
**EXECUTIVE OFFICER'S REPORT**
Covers April 1, 2024 – April 30, 2024

## Contents



## 1. Personnel Report – *Sandra Lopez*

### New Hire

- Aileen Chea, Water Resource Control Engineer, Wastewater & Agricultural Unit, Victorville. This position will provide regulatory oversight of projects involving discharges to groundwater or surface waters and projects intended to restore and/or enhance water quality in the Waste Discharge Requirements, National Pollutant Discharge Elimination System, and Site Cleanup Programs.

### Vacancies

- Environmental Scientist, Planning & Assessment Unit. The position is advertised with placement in either the South Lake Tahoe or Victorville office. This position will assess water quality data to help develop the 303(d) Impaired Waters List, work to restore impaired waters, and work on Basin Planning priorities. The position requires work based in science, policy, and public process.

- Senior Water Resource Control Engineer, as the Supervisor overseeing the Forestry/Dredge and Fill Unit (FDF). The position is advertised with placement in the South Lake Tahoe office. This position will manage a team of two Environmental Scientists, two Engineering Geologists, a Water Resource Control Engineer, and a Scientific Aid. The FDF is responsible for implementing the Forestry Activities Program and the Dredge and Fill Program throughout the Lahontan region. The position requires work based in science, policy, and public process.

**Departures**

- Adam Henriques, Environmental Scientist, Forestry/Dredge and Fill Unit, South Lake Tahoe

- Janelle Spandau-Butts, Scientific Aid, Regulatory and Enforcement Unit, South Lake Tahoe

2. **Leviathan Mine, Alpine County** – *Leviathan Unit*

Water Board staff continue site cleanup and maintenance work at Leviathan Mine that started in the 1980s. This work involves coordinating with United States Environmental Protection Agency (USEPA), Atlantic Richfield Company (ARC), project stakeholders, and government partners.

Extensive background on the Leviathan Mine cleanup project has been provided in previous EO Report articles and in board presentations. The most recent EO Report article was published in the March 2023 EO Report. The most recent board presentation occurred at the October 2023 board meeting. The following article focuses on work completed and challenges encountered since those updates.

**Field Activities**

**2024 Early-Season Treatment**

The Water Board started mobilizing the early-season treatment system in early-March and treating pond water on March 20, 2024. Field conditions for the 2024 early-season treatment were much less challenging than during last year's record setting water year. By mid-March last year, the ponds had already filled to approximately 94% of capacity while this year, in mid-March, the ponds had only reached approximately 73% of capacity.

The additional capacity in the ponds in 2024, along with better weather conditions (less snow onsite), and improved access allowed early-season treatment operations to proceed on a nearly continuous basis following startup. Water Board staff expect to continue early-season treatment until such time that the ponds are approximately 70% of capacity or until summer treatment operations commence on or around July 8, 2024. The March 2023 Executive Officer's Report contains background information on the early-season treatment process.

**Summer Treatment**

Mobilization efforts for summer treatment are expected to commence mid-June 2024 with treatment commencing on or around July 8, 2024. Water Board staff estimate the remaining volume to treat after the early-season treatment effort will be approximately 9 million gallons and that it will take approximately 6-8 weeks to treat this volume barring any significant operational delays. The actual volume to be treated will depend on the

volume of acid mine drainage that flows into the pond system, the volume of rain or snow that enters the ponds, and the amount of water that evaporates from the ponds.

**Settlement Agreement Activities**

As of the review of second quarter 2023 expenses, Water Board staff and ARC agreed that ARC had spent $62.4 million in total on remedial investigation and feasibility studies, making ARC's credit approximately $20.6 million. The August 2022 Executive Officer's Report contains the most recent preceding update on the settlement agreement costs allocation.

ARC has asked the State of California, through the Lahontan Water Board, to take ownership of the property. After transferring the site to ARC, the Water Board would retain its regulatory role as a support agency. Additionally, Water Board staff would continue working with the USEPA as the lead agency towards continued investigation, assessment, and remediation of the mine site. The transfer ultimately is expected to result in more efficient contract procurement than the State of California could attain. A legislative bill allowing transfer of the property may be adopted by the end of the legislative session in August.

