff received a single response to the online survey, from Trout Unlimited, which requested the Lahontan Water Board consider prioritizing the designation of Hot Creek and Little Hot Creek as Outstanding National Resource Waters. Trout Unlimited also submitted to staff a ten-page “petition” letter with the same request and providing additional context and justification for the request. Trout unlimited subsequently gave a presentation during Open Forum (Agenda item 1) at the Lahontan Water Board’s January 30, 2025, regular meeting.

Prioritization

The Triennial Review issues are prioritized using nine (9) prioritization criteria to develop a draft Triennial Review list. Seven of the criteria are derived from the agency Goals. Of the two remaining criteria, one criterion captures the readiness of an issue (*Basin Planning Need Aligns with Triennial Review Period*), and the other supports continued work on previously prioritized basin planning issues (*Previous Priority with Allocated Resources*). The prioritization criteria are listed below. The breadth of prioritization criteria provides a suitable approach to compare disparate basin planning issue types for workplan assignment.

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 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 Lahontan 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 Lahontan Water Board implement the Climate Change Adaptation and Mitigation Strategy and support the Lahontan 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 protection.

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 improved understanding by those affected by the plan. Such changes will help improve internal communication, communication with stakeholders, and will ease personnel succession planning and training. 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 Lahontan Water Board be responsive to stakeholders, Tribal governments, and the general public, 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 protection.

Previous Priority with Allocated Resources: Issues were prioritized in previous Triennial Review cycles and/or resources were otherwise committed. Basin planning projects designed to address specific issues 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, depending on the complexity of the technical and policy issues. 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 resources not to be available in the three-year period of this Triennial Review.

Scoring and Results

This effort prioritizes a total of 12 basin planning issues. Eleven of these issues originated from Lahontan Water Board staff and the remaining issue, to designate Hot Creek as an Outstanding National Resource Water, was submitted by Trout Unlimited. Project staff assessed the 12 basin planning issues against the nine criteria listed above and consulted with executive management on the rankings. The prioritization is a recommendation to the Board and incorporates ranking by criteria assessment and executive input.

At the November 13, 2024 Board meeting, the Board advised staff both to prioritize discrete projects that improve the efficiency and effectiveness of the Lahontan Water Board's core regulatory functions and to create capacity for more complex basin planning efforts. To meet this direction, staff scored the criterion *Customer Service Responsiveness by Improving Process, Efficiency and Seeking Agreeable Water Quality Improvements* criteria, with a scale allowing a maximum score of 1.5 times that of the maximum score of the remaining criteria. Staff also continues to score the *Protect*

Human Health criterion with a 1.5 multiplier of the remaining criteria because of the paramount importance of protecting the citizens and visitors to the State of California. Both weighed criteria align with the agency's Regional Goals, and projects that address these goals are often prioritized within the region.

Some potential basin planning issues start as good ideas that are proposed with an incomplete conceptualization of how a potential Basin Plan amendment would address the problem. The Board requested that staff recognize the resources and process to develop complex basin planning issues from an initial idea to complete and thorough concepts. That process helps determine if the issue should result in a Basin Plan amendment, or if the solution has a different end point. The Board put forth the concept of a "reserve project" that identifies space to work on more complex basin planning issues. These issues in reserve are not prioritized, but staff are still slowly working on the conceptual framework of what the BPA could be. If an issue in reserve is sufficiently developed staff can recommend the issue be prioritized by the Board for basin planning resources.

Pursuant to Board direction from the November 2024 Triennial Review informational item, this list includes a sixth issue in reserve, *Update Aquatic Pesticide Prohibition Exemption*. Assessing and processing requests for exemptions to the prohibition on the discharge of aquatic pesticides to water has been identified by staff and management as worthy of review. The demand for these exemptions has evolved over time as the challenges of addressing Aquatic Invasive Species and, increasingly, Harmful Algal Blooms, have become clearer. This draft Triennial Review recommends that the issue, *Update Aquatic Pesticide Prohibition Exemption*, should also be given dedicated resources from a collaboration of programs because doing so will address a regional issue with implications on multiple programs.

Further issues that are neither high priority nor in reserve, termed *Issues not Recommended for Resource Prioritization*, are not judged to be without merit. Rather, they are unable to be addressed by the available basin planning resources. Should resources become available, or some other factor arises supporting their prioritization, the Board will be asked to re-prioritize the issue.

Prioritization recommendations in this draft report are presented to guide the Lahontan Water Board in their prioritization. Public comments received on this draft prioritization will inform the Board and staff and may result in an adjustment to the final recommendation to the Board.

The Lahontan Water Board may choose to accept the staff recommendation for prioritizing identified basin planning issues at the Board hearing, or the Board may choose to adjust the Triennial Review list before adoption.

