

Lahontan Water Board 2022 Triennial Review List

Below are descriptions of the basin planning issues being considered for prioritization. Presented are summaries of the issues, estimated time to address the issues, and relevant notes. Issues are presented by priority category (High, Medium, Low) and are alphabetized within the category.

Appendix A does not include a description dedicated to tracking State Board Policies and standards actions under development, though such resource commitment will be included in annual workplans. Tracking such projects, and responding to State Board requests for engagement, takes relatively few resources and ensures Water Board staff can bring region-specific input into the development process. Such efforts could result in a basin planning action, but the readiness for these efforts to result in potential amendments to the Basin Plan is not consistent with this Triennial Review period. Examples of State Board projects under development include the Biostimulatory Substances Objective Program to Implement Biological Integrity and the Toxicity Assessment and Control Policy.

High Priority

Bacteria Water Quality Objectives: Fecal Coliform Removal

Summary: Bacteria WQOs use the presence of fecal indicator bacteria (FIB) as a measurement of pathogen risk. Two bacteria WQOs apply to the Lahontan Region surface waters. These include a regionwide WQO of 20 cfu/100 mL fecal coliform WQO measured as a logarithmic mean and a statewide WQO for REC-1 designated waters of 100 cfu/ 100 mL E. coli WQO measured as a geomean. Having two bacteria WQOs causes difficulty for stakeholder messaging, permitting, and water quality assessment purposes. Additionally, using fecal coliform has not been a US EPA recommended FIB since 1986. This project would remove the regionwide fecal coliform based water quality objective from the Basin Plan. A summary of the statewide WQO would be added to the Basin Plan. The action may also update the narrative WQO.

Notes: Updating the bacteria WQO in the Lahontan Basin Plan has been a top Triennial Review priority for several cycles. The USEPA's approval letter of the current Basin Plan also recommended an update to the FIB used for the bacteria WQO. This project is underway and is scheduled for board action in early 2023.

Resources: Estimated project time 1-2 years (project underway). Estimated 0.75 PY.

Editorial Amendment

Summary: Update the Basin Plan to fix errors in the Mojave River Surface Water Beneficial Uses Basin Plan amendment (Mojave BU BPA). The amendment was adopted by the Water Board and approved by the USEPA with the expectation that the Water Board would fix some inadvertent errors in the amendment text. Staff will also propose making other changes to the Basin Plan with this amendment, as well as fixing typos and other edits that are not substantive changes.

Note: The amendment will not be subject to CEQA if it will not have a direct or reasonably foreseeable indirect impact on the environment.

Resources: Estimated project time is 0.5 years. Staff has begun working on this amendment and plans to bring it to the Water Board for consideration as early as June 2022.

Groundwater Protection Prohibitions

Summary: Establish prohibitions limiting certain discharges in critical recharge areas and high priority groundwater basins to mitigate impacts from climate change and population growth. Such actions would be a source water protection measure and compliment protection of headwaters. Prohibition areas could coincide with high priority groundwater basins as identified by the Department of Water Resources. Lake Tahoe and Truckee riparian and floodplain development prohibitions could serve as a template.

Resources: Estimated project time is 4 years. Estimated 1.5 – 2 PY.

High Quality Beneficial Use

Summary: The Lahontan Region contains an abundance of exceptionally high-quality waters. This project would explore 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.

Notes: Development and designation of such a beneficial use will assist the success of future updates to the Basin Plan (see 2018 Triennial Review Priority 11; WQOBU) while ensuring continued water quality protection of waters that meet the use definition. This project was borne of the Bacteria WQO Evaluation Project (2018 Triennial Review Priority 1) and endorsed in the proceedings of the May 2021 Board meeting.

Resources: Estimated project time is 3-5 years. Estimated staffing need 1.5-2.5 PY.