**Long-term Remediation Activities**

USEPA placed Leviathan Mine on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List on May 11, 2000. This action made the site a federal Superfund site. As such, pollution abatement work at the site must follow the Superfund process outlined in Figure 2.1.

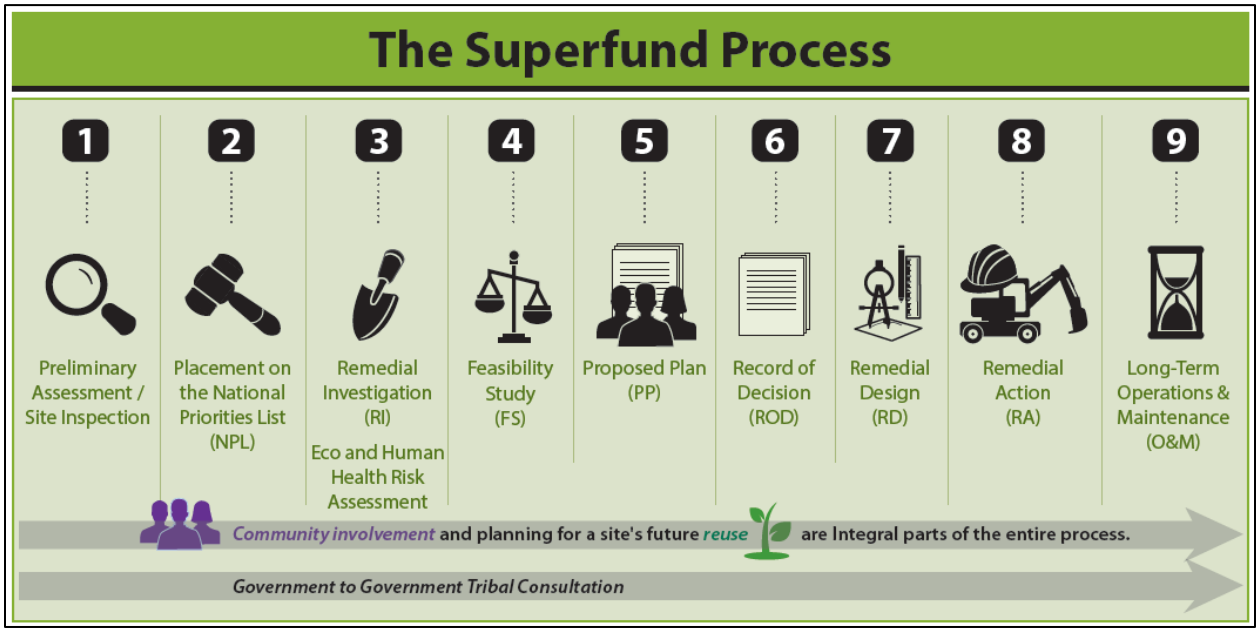


**Figure 2.1: The Superfund Process**

**Superfund Process Step 3**

ARC submitted the Draft Remedial Investigation Report on April 28, 2023 to USEPA for review. Water Board staff, along with Desert Research Institute and California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA), are currently reviewing and commenting on the Draft Remedial Investigation Report. USEPA has requested Water Board comments by June 17, 2024.

ARC submitted the Baseline Human Health Risk Assessment on August 4, 2023 to USEPA for stakeholder review. Water Board staff, along with OEHHA, are currently reviewing and commenting on the Baseline Ecological Risk Assessment. USEPA has requested Water Board comments by July 1, 2024.

ARC submitted the Baseline Ecological Risk Assessment on September 13, 2023 to USEPA for stakeholder review. Water Board staff, along with OEHHA, are currently reviewing and commenting on the Baseline Ecological Risk Assessment. USEPA has requested Water Board comments by July 1, 2024.

**Superfund Process Step 4**

ARC submitted a Focused Feasibility Study for a proposed First Final Remedial Action on August 6, 2021, and a related Technical Impracticability Evaluation on September 30, 2021. Water Board staff submitted comments on both these documents on January 14, 2022 and USEPA provided comments on the Focused Feasibility Study for a proposed First Final Remedial Action to ARC on May 22,2023. USEPA has not received a revised Focused Feasibility Study from ARC. The March 2023 Executive Officer's Report contains additional information on the Focused Feasibility Study.