The result of the prioritization assessment is a recommendation to elevate **five** Basin Planning needs for resources in the coming Triennial Review period.

The staff recommendation for prioritizing identified basin planning issues is identified and described in the Triennial Review list of basin planning priorities (Appendix A) and summarized below. The order the issues appear in within each category does not indicate the priority of ranking:

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

Issues not Recommended for Resource Prioritization

- Designate Hot Creek as an ONRW
- 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

Triennial Review Considerations

Evaluation of National Recommended Water Quality Criteria as WQOs

During the Triennial Review process, the Lahontan Water Board receives public input on water quality standards and evaluates the need to modify or adopt new water quality objectives or beneficial uses. Federal regulations at 40 CFR § 131.20(a) provides, “[t]he State shall from time to time, but at least once every 3 years, hold public hearings for the purpose of reviewing applicable water quality standards . . .” CWA section 303(c)(2)(B) provides “that a state shall adopt criteria for toxic pollutants for which criteria have been published under CWA section 304(a), the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support designated beneficial uses.” In accordance with 40 CFR § 131.20(a), states and tribes provide an explanation for why they did not adopt new or revised criteria for parameters for which U.S. EPA has published new or updated CWA section 304(a) criteria recommendations. States and tribes are not required to adopt the recommended criteria but must consider them. “Ultimately, states and authorized tribes must adopt criteria that are scientifically defensible and protective of designated uses to ensure that [water quality standards] continue to ‘protect public health or welfare, enhance water quality and serve the purposes of’ the [CWA].” (80 Fed. Reg. 51028.) States and authorized tribes “provide

an explanation for why they did not adopt new or revised criteria for parameters for which EPA has published new or updated CWA section 304(a) criteria recommendations since May 30, 2000.” (Id.) “A state’s or authorized tribe’s explanation may be situation-specific and could involve consideration of priorities and resources.” (Id. at p. 51029)

Board staff continuously assess the protectiveness of existing standards through permitting and monitoring programs, including toxicity testing and bioassessment data collection through permits and by the Surface Water Ambient Monitoring Program, and evaluation of constituents and water quality through the Integrated Report process. Through these ongoing processes, staff believe existing standards continue to be protective.

This section of the report contains the Lahontan Water Board’s consideration of new or revised CWA section 304(a) recommended criteria for certain toxic pollutants and explanation for why, based on its analysis, it is unnecessary to revise the Basin Plan water quality objectives for those pollutants in light of the new or revised recommended criteria. Specifically, the Lahontan Water Board considered 304(a) recommended criteria for those toxic pollutants for which the Lahontan Water Board has adopted site-specific water quality objectives (SSOs) or unique regionwide objectives.

The Lahontan Water Board does not have site specific objectives or unique regionwide water quality objectives for priority pollutants. For most parameters for which the Lahontan Water Board has site-specific objectives or unique regionwide objectives, USEPA has not published new or revised 304(a) recommended criteria since before 2000, or the Board’s objectives are more stringent than current 304(a) recommended criteria. Non-priority pollutant water quality objectives in the Lahontan Basin Plan for which there are 304(a) recommended criteria, include: dissolved oxygen, pH, iron, and ammonia.

Dissolved oxygen: The 304(a) recommended criteria for dissolved oxygen were updated in 1986. The Lahontan Basin plan contains regionwide and site-specific objectives for dissolved oxygen that apply to water body segments in the Region. The Basin Plan objectives are more stringent than the 304(a) recommended criteria. The 304(a) criteria were not updated since the most recent Triennial Review.

pH: The 304(a) recommended criteria for pH were updated in 1986. The Lahontan Basin Plan contains regionwide site specific objectives for pH that are more stringent than the 304(a) recommended criteria and were developed to be more relevant to local conditions. The 304(a) criteria were not updated since the most recent Triennial Review.

Iron: The 304(a) recommended criteria for iron were updated in 1986. For aquatic life the 304(a) criteria is 1.0 mg/L. The Lahontan Basin plan contains site-specific objectives for iron that applies to specific water body segments in the Region. These objectives for total iron in the Lake Tahoe, Truckee River, and Little Truckee River hydrologic units, are all more stringent than the 304(a) recommended criteria, in some cases by more than an order of magnitude. Additionally, all waters designated with the Municipal and

Domestic Supply (MUN) beneficial use are subject to the secondary maximum contaminant level (SMLC) in Title 22 of the California Code of Regulations. That objective of 0.3 mg/L matches the 1986 304(a) recommended criteria for domestic water supplies and applies to all MUN designated waters regardless of the status of their use for supply. The 304(a) criteria were not updated since the most recent Triennial Review.

Ammonia: The 304(a) recommended criteria for ammonia were updated in 2013. The toxicity of ammonia is dependent on the proportion of total ammonia that exists in the toxic, unionized form, which varies based on pH and temperature.

