
Lahontan Regional Water Quality Control Board

MINUTES

October 31, 2023

The Lahontan Regional Water Quality Control Board (Water Board)
conducted this meeting at the locations shown below:

Lahontan Water Board Annex, Hearing Room
971 Silver Dollar Avenue
South Lake Tahoe, CA 96150

And

Via Video and Teleconference (Gov. Code § 11133)

Water Board Members

Kimberly Cox, Helendale
Amy Horne, Ph.D., Truckee
Keith Dyas, Rosamond

Peter C. Pumphrey, Chair, Chalfant
Essra Mostafavi, Bishop

State Water Board

Elizabeth Beryt, Office of Chief Counsel

Sean Maguire, State Board Liaison

Water Board Staff

Ben Letton, Asst. Executive Officer
Jan Zimmerman, Sr. Engineering Geologist
Dan Sussman, Sr Environmental Scientist
Laurie Scribe, Sr Environmental Scientist
Chris Stettler, Sr. WRC Engineer
Shelby Barker, Sr. Engineering Geologist
Anna Garcia, Sr. Engineering Geologist
Katrina Fleshman, Executive Assistant

Timothy Middlemis-Clark, Supervising WRC Engineer
Andrew Jensen, Environmental Program Mgr.
Daniel McClure, WRC Engineer
Abby Cazier, Sr. WRC Engineer
Robert Tucker, Sr. WRC Engineer
Reginald Tan, Sr. WRC Engineer
Christina Guerra, Sr. Engineering Geologist
Ariel Lafarga, Asst. Board Clerk

[View the full Agenda and listen to the audio of this meeting](#)

REGULAR MEETING: Wednesday, October 31, 2023, @ 9:00 a.m.

CALL TO ORDER AND INTRODUCTIONS

Water Board Chair, Peter Pumphrey, called the meeting to order at 9:02 a.m. and discussed procedures for in-person and video and teleconference meetings. Chair Pumphrey introduced AGP Video staff, the Water Board Members, and the Water Board staff.

1. PUBLIC FORUM

No public comments.

2. MINUTES

Motion: Moved by Member Dyas, seconded by Member Dr. Horne, to approve the August 30, 2023, meeting Minutes as presented. Chair Pumphrey called for a roll call vote and the motion carried per the following votes:

Chair Pumphrey	Aye
Vice-Chair Dr. Horne	Aye
Member Dr. Cox	Aye
Member Dyas	Aye
Member Mostafavi	Aye

[View the adopted August 30, 2023, Meeting Minutes](#)

3. REPORTS BY WATER BOARD CHAIR AND WATER BOARD MEMBERS

Water Board member, Dr. Kimberly Cox, gave praise to Assistant Executive Officer, Ben Letton, for his presentation on October 25, 2023, at the Water Quality Control Committee Meeting (WQCC). presentation regarding the work in the Lahontan region.

Water Board member, Dr. Amy Horne, provided a detailed overview of the topics and presentations given at the WQCC meeting.

State Water Board liaison, Sean Maguire agreed with Board members, Dr. Cox, and Dr. Horne about the great WQCC meeting and its topics. Mr. Maguire encouraged those that missed the WQCC meeting to watch the webcast.

Mr. Maguire provided an overview of the regulations to make conservation in California a way of life. Another project by the State Water Board is centered on Water supply, and making sure we have enough water supply resources. Mr. Maguire indicated that the State Water Board is getting close to completing the direct portable use regulations. The State Water Board is hoping to have those regulations up for adoption in December of 2023.

Mr. Maguire went on to indicate the State Water Board just released a Staff Report on the Bay Delta Water Control Plan update. Mr. Maguire further stated that the State Water Board is working on the Sigma Sustainable Groundwater Management Act.

4. EXECUTIVE OFFICER'S REPORT

The Assistant Executive Officer, Ben Letton, provided an update to the Water Board and public on key actions and activities in the Lahontan region, including the items below.

- a. Personnel Report.
- b. 2024 Lahontan Board meeting location changes
- c. Integrating Tribal Beneficial Use Designations, Racial Equity, and Regional Goals
- d. Lahontan Water Board staff Face to Face All staff Meeting. Including a tour with the Kutzadika Tribe.
- e. Tribal Beneficial Use (TBU)
- f. Racial Equity Working Group

Water Board staff, Shelby Barker, gave an overview of the 2nd Quarterly Violations Report.

5. CLIMATE CHANGE PROGRAM ANNUAL REPORT

Water Board staff, Laurie Scribe, Senior Environmental Scientist, presented the annual report to the Water Board. The presentation summarized progress made in implementing the Climate Change Action Plan and Resolution R6T-2019-0277, Climate Change Mitigation and Adaptation Strategy and work planned to occur during fiscal year 2023-2024.