**Funding Challenges**

**Summer Treatment System Improvements**

Water Board staff are working with the State Water Board to secure funding for the summer treatment system improvements. Contingent upon funding, the project could go out to bid late fall 2024. Construction is expected to take four years to complete and will have to be carried out in a manner that allows summer treatment to occur as required by USEPA. The August 2022 Executive Officer's Report contains background information on the summer treatment process.

**Summer Treatment System Operations**

As mentioned in the October 2023 board meeting, Water Board contractors treated a record total of 28.5 million gallons during the combined 2023 early and summer treatment seasons. This represented approximately 14 percent of all acid mine drainage treated by the Water Board since 2000 (197 million gallons). The Water Board pays the contractors on a per gallon basis, which means a record-breaking year has a similar impact on the treatment system budget. Additionally, a new treatment contract included increased costs, reflecting domestic inflation occurring since the start of the preceding

contract in 2021. Water Board staff have requested additional funds to cover these costs but have been unsuccessful due to the current statewide budgetary constraints.

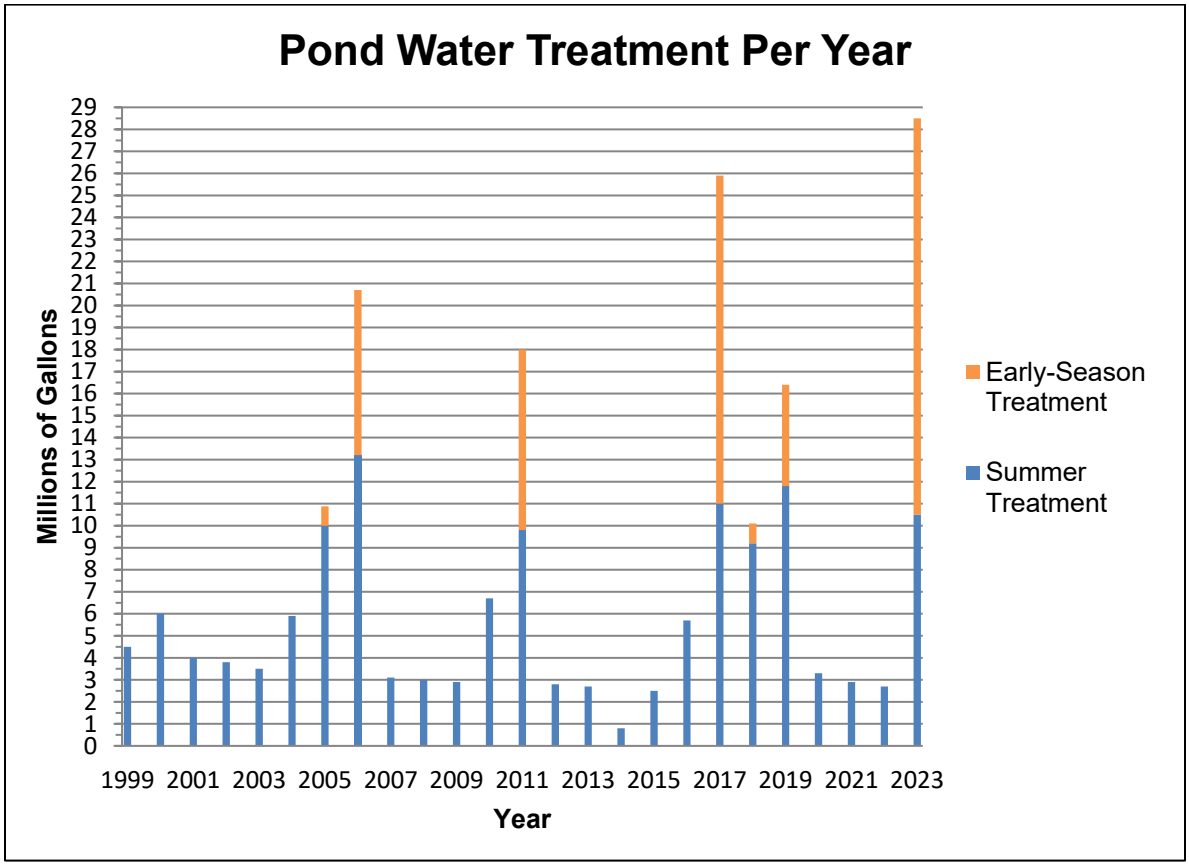


**Figure 2.2: Water Board pond water treatment volumes per year**

**Site Maintenance Needs**

The Water Board requested and received $5.163 million from the General Fund in fiscal year 2023-2024 for the repair of the Leviathan Creek Channel Diversion. This request was based on a construction cost estimate prepared by the project's design consultant. After receiving the funding, DGS solicited bids for the project and received a single construction bid at $11.462 million. The shortfall between the bid amount and available funding for the project was approximately $6.3 million. Given the shortfall, DGS could not award the project. The Water Board staff elected to defer pursuing additional funding for the project after discovering the project budget shortfall and due to constraints on the State budget.

3. **Standing Item – Onsite Wastewater Treatment Systems** – *Jose Valle de Leon*

This item provides a status update of the State Water Resources Control Board's (State Water Board's) Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS or septic systems), or

OWTS Policy. The OWTS Policy allows the continued use of OWTS with permitting authority lying with the local agency.

The OWTS Policy establishes a five-tiered approach (Tiers 0-4) for the regulation and management of OWTS installations and replacements (Table 3.1). The Lahontan Water Board currently is the lead contact for the implementation of nine Local Agency Management Programs (LAMPs). There are also two cities that permit septic systems without a LAMP within the Lahontan Region. These cities permit systems by following guidelines in the OWTS Policy under Tier 1.