The Lahontan Basin Plan contains a site-specific water quality objective for un-ionized ammonia for the Owens River Hydrologic unit for the Pine Creek watershed. This objective was developed to be relevant to local conditions and is protective of beneficial uses. The Lahontan Basin Plan contains a site-specific water quality objective for total ammonia for the Antelope Hydrologic Unit that applies to Amargosa Creek downstream of the Los Angeles County Sanitation District No. 14 discharge point, and to the Piute Ponds and associated wetlands. U.S. Army Corps of Engineers (USACE) determined in 2002 that the waters of the Amargosa Creek watershed, and other surface waters within the boundaries of Edwards Air Force Base, are not "waters of the United States."

The regionwide water quality objective for ammonia is based on the 1986 EPA criteria. EPA's 2013 criteria for ammonia takes into account data from several sensitive species in the Family Unionidae that had not been previously tested. It is not yet known whether the species of freshwater mussels in waters within the Lahontan Region are different than the species USEPA used in the toxicity dataset for development of the 2013 ammonia criteria. Some waters may hold Unionidae mussels. The Lahontan Region includes many seasonal waters which would be unable to support freshwater mussels. This Triennial Review includes an issue description to update the ammonia water quality objectives using the 2013 recommended criteria. The Lahontan Board has considered the revised 304(a) recommendations and does not plan to adopt the revised criteria during the next three years due to resource limitations, other priority project outlined in this report, and the protectiveness of the existing water quality standard.

The Lahontan Basin plan includes a chemical constituent standard that incorporates statewide maximum contaminant levels (MCLs). For statewide water quality objectives, the State Water Resources Control Board (State Water Board) is in the process of reviewing federally promulgated water quality standards for California and Clean Water Act section 304(a) recommended criteria. A working draft comprehensive comparison table of the U.S. EPA's California Toxics Rule Criteria, Water Quality Objectives Established by the Lahontan Water Boards, and U.S EPA recommended Clean Water Act section 304(a) criteria have been developed to assist the public in comparing various federal water quality standards and criteria to California's Water Quality Objectives. ([2024 Review of State Water Quality Control Plans and Policies for Water Quality Control | California State Water Resources Control Board](#)). Consistent with past practices, the Lahontan Water Board will coordinate with the State Water Board to

ensure that any action to adopt or revise statewide water quality objectives resulting from its CWA 304(a) review supersedes corresponding Basin Plan objectives.

Because the review included in this report and the State Water Board's review of, and potential action related to, 304(a) criteria for statewide standards address the requirements of the CWA, a candidate Triennial Review project to review CWA section 304(a) criteria is not needed in the list of candidate projects in Appendix A.

Review of CWA Section 101(a)(2) "Fishable/Swimmable" Uses

This document contains a review of Clean Water Act (CWA) section 101(a)(2) uses, more commonly known as "fishable/swimmable" uses in the Basin Plan. Section 101(a)(2) provides, "[I]t 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 be achieved by July 1, 1983." (33 U.S.C. § 1251(a)(2).) The CWA regulations at 40 CFR § 131.20(a) provides, "The State shall from time to time, but at least once every 3 years, hold public hearings for the purpose of reviewing applicable water quality standards adopted pursuant to §§ 131.9 through 131.15 and Federally promulgated water quality standards and, as appropriate, modifying and adopting standards... The State shall also re-examine any waterbody segment with water quality standards that do not include the uses specified in section 101(a)(2) of the Act every 3 years to determine if any new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State shall revise its standards accordingly."

The Lahontan Water Board has re-examined water body segments lacking fishable/swimmable uses to determine if any new information has become available that indicates the uses are attainable.

All but five Lahontan surface waters are designated REC-1 (Piute Ponds, Piute Ponds Wetlands, Rosamond Dry Lake, Amargosa Creek below Los Angeles County Sanitation District Discharge, and Opal Mountain Springs). Four of the waterbodies are in the Antelope Hydrologic Unit (Lancaster Hydrologic Area), and the fifth waterbody, Opal Mountain Springs, is located in the Fecal Bacteria Water Quality Objectives Basin Plan Amendment 24 Mojave Hydrologic Unit (Harper Valley Hydrologic Subarea). No evidence has been found to support the existence of recreational use or the ability to attain such uses at these five waterbodies. Further, no documentation indicates these are Waters of the United States.

Prior to 2009 the first four waterbodies were designated with the REC-1 beneficial use. With Resolution No. 2009- 0018 the State Water Board approved an amendment to the Lahontan Region Basin Plan (R6T-2007-0036) which included the removal of the REC-1 beneficial use from those waters. This resolution also references a US Army Corps of Engineers determination that these waters are not "waters of the United States." Access to these waters for recreation is restricted by protocols imposed by the United States Air Force Edwards Air Force Base, on which they are located.