Riparian, Floodplain, and Wetland Protection Updates

Summary: Staff would evaluate the need for updating existing Basin Plan language for consistency and clarity and would consider the need to add additional protections. Such amendment to the Basin Plan would increase the ability of staff to protect water resources and their efficiency in doing so, specifically through the 401/Dredge and Fill and Enforcement programs. Some of the possibilities would include: an updated and specific floodplain definition for ephemeral streams to support staff in implementing the applicability of the Truckee and Tahoe 100-year floodplain prohibition; refining the definition of “riparian areas” to ease determinations by staff and dischargers if a riparian area is a Water of the State; clarify or update the definition of Stream Environment Zones (SEZ) in Chapter 5 (Lake Tahoe Basin) as it relates to lands below high water line in Lake Tahoe and other area lakes; and consider language requiring setbacks from wetlands.

Note: The issue combines several topics included in the October 2021 Triennial Review Board Workshop. Some of the topics described have clear solutions and others would require a more involved development and administrative process.

Resources: Estimated project time is 4 years if addressed as single project. Estimate of 1.5 PY Basin Planning staff and 1-2 PY 401 Program staff.

Tribal Beneficial Use and Subsistence Beneficial Use Designations

Summary: In 2017 the State Board developed Tribal and Subsistence Fishing beneficial uses. The definitions are for Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB). Mercury WQOs are associated with T-SUB and SUB. In September 2020, the Water Board adopted Resolution R6T-2020-0057 adding the beneficial use definitions to the Basin Plan. This action was approved by the Office of Administrative Law in September 2021. This project would designate water bodies in the Lahontan Region with the appropriate beneficial use or uses. To designate the CUL or T-SUB beneficial use a California Native American Tribe must confirm the designation is appropriate.

Note: The TBUs project was a priority of the 2018 Triennial Review. The project is assigned staff resources in the current work plan.

Resources: Estimated project time is 5+ years regionwide. Estimated staff time is 0.5-1PY per year, excluding assistance from the Office of Public Participation and executive engagement.

Update Total Nitrogen WQO for Hot Creek

Summary: The California Department of Fish and Wildlife (CDFW) operates the Hot Creek Fish Hatchery (Hatchery). The project would assess the nitrogen inputs to the Hatchery’s spring fed water supply and determine if a site-specific objective

for nitrogen should be developed for Hot Creek. A revised, or new, site-specific objective may supplant the existing limit in the Hatchery's NPDES permit.

Notes: The Water Board, at the March 2021 Board meeting, adopted a Time Schedule Order providing the CDFW time to comply with the permit effluent limitations and requiring tasks to assess sources of nitrogen.

Resources: Estimated project time is 3-5 years. This project would involve staff from several programs, with an estimated total staffing requirement of 2-2.5 PY. Staffing could be reduced depending on project contribution from CDFW.

Medium Priority

Evaluate Developing Instream Flow Criteria

Summary: This issue considers developing narrative or site-specific numeric flow criteria. Flow is a complex characteristic of streams and rivers. It can be considered an influence on the physical, chemical, and biological aspects of waterbody health. Flow affects a waterbody's water quality in different manners depending on the analyte of concern and the source of the analyte in the water column. Seasonal flow variation is also important to the timing and success of life cycle stages of various aquatic vertebrates and invertebrates. This issue has a climate change nexus with changing precipitation regimes and peak snowmelt runoff, and with the release and timing of impounded waters and water rights.

Note: Traditionally the purview of the Division of Water Rights and California Department of Fish and Wildlife, there is building interest from the Division of Water Quality and Regional Board in addressing instream flow from a water quality perspective. Most notably, the State Board Policy for Maintaining Instream Flows in Northern California Coast Streams (effective 2014) has a limited geographic scope and focus (anadromous salmonids). The [Cannabis Cultivation Policy](#) (2019) includes flow and gaging requirements so growers can determine when they may divert water. The Cannabis Policy instream flow requirements includes many [Lahontan Region waters](#).

Resources: Estimated project time is 5-10 years, fewer if Cannabis Policy requirements can be adapted. Estimated 1-5 PY.