During the Annual Report, the Water Board heard a presentation from guest speaker Michael Dettinger, Research Hydrologist and Climatologist. Mr. Dettinger is currently working as a Visiting Researcher for Scripps Institution of Oceanography and a visiting Research Professor at the Desert Research Institute. Mr. Dettinger presented on his work entitled [Simulated Hydrologic Responses to Climate Change Projections for the Lake Tahoe Basin](#).

QUESTIONS/COMMENTS BY WATER BOARD MEMBERS

Water Board member, Dr. Cox thanked the Water Board staff for all their hard work on this item.

Water Board member, Dr. Horne asked Water Board staff, Ms. Scribe to provide what the four sub-issues are. Ms. Scribe responded: One revolves around the hundred-year floodplain discharge prohibition and whether that applies, or how far that applies up into ephemeral drainages. Another topic related to some of the definitions of stream environment zone and how they overlap in the Tahoe basin with our discharge prohibitions against discharges to surface waters and flood plains. Another one is related to the potential development of a riparian source water protection policy.

Water Board staff, Dan Sussman, Senior Environmental Scientist, added that another sub-issue is the Tahoe Basin floodplain prohibitions and the Truckee floodplain prohibitions, and if a Basin Plan amendment would be appropriate for consistency between the watersheds. The Water Board is possibly looking at our prohibitions in the Tahoe and Truckee as a model for possibly other locations throughout our region.

Water Board member, Dr. Horne, went on to say, we are working on developing a regional strategy for addressing harmful algal blooms, and feels it is time to start thinking about a regional strategy for protecting infrastructure. Dr. Horne added maybe the Water Board should start looking through the data provided by Mr. Dettinger and see where and what kinds of facilities were impacted last year in the heavy winter. Especially looking at the big water years in terms of impacts on hydrology, to see if we can see any patterns in places that could hit, to see if there is a regionwide strategy that we could develop.

WATER BOARD TOOK A BREAK FROM 11:00 AM TO 11:10 AM.

6. WEST FORK CARSON RIVER VISION PLAN

Water Board staff, Danny McClure, Water Resource Control Engineer, presented the plan to address multiple 303(d) listings, including nutrients, turbidity, and salts, affecting the West Fork Carson River in Alpine County. Mr. McClure explained the Vision Plan is an advanced restoration plan developed to resolve these impairments in advance of Total Maximum Daily Load development. Mr. McClure went on to say the Vision Plan is not a formal regulation but describes multiple ongoing and expected actions by the Water Board and stakeholders which, when implemented, are likely to resolve the impairments in the West Fork Carson River. The Vision Plan is also a nine-element watershed plan which will make some projects in the watershed potentially eligible for Clean Water Act section 319 funding. The Vision Plan includes an implementation timeline and outline for adaptive management.

Water Board staff asked the Water Board members to consider adopting a resolution supporting the Vision Plan and directing staff to forward the document to U.S. Environmental Protection Agency (EPA).

QUESTIONS/COMMENTS BY WATER BOARD MEMBERS

Water Board member, Keith Dyas, asked regarding the South Tahoe Public Utilities District (PUD), and if their treatment system removes nitrogen. Mr. McClure replied that it is a secondary treatment system, so it does remove some nitrogen.

Water Board member, Keith Dyas, asked regarding Mr. McClure's reference to the onsite water treatment systems that produce some effluent with nitrates in them, asked if the watershed includes any public wastewater treatment systems. Mr. McClure replied that the West Fork watershed does not include any public wastewater treatment systems.

Water Board member, Dr. Kimberly Cox asked what is attributable to the frequent harmful algal blooms (HABs) in Red Lake. Mr. McClure replied that the lake is high up on the watershed, and the source of nutrients contributing to HABs could be from recreational use, but we do not know for sure.

Water Board member, Dr. Cox, asked if there is an interplay between the vision plan and the Basin plan, and is this intended to help inform future basin plan amendments. Mr. McClure replied, the things we work on here could help inform us about things we might want to add to the Basin Plan in the future, and things that don't work here, we don't want to add to the future basins. The overall implementation could provide a framework for how we do everything.

Water Board member, Essra Mostafavi, asked if the 319 and NRCS funds would still be available if the West Fork was only on the 303(d) list. Mr. McClure replied the NRCS funds would be, but the 319 implementation funds are only available if you have the nine-element watershed plan.

Water Board member, Dr. Horne likes the Vision Plan approach. Dr. Horne would like to see Vision Plans used in other projects within the Lahontan region.

PUBLIC COMMENTS

Brenda Hunt, Watershed Program Manager, Carson Water Subconservancy District – expressed support for the Vision Plan, and support for the development of a Vision Plan for the East Fork Carson River.