| Tier | Description of Tier | Effect in Lahontan Region | Local Agencies under Lahontan Water Board Jurisdiction |
|---|---|---|---|
| 0 | Existing OWTS that are properly functioning and do not meet the conditions of failing systems or otherwise corrective action | Applies to most existing OWTS | |
| 1 | New or replacement OWTS that meet low risk siting and design requirements as specified in Tier 1 | Applies to two local agencies issuing OWTS permits without a LAMP | Adelanto<br>Victorville |
| 2 | Local agencies that permit OWTS with an established LAMP that has standards specified | Applies to local agencies issuing OWTS permits with an approved LAMP | Lassen County<br>Alpine County<br>Mono County<br>Inyo County<br>San Bernardino County<br>California City<br>Barstow<br>Apple Valley<br>Hesperia |
| 3 | OWTS in surface watersheds impaired by nutrients or pathogens | Currently, there is none in Region 6 | |
| 4 | Failed existing OWTS | When local agency required corrective actions are completed, OWTS returns to Tier 0 | |

**Table 3.1: OWTS Policy Tiers and Local Agencies Reporting to Lahontan Water Board**

### Summary of OWTS Policy Revisions and Amendments

On April 18, 2023, the State Water Board adopted the revised OWTS Policy. The revised OWTS Policy replaced the original OWTS Policy that was adopted on June 19, 2012. The revised policy includes minor clarifications to the applicability of OWTS Policy tiers, including:

- Specifying that LAMPs must comply with local ordinances.
- Clarifying the mechanism for defining the geographical reach of certain requirements contained within LAMPs or Advanced Protection Management Programs.
- Clarifying the timing for the submission of reports.
- Removing legacy language addressing applicability during the initial phase-in period of the OWTS Policy which has now passed.
- Including non-substantive revisions for improved website accessibility and readability.

Revisions to clarify authority already afforded to local agencies, concerning LAMPs, including:

- Defining domestic wastewater to include wastewater normally discharged from systems serving multiple dwelling units, including accessory dwelling units that are the subject of recent legislation.

- Clarifying that the OWTS Policy Tier 2 LAMPs can include alternative collection and disposal systems that use subsurface disposal that are determined to be appropriate alternative systems by a qualified professional to satisfy Tier 2 LAMP requirements. All OWTS, including alternative collection and disposal systems that use subsurface disposal under a LAMP, must adhere to monitoring requirements, any service provider roles outlined by an approved LAMP, and any other applicable Tier 2 requirements. OWTS covered by a LAMP utilizing supplemental treatment may be required to meet Tier 3 conditions, which may include nitrogen and pathogen monitoring and mitigation requirements.