Evaluate USEPA Clean Water Act Section 304(a) Criteria

Summary: 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, aquatic health, and recreation as water quality standards (WQS) into their state plans. Criteria published by the United States Environmental Protection Agency (USEPA) since May 30, 2000, are required to be evaluated.

Note: The 2018 Triennial Review included the recommendation that the Water Board support the State Board in its authority to consider these criteria for statewide standards actions. As a medium priority issue, as identified above, the recommendation is to continue to support the State Board.

Resources: Estimated project time is 0.5-5 years. Resource need varies from 0.2 PY to 2 PY depending on decisions to review, adopt, or defer to State Board action.

Groundwater Basin/Subbasin Alignment and Beneficial Use Designations

Summary: The Basin Plan groundwater basins/subbasin information in the Lahontan Region has not kept pace with updates by the Department of Water Resources (DWR), the agency tasked with identifying the State's groundwater basins/subbasins on the basis of geological and hydrological conditions and consideration of political boundary lines whenever practical ([Water Code §12924](#)). Resolving this issue may involve a Basin Plan Amendment to revise Table 2-2 of the [Lahontan Basin Plan](#) (groundwater beneficial use designations). Such an effort may also include assessment of beneficial uses for the revised groundwater basins/subbasins, including recommendations to designate groundwaters with the MUN beneficial use where consistent with the Sources of Drinking Water Policy ([Resolution No. 88-63](#)). Resolving this issue may include replacing Plates 2A and 2B with links to an online interactive mapping tool (e.g., [SGMA Data Viewer](#), [GeoTracker](#), [GAMA GIS](#)) that is updated with any future changes to basin/subbasin boundaries identified by DWR. Alignment of the Basin Plan's groundwater basins/subbasins with DWR defined groundwater basins/subbasins would streamline coordination with DWR and the Sustainable Groundwater Management Act (SGMA), and would facilitate compliance with the 2019 [Recycled Water Policy Amendment](#) by reducing the number of groundwater basins/subbasins requiring evaluation and supporting development of a prioritization process for salt and nutrient management planning. Linking to an online interactive mapping tool maintained by the State will also facilitate any future groundwater basin/subbasin boundary updates implemented by DWR.

Note: This project is ongoing, led by the Regional Groundwater Specialist.

Resources: Estimated project time is 2-3 years. Estimated 2.5 PYs shared between programs.

Mojave Groundwater WQO

Summary: This project will evaluate groundwater quality information in the groundwater basins of the Mojave River to determine whether it is appropriate to revise and/or develop site specific groundwater quality objectives for the basins. The Mojave River basin is a fast-growing part of the Lahontan Region and includes disadvantaged communities. Past groundwater overdraft affected the Mojave River groundwater basins and led to the Adjudication of the Mojave Basin Area. Groundwater overdraft can concentrate trace chemicals, including naturally

occurring salts and contaminants resulting from human activities. Groundwater pollution is a concern to protect a sustainable domestic and industrial water supply.

Resources: Estimated project time is 4 years. Estimated 2+PY.

Update Prohibition Language for Consistency

Summary: The action would revise the language of the unit/area-specific prohibitions in Chapter 4.1 so that they are written in plain language and to be consistently interpreted and applied for the specific waste types, regionwide. Unit/area-specific prohibition language is inconsistent between unit/areas even though the prohibitions appear to be for the same types of wastes.

Resources: Estimated project time is 2 years. Total PY estimate of 0.75-1 PY split

Wastewater Basin Plan Updates

Summary: Staff would coordinate with the NPDES and WDR programs to revise and update Chapter 4.4 of the Basin Plan (Municipal and Domestic Wastewater: Treatment, Disposal, and Reclamation) to provide a more consistent and specific implementation plan for protection of water quality. Such an effort would also provide dischargers and stakeholders more clarity and specificity to meet such requirements. This issue includes evaluating the need for a regionwide prohibition on cesspools.

Resources: Estimated project time is 2 years, 0.5 PY Basin Planning staff and 0.5 PY wastewater programs staff.