Kimra McAfee, from Alpine Watershed Group - expressed support for the Vision Plan, and support for the development of a Vision Plan for the East Fork Carson River.

Devere Dressler, representing self. - expressed support for the Vision Plan.

Motion: Moved by Member Dr. Horne, seconded by Member Dr. Cox, to adopt a resolution supporting the Vision Plan and directing staff to forward the document to U.S. EPA as presented. Chair Pumphrey called for a roll call vote and the motion carried per the following votes:

Chair Pumphrey	Aye
Vice-Chair Dr. Horne	Aye
Member Dr. Cox	Aye
Member Dyas	Aye
Member Mostafavi	Aye

7. 2023 LEVIATHAN MINE SITE PROJECT UPDATE

Water Board staff, Abby Cazier, Senior Water Resource Control Engineer, discussed the 2023 pond water treatment and maintenance operational challenges encountered at the Leviathan Mine Site (Site) due to the extreme weather conditions experienced during the 2022/2023 water-year. Ms. Cazier explained the status and initial concerns of the draft Remedial Investigation Report developed by Atlantic Richfield Company (AR) to define the nature and extent of mine-related impacts in mine waste, surface water, groundwater, stream sediment, and floodplain soil. Ms. Cazier went on to explain U.S. EPA's direction to AR to revise the draft Focused Feasibility Study for year-round treatment of the release of acid mine drainage from five (5) locations at the Site.

QUESTIONS/COMMENTS BY WATER BOARD

Water Board Member, Keith Dyas, asked regarding the treatment systems. In reference to the Aspen Seep Bioreactor, Mr. Dyas wondered if the performance of the bioreactor is dependent on ambient temperature. Does it work better in the summer months than in the winter months? Ms. Cazier replied the performance is not contingent on the temperatures as the treatment system is not entirely biological and requires the addition of sodium hydroxide to increase influent pH to precipitate metals.

Water Board member, Dr. Kimberly Cox, asked if the acid drainage occurs 365 days a year, and if so, what happens in the winter when it is covered with snow, and we can't do any remediation. Ms. Cazier replied that the Acid Mine Drainage (AMD) flows year-round and does not stop in the winter since it is groundwater discharging to the surface. Water Board member, Dr. Cox, further asked what happens to that drainage during winter when we can't treat. Ms. Cazier replied that the State has the capacity to store AMD flows from the pit underdrain and admit year-round in the upper ponds and seasonally treat pond water. AR does not have the capacity to store AMD flows from the channel underdrain and delta seep year round and AMD flows are discharged into the Leviathan Creek when the treatment system is shutdown.

Water Board member, Essra Mostafavi, asked if there have been any studies regarding the costs of having to remediate water introduced as direct precipitation. Ms. Cazier replied that the Water Board is working with Atlantic Richfield to address concerns for need to treat the direct precipitation, and looking into other alternatives for AMD

storage, like tank storage. Ms. Mostafavi, asked if there is accounting over the long run regarding the costs of direct precipitation, diluting the sludge, etc., could those funds potentially be used as preventive measures to cover these ponds. Ms. Mostafavi further asked if the Water Board staff have any suggestions regarding how to divert direct precipitation from falling on the ponds. Ms. Cazier replied that Water Board staff, Chris Stetler, came up with an underground aquifer system, using the storage ponds in their capacity and filling the system with pipes and gravel, and then allowing for the AMD to flow into those ponds and having a vegetated cover on top of the pond system. Lahontan staff brought these ideas to the U.S. EPA, and they get to choose what the final remedy looks like. Ms. Mostafavi further asked if the U.S. EPA acknowledged any of the concerns Lahontan staff addressed regarding the control sites. Ms. Cazier indicated we have addressed our concerns by characterizing background concentrations with USEPA and are hoping to have some resolution in the coming months.

Water Board member, Dr. Amy Horne, referred to Dr. Michael Dettinger's presentation in the Climate Change report, and asked Ms. Cazier if there was information provided by Dr. Dettinger that changed her thinking about the final remedy. Ms. Cazier replied that it does lead to the fact that we do need to implement better storm water controls at the site to divert the storm water before it infiltrates into the mine wastes to create AMD. Extreme weather does offer a lot of challenges with regards to the design of the treatment system for the final remedy.

PUBLIC COMMENT


Curt Taras, representing Infrastructure Improvement Inc., would like to be considered as our next subcontractor for Leviathan Mine.

8. CLOSED SESSION

The Water Board members did not go into Closed Session on Tuesday, October 31, 2023.

ADJOURNMENT

With no further business to come before the Water Board, the meeting adjourned at 12:51 p.m. on October 31, 2023.

Prepared by:  Adopted: 10/31/2023
Katrina Fleshman, Water Board Clerk