- In addition to the existing surface water considerations in the OWTS Policy, noting that LAMPs should consider whether any additional requirements may be needed to be more protective of water quality, including groundwater degradation, in specific areas within a local agency's jurisdiction, including areas vulnerable to groundwater pollution from OWTS.

**Local Agency Management Program (Tier 2) Update**

Per Tier 2 requirements of the OWTS Policy, local agencies may submit management programs "Local Agency Management Programs" for approval by the applicable Regional Water Board, and upon approval then manage the installation of new and replacement OWTS under that program. LAMPs approved under Tier 2 provide an alternate method from Tier 1 programs to achieve the same policy purpose, which is to protect water quality and public health.

Discussions with San Bernardino County started last October to update the San Bernardino LAMP after the County expressed its intention. On March 8, 2024. San Bernardino County submitted an initial draft LAMP to the Water Board as the County intends to revise its LAMP. Since then, Lahontan Water Board staff, along with Colorado River Water Board and Santa Ana Water Board staff have been working

with the County of San Bernardino to update their 2017 LAMP. No other local agencies other than San Bernardino have expressed intentions of adopting or revising a LAMP.

**Reporting to GeoTracker**

As a requirement in the LAMPs and the OWTS Policy, local agencies must report annually by February 1 on the permitting and enforcement activities of the previous year. Additionally, Lahontan Water Board staff are requesting local agencies to provide the following information in the annual permitting and enforcement reports to evaluate the density loading of OWTS in the Lahontan Region:

- Map of septic installations, failures, and complaints
- Narrative summary of septic installations, failures, and complaints from the previous calendar year

As of May 2024, of the eleven local agencies reporting to the Water Board (see Table 3.2) under the OWTS Policy, seven agencies have not submitted their 5-Year LAMP Assessment reports and ten have not submitted their 2023 annual reports (Table 3.2).

| Local Agency Management Program | 5 Year LAMP Assessment | Last Annual Report Submitted |
|---|---|---|
| Apple Valley Town | Submitted to GeoTracker – Not Reviewed | 2022 |
| Inyo County | Not Submitted | 2022 |
| California City | Not Submitted | 2022 |
| Barstow City | Not Submitted | 2020 |
| San Bernardino County | Submitted to GeoTracker – Reviewed | 2022 |
| Mono County | Not Submitted | 2023 |
| Hesperia City | Not Submitted | 2022 |
| Alpine County | Not Submitted | 2022 |
| Lassen County | Not Submitted | Not Submitted |
| Victorville City OWTS Tier 1 | N/A | 2020 |
| Adelanto City OWTS Tier 1 | N/A | 2021 |

**Table 3.2: Summary of LAMP Reporting**

Staff has only reviewed the San Bernardino County LAMP 5-Year assessment report thus far due to prioritization of time. The San Bernardino County LAMP accounts for almost 85% of the population in the Lahontan Region. The only other 5-year assessment report was submitted by the Town of Apple Valley, which accounts for about 3% of the population. Staff are contacting the other local agencies regarding the late submittal of their 5-year assessment reports.

4. **Standing Item – Update on Salt and Nutrient Management Plans in the Lahontan Region** – *Anna Garcia*

This item is a regular update on the progress of Salt and Nutrient Management Planning efforts in the Lahontan Region. The State Water Board's *Water Quality Control Policy for Recycled Water* (Recycled Water Policy) was adopted in 2009, then amended in 2013 and 2018. The 2018 Recycled Water Policy Amendment provides updated guidance on developing groundwater basin-wide or subbasin-wide Salt and Nutrient Management Plans (SNMPs). Lahontan Water Board staff previously presented a region-specific Staff Report on Developing a Salt and Nutrient Management Planning Strategy to provide an evaluation of groundwater basins/subbasins for potential threats to water quality from salt and nutrients. The strategy consists of three parts: updated data assessments for existing SNMPs, basin/subbasin evaluation and prioritization, and groundwater basin/subbasin alignment.