Low Priority

Add Laurel Pond as a Named Waterbody in Table 2-1 and Evaluate BUs

Summary: Laurel Pond receives effluent from Mammoth Community Water District. The project would add Laurel Pond as a named water body and identify beneficial uses. Currently, as an unnamed waterbody in Chapter 2 of the Basin Plan, the beneficial uses assigned to Laurel Pond are those of "Minor Surface Waters." Subsequently, the project would evaluate whether the REC-1 and MUN beneficial uses are appropriate.

Note: This issue has a nexus with the Hot Creek issue. Further investigation is needed to determine the contribution level, if any, of the discharge to the Hot Creek nitrogen inputs through groundwater connectivity.

Resources: Estimated project time is 3-5 years. This project would involve staff from several programs, with an estimated total staffing requirement of 2.5 PY. MCWD has indicated interest in funding contractors to assist, which would reduce staffing needs.

Evaluate Site Specific WQO for TDS for Susan River

Summary: Staff would evaluate the appropriateness of the existing TDS water quality objective and determine if the Susanville Sanitary District can meet permit conditions through capital improvements or alternative methods. The Susan River Water Quality Objective (WQO) for total dissolved solids (TDS) at Litchfield is at 185 mg/L with a 90 percentile at 250mg/L. Data from 2011 indicated the TDS at the Litchfield site was 240 mg/L on average. The Susanville Sanitary District TDS discharge in 2011 below 400mg/L. In comparison, the drinking water standard for TDS is 500 to 1000mg/L. Altering the standards to a lower number standard could still be protective of beneficial use. Any Water Board action to change the WQO would include consideration of an antidegradation analysis.

Resources: Estimated project time is 4 years. Estimated staff time 0.25 Basin Planning staff and 0.25 NPDES staff per year.

Evaluate Truckee River Site Specific Objectives

Summary: The Truckee River has multiple site-specific objectives with multiple points of compliance, each in close proximity. Having such numerous objectives complicates water quality assessment and regulatory practices. The project would evaluate the need for so many compliance points and if the many objectives are appropriate. Staff would recommend keeping as-is, reducing compliance points, and/or changing WQOs.

Resources: Estimated time is 4-5 years. Resolving this issue may draw on resources from the Basin Planning, TMDL, SWAMP, and regulatory programs, with an estimate of 2-3 PY total.

Evaluate WQOs for Association with Specific Beneficial Uses

Summary: Many of the Basin Plan WQOs are not explicitly linked to specific beneficial uses. Staff would evaluate WQOs and beneficial uses for association. In some situations, it will be appropriate to associate existing or updated WQOs with a specific beneficial use, and in some cases the objective may continue to apply generally, or to all beneficial uses. Associating WQOs with the protection of specific beneficial uses would be consistent with USEPA guidance on standards development and would ensure a scientific basis for numeric objectives. Such a change to the Basin Plan would aid staff work developing water quality assessments for the Integrated Report.

Note: This effort is a long-term need but is not necessarily ready for this Triennial Review period. The issue will be resource intensive and should be coordinated with (or after) the HQBU issue. This issue can also be used to create a regionwide

approach to evaluate and update surface water TDS water quality objectives and potentially other standards actions, as well.

Resources: Estimated project time 10 years; can be divided into sub-efforts. The issue presents an important need, but one that is resource intensive. Such an effort could be accomplished with an estimated is 1+ PY per year plus contract funds.

Update Basin Plan Reference Documents

Summary: The plates that display and categorize groundwater basins and watersheds in the Basin Plan can be digitized to increase ease of use and visual resolution. Appendices C and D address sewage and wastewaters disposal and related exemptions. They would be evaluated to determine if they are current and updated or deleted if superseded. Appendix B includes copies of State and Regional Board Policies used in Basin Plan Implementation. The list has not been updated to account for development of newer Policies, which are available online.

Resources: Estimated project time is 1-2 years. It is not clear that updating the plates needs a basin planning action, or if developing and linking to a digitized, or GIS, resource is sufficient.