Opal Mtn Springs is an isolated waterbody in the vicinity of Opal Mountain north of Barstow, and near the Black Mountain Wilderness Area administered by the Bureau of Land Management. The waterbody is designated with one beneficial use, Water Quality Enhancement (WQE). In November 2000 the Lahontan Water Board passed Resolution 6-00-66, which included designation of Opal Mtn Springs with a number of additional beneficial uses, including REC-1. However, with passage of State Board Resolution No.2002-0001, those designations were remanded by the State Water Board prior to submission to U.S. EPA for approval because no evidence was provided to justify the designations. A visual search for a spring near Opal Mountain using the online USGS map application, TNM Viewer, revealed a spring symbol approximately a quarter mile southeast of Opal Mountain. An aerial view, using Google Maps and the coordinates of the spring (35.151880° N 117.176354° W) appears to show a fenced area, approximately 50' by 50' with what appears to be a rectangular spring box at its center. In conclusion, the waterbody appears unable to support recreational beneficial uses. The waterbody is unlikely to be a water of the United States, though such a delineation has not been sought or confirmed.

Many Lahontan Region waters are designated COMM, a characteristic of the Basin Plan that is not shared by all other Regions' Basin Plans. The breadth of these designations demonstrate that identification and protection of 101(a)(2) uses has generally been evaluated in the establishment of beneficial uses in the Lahontan Region waters. In waterbodies with no COMM or other "fishable" use, new information has not become available that indicates the uses are attainable. Many of the waterbodies not designated COMM do not have physical characteristics to support fish species, or fish species that would support the COMM use. Types of waters without COMM designation include hot springs, marshes, alkali lakes, wetlands, and intermittent waters. In one case of waterbodies not being designated COMM, the waters of Fish Slough Ecological Preserve are habitat for the federally endangered Owens Valley pupfish.

As required, the Lahontan Water Board will continue to re-examine waters to determine if new information has become available concerning the attainability of CWA section 101(a)(2) uses in future triennial reviews.

Federal Reserved Water Rights

40 CFR 131.20(a) states in part: "This [triennial] review shall include evaluating whether there is any new information available about Tribal reserved rights applicable to State waters that needs to be considered to establish water quality standards consistent with § 131.9." Tribal reserved rights" are defined as "any rights to CWA-protected aquatic and/or aquatic-dependent resources reserved by right holders, either expressly or implicitly, through Federal treaties, statutes, or Executive orders." (40 CFR 131.3(r).) The Lahontan Water Board has no new information about Tribal reserved rights applicable to state waters that need to be considered to establish water quality standards. The Lahontan Water Board will continue to engage with U.S. EPA and Tribes to receive relevant information regarding Tribal reserved rights and consider modifications to water quality standards, as appropriate.

Appendix A – 2025 Triennial Review List of Basin Planning Priorities

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

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, AA) 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 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 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 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.

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 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 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 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 and identify one or more tribes to work with 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 Lahontan 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: 2 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: 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.

Issues Not Recommended for Resource Prioritization

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 June 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 through different processes, and while the Lahontan Water Boards 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.

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 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.

Appendix B – Status of 2022 Triennial Review Issues

2022 Priority	Title	Status
High	Bacteria Water Quality Objectives	Pending USEPA approval
High	Editorial Amendment	Approved
High	Groundwater Protection Prohibitions	On Hold – overlap with other topics
High	High Quality Beneficial Use	Staff Recommendation Developed
High	Riparian, Floodplain, and Wetland Protection Updates	Four Problem Statements Defined; Three issues best addressed w/o BPA; Fourth issue represented in 2025 TR as “Setbacks from Wetlands or other Waters”
High	Tribal Beneficial Use and Subsistence Beneficial Use Designations	Active
High	Update Total Nitrogen WQO for Hot Creek	Active
Medium	Evaluate Developing Instream Flow Criteria	No Resources to Address
Medium	Evaluate USEPA Clean Water Act Section 304(a) Criteria	See Evaluation in this Report
Medium	Groundwater Basin/ Subbasin Alignment and Beneficial Use Designations	“Slow Burn” project of the Regional Groundwater Specialist. May be addressed without BPA
Medium	Mojave Groundwater WQO	No Resources to Address
Medium	Update Prohibition Language for Consistency	No Resources to Address
Medium	Wastewater Basin Plan Updates	No Resources to Address
Low	Add Laurel Pond as a Named Waterbody in Table 2-1 and Evaluate BUs	No Resources to Address; Issue not ripe for consideration

2022 Priority	Title	Status
Low	Evaluate Site Specific TDS WQO for Susan River	No Resources to Address
Low	Evaluate Truckee River Site Specific WQOs	No Resources to Address
Low	Evaluate WQOs for association w/ Specific BUs	No Resources to Address
Low	Update Basin Plan Reference Documents	No Resources to Address