**Updated Data Assessments for existing SNMPs**:

Stakeholders in the Lahontan Region developed, and the Lahontan Water Board accepted five SNMPs prior to April 8, 2019. This list provides the SNMP name and the date of plan acceptance:

- Antelope Valley SNMP - November 2014
- Mojave SNMP - February 2016
- Fort Irwin SNMP - January 2017
- Indian Wells Valley SNMP - April 2018
- Fremont Basin SNMP - January 2019

These five SNMPs cover 12 groundwater basins/subbasins and almost 90% of the population living across all of the DWR defined groundwater basins/subbasins of the Lahontan Region.

The 2018 Recycled Water Policy Amendment requires stakeholders to upload SNMP water quality data to the SWRCB's Groundwater Ambient Monitoring and Assessment Program (GAMA) system. The new GAMA GIS Data Connection Tool is now ready for use to upload SNMP water quality data into the GAMA Groundwater Information System. The GAMA Groundwater Information System integrates and displays water quality data from various sources on an interactive Google-based map. Data is compiled from multiple sources and includes well chemical data and depth to water measurements. This system centralizes and increases the availability of groundwater information to the public and decision makers. Lahontan staff are also able to use the GAMA Groundwater Information System in our basin/subbasin evaluation and prioritization process in support of our region-specific SNMP Strategy.

DWQ staff reviewed available SNMPs and coordinated with the United States Geologic Survey to develop a map that identifies basins with potential for brackish groundwater desalination, documenting this work in Groundwater Basins with Potential for Brackish Groundwater Desalination. The work was completed in early 2024 in support of the

Governor's Water Supply Strategy which tasked the State Water Board with reviewing groundwater basins impaired by salts and nutrients and determining the volume of water available for brackish groundwater desalination.

During review of several existing SNMPs from across the State, DWQ staff noted that SNMPs contain project implementation tables that include benchmarks and goals and identified the need for a process to track SNMP implementation progress. DWQ staff and the SNMP Data Management Group are looking for ways to improve tracking of SNMP implementation. DWQ Staff expect to reinitiate meetings of the SNMP Data Group during Summer 2024. Lahontan staff continue to work with DWQ staff and the SNMP Data Management Group to advance SNMP efforts in our Region.

**Basin/subbasin evaluation and prioritization**:

Lahontan staff are implementing a basin/subbasin evaluation and prioritization process of the 105 DWR identified basins/subbasins in our region based on population tiers. Tier 1 consists of basins/subbasins with populations greater than 10,000, Tier 2 is comprised of basins/subbasins with populations between 1,000 and 10,000, and Tier 3 contains basins with populations less than 1,000. Our Region contains ten Tier 1 basins/subbasins, seven Tier 2 basins/subbasins, and eighty-eight Tier 3 basins/subbasins. Of our Tier 1 basins/subbasin, six are covered by previously accepted SNMPs, leaving four Tier 1 basins/subbasins in need of evaluation. Lahontan staff are in the process of reviewing water quality data for these four Tier 1 basins/subbasins available through the GAMA Groundwater Information System.

**Alignment of groundwater basins/subbasins**:

Lahontan staff identified a discrepancy between the basins/subbasins identified in the Basin Plan and the basins/subbasins defined by DWR in Bulletin 118, California's Groundwater. Table 2-2 of the Basin Plan lists 346 basins in the Lahontan Region. The 2020 update of Bulletin 118, California's Groundwater by the Department of Water Resources (DWR) lists 105 groundwater basins/subbasins for the Lahontan Region. Lahontan staff worked with DWQ and DWR staff to consider how we might align our groundwater basins/subbasins and in early 2024, Lahontan staff worked with State Board DIT to generate a GIS image layer that displays the boundaries of the groundwater basins/subbasins identified in our Basin Plan. Staff are comparing the basin/subbasin boundaries identified in the GIS image layer with the boundaries defined in GIS layers from Bulletin 118, California's Groundwater and reviewing lithologic data from well driller logs to refine basin boundary locations. Staff are also considering the next steps to move forward with the basin/subbasin alignment process.