

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF FINANCIAL ASSISTANCE
SEPTEMBER 19, 2023**

ITEM 3

SUBJECT

CONSIDERATION OF A PROPOSED RESOLUTION TO ALLOCATE UP TO AN ADDITIONAL \$3,200,000 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA) FOR THE LEVIATHAN MINE EMERGENCY ACID MINE DRAINAGE TREATMENT AND PIT SLOPE STABILIZATION PROJECTS (PROJECTS).

DISCUSSION

Leviathan Mine is a former sulfur mine the State of California acquired in the early 1980s to address water quality problems caused by historic mining. The State Water Resources Control Board (State Water Board) has delegated jurisdiction over pollution abatement activities at the former mine to the Lahontan Regional Water Quality Control Board (Lahontan Water Board).

On May 11, 2000, the United States Environmental Protection Agency (USEPA) placed Leviathan Mine on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List, thus making Leviathan Mine a federal Superfund site. USEPA issued an Administrative Abatement Action (AAA) that directs the Lahontan Water Board to implement certain pollution abatement and site monitoring activities at Leviathan Mine.

Lahontan Water Board staff are responsible for monitoring the water levels in holding ponds at the mine that collect and contain acid mine drainage (AMD). During normal water years, the Lahontan Water Board mobilizes personnel, equipment, and supplies to the mine in June when the site becomes accessible, and then treats AMD in the ponds using an in-place treatment facility. This treatment effort allows for discharge of treated water to Leviathan Creek to maximize the capacity of the ponds to receive AMD through the next winter/spring seasons.

During some water years, the capacity of the ponds can be exceeded, which could result in the discharge of untreated AMD from the ponds to Leviathan Creek. When necessary to avoid such a discharge, the Lahontan Water Board initiates emergency winter/spring treatment operations to treat AMD for discharge. This creates adequate capacity to hold all incoming AMD until regular operations begin in the summer. Lahontan Water Board staff regularly monitor pond levels, acid mine drainage flow rates to the pond system, precipitation and snowpack, as well as predicted weather conditions, to determine when emergency winter/spring treatment operations are necessary.

Since 2002, CAA funds totaling over \$8 million have been provided for various pollution abatement work at Leviathan Mine including emergency treatment operations.

Previously approved funds have been expended. For over ten years, the Lahontan Water Board has also received an annual allocation from the General Fund, which covers routine summer treatment of AMD, but not emergency treatment work in the winter and spring.

On February 26, 2019, the DFA Deputy Director approved \$500,000 in CAA funding to the Lahontan Water Board to implement the emergency treatment work at Leviathan Mine and determined that the Project is exempt from the California Environmental Quality Act under statutory exemptions for emergency projects (Public Resources Code Section 21080(b)(4); California Code of Regulations, Title 14, Section 15269, Subdivision (c)). On May 7, 2019, in [Resolution No. 2019-0016](#), the State Water Board adopted additional CAA funding of \$800,000 to sufficiently cover emergency AMD treatment in future years. The Lahontan Water Board has an existing emergency contracting process in place with the Department of General Services that they will utilize to quickly mobilize the contractor to initiate emergency treatment work.

On July 11, 2023, Lahontan Water Board staff informed Division of Financial Assistance (DFA) staff that based on recent record high precipitation resulting in higher than normal flows of AMD into the pond system and more direct precipitation (rain and snow) upon the ponds than seen in the last 20 years, Lahontan Water Board staff expect a need for additional funding to support winter/spring emergency treatment work.

Based on historical needs, emergency treatment is typically needed every four to five years. Costs are typically within \$650,000 per annual event; however, in 2022, costs were higher at \$800,000. The Lahontan Water Board is requesting \$2.4 million in CAA funding to supplement previous approvals. If the State Water Board approves this request, a total of \$2.4 million will be available for use over the next three years. This requested amount is based upon past need, but additional funding may be needed within the three-year timeframe if there are a series of very wet winters.

As a result of record-breaking rain/snowfall at the Project site during the 2023 water-year, soils on a slope adjacent to the AMD treatment Pit Clarifier became saturated in the Spring of 2023, resulting in a slump in the slope. Surface runoff and groundwater with slope deposition material flowed downhill into the Pit Clarifier. Several weeks after the release of water and debris from slump occurred, the State redirected drainage away from the Pit Clarifier and removed landslide debris so the Pit Clarifier could be put into service for the 2023 summer treatment effort.

Broader instability in areas proximate to the slump remain and instability continues to present a threat to the Pit Clarifier. Loss of the Pit Clarifier would require shutdown of summer treatment operations and could result in the unauthorized discharge of untreated AMD to waters of the State (Leviathan Creek).

It is anticipated that extreme weather due to climate change will persist into the future at the site and exacerbate slope instability conditions; therefore, it is necessary to complete emergency measures to protect and maintain critical infrastructure prior to the onset of winter conditions, no later than November 30, 2023. Failure to do so could lead to additional slope failure and disruption of summer treatment efforts in 2024. The

Lahontan Water Board is requesting \$800,000 in additional CAA funding for the construction of mitigation measures to increase slope stability across the area that remains unstable and for removal of debris that flowed into the pit clarifier.

Approval of this request will allow Lahontan Water Board staff to initiate emergency contracting quickly when emergency winter and spring treatment needs arise and to implement the necessary slope stability mitigation measures timely. Given that the total funding requested for the Project exceeds the \$500,000 threshold for DFA approvals, State Water Board approval is required.

The requested allocation is consistent with the purposes of Water Code section 13442, which provides that the State Water Board may approve the payment of moneys from the CAA to a public agency to assist in cleaning up a waste or abating the effects of a waste on waters of the state. Consistent with the CAA Funding Program Guidelines, adopted by the State Water Board on December 11, 2018, this Project is categorized as a Tier 1 emergency project that requires immediate action to mitigate a significant threat to the environmental or public health and safety.

POLICY ISSUE

Approves the allocation of up to \$3.2 million in additional CAA funds to the Projects. The funds will be available until June 30, 2027. Any unexpended funds, as of December 30, 2027, shall revert to CAA, unless the Deputy Director or Assistant Deputy Director of DFA authorizes an extension.

FISCAL IMPACT

CAA cash balances are adequate to cover projected Project expenditures.

REGIONAL BOARD IMPACT

The Lahontan Water Board is supportive of the proposed additional funding for the Project.

STAFF RECOMMENDATION

Staff recommend that the State Water Board adopt the proposed resolution.