

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**MEETING OF OCTOBER 2, 2024
MAMMOTH LAKES, CA**

ITEM 7

CLIMATE CHANGE PROGRAM ANNUAL REPORT

CHRONOLOGY

November 20, 2019	The Lahontan Water Board adopted Resolution No. R6T-2019-0277 formalizing a Climate Change Mitigation and Adaptation Strategy (Climate Change Strategy) for the Water Board. The Climate Change Strategy provides direction and guidance on the development and implementation of actions to address climate change impacts. Resolution R6T-2019-0277 directs staff to develop an action plan for purposes of making progress toward protection of the four key resource areas, and to report annually regarding progress.
March 10, 2021	Water Board staff presented an informational item to the Lahontan Water Board and a staff report titled “Climate Change Mitigation and Adaptation Action Plan for the Lahontan Region” (Climate Change Action Plan). The Climate Change Action Plan provides more context to the Water Board’s role in mitigation and adaptation efforts, summarizes guidance contained in the Climate Change Strategy, and presents a framework to clarify how actions are developed, prioritized, and reported upon.

BACKGROUND

The Lahontan Water Board prepared its Climate Change Strategy, which was formalized with the adoption of [Resolution No. R6T-2019-0277](#) (Resolution) in November 2019. The Resolution and Climate Change Strategy describe the Lahontan Water Board’s role in protecting water quality and beneficial uses within the context of California’s climate change efforts and summarizes anticipated regional climate change impacts.

The Resolution directs staff to focus its efforts, as resources allow, to address the impacts of climate change on the four key resource areas identified in the Policy Statements:

- (1) Protection of Wetlands, Floodplains and Headwaters
- (2) Protection of Infrastructure
- (3) Protection of Groundwater Quality & Supply
- (4) Protection of Headwater Forests and Promoting Fire Resiliency

BACKGROUND

Additionally, the Resolution and the Climate Change Strategy directs Water Board staff to develop an action plan. The Climate Change Action Plan was brought forth as an informational item presented to the Lahontan Water Board in March 2021. It contains more context to the Water Board's role in mitigation and adaptation efforts, summarizes guidance contained in the Climate Change Strategy, and provides a framework to clarify how actions are developed, prioritized, and reported upon. Resolution R6T-2019-0277 directs the Executive Officer, or their designee, to report annually to the Lahontan Water Board on progress of program specific climate change response related actions from the previous year. Section 5 of the Climate Change Action Plan provides guidance regarding the content for the annual reporting to the Board.

DISCUSSION

This Climate Change Action Plan Annual Report (Annual Report) presents information to the Lahontan Water Board and public on progress related to implementation of the Climate Change Strategy and Climate Change Action Plan (collectively Climate Change Program). As described in the Climate Change Action Plan, the primary tools the Lahontan Water Board has as a regulatory agency include permit requirements, use of enforcement, developing policies, and conducting or requiring monitoring.

This Annual Report describes actions supporting our Climate Change Program that were accomplished during 2023-2024 fiscal year (FY 23/24) that runs from July 2023-June 2024, actions that are ongoing and proposed for the coming fiscal year from July 2024-June 2025 (FY 24/25), updates on partnerships and outreach, and a discussion of emerging issues and statewide policy updates.

Adopted Board Orders and certain other accomplishments supporting the Climate Change Program are summarized in Enclosure 1. Over the 12-month reporting period for this update, the Water Board approved five Orders that have a nexus to one or more of the Policy Statements. This includes Board Order R6T-2024-0003, a formal enforcement action whose settlement includes implementation of a Supplemental Environmental Project (SEP). The SEP is focused on restoration of a degraded stream channel within the Town of Truckee.

During FY 23/24 Water Board staff continued to make progress on the development of the 2022 Triennial Review item entitled Riparian, Floodplain, and Wetland Protection. Staff identified this Triennial Review issue as having four distinct parts and can be thought of as potentially independent sub-issues, each with the possibility to be addressed without an amendment to the Water Quality Control Plan for the Lahontan Basin. Staff worked to develop problem statements for each of the parts, along with a recommended approach and next steps. During FY 23/24 staff determined that two of the sub-issues can be resolved without a Basin Plan amendment. Staff and management remain in discussion about the two remaining sub-issues and their next steps. Another item that was projected to occur during FY 23/24 was to start updating the management plan for the regional Surface Water

DISCUSSION

Ambient Monitoring Program (SWAMP). This project is supported by a contract with the San Francisco Estuary Institute – Aquatic Science Center. Contracting delays postponed work on this project until May 2024. This update will include exploring ways that we might incorporate climate change elements into our SWAMP program and incorporating recommendations from the [20-Year Water Quality Review and Program Recommendations Report](#). Water Board staff will continue to work on both the 2022 Triennial Review item and the SWAMP management plan update in FY 24/25.

Internal communication in FY 23/24 led to an increased focus on SEPs in our revised regional enforcement priorities, specifically with regards to furthering relationships with restoration partners in the region and developing lists of potential SEPs. In FY 24/25 Water Board staff will continue implementation of the framework that is contained in the Climate Change Action Plan (Section 4). The Regional Monitoring Coordinator will continue attending quarterly climate change meetings hosted by the State Water Resources Control Board. These meetings include representatives from the other Regional Boards and the many divisions and offices that comprise the State Water Resources Control Board and provide a forum for collaboration and understanding each other's efforts toward climate change mitigation and adaptation.

Water Board staff continued to engage in numerous partnerships that support the Policy Statements, including with the Tahoe Science Council, the Sierra Meadows Partnership, and the State Board's Forestry and Wildfire Resiliency Program roundtable. Last fiscal year staff began working with San Bernardino County, the Colorado River Regional Water Board and the Santa Ana Regional Water Board to update San Bernardino County's 2017 Local Area Management Plan.

Significant ongoing issues that are exacerbated by rising air and water temperatures include increasing occurrences of freshwater harmful algal blooms, and new threats from aquatic invasive species. In September 2023 divers surveying for invasive plants discovered the invasive New Zealand mudsnail in Lake Tahoe, marking the first new invasive species detection since the Lake Tahoe Watercraft Inspection Program began in 2008. Water Board staff are supporting efforts in the Tahoe Basin to gather information supporting decision making, and staff continue working on a region-wide strategy to improve our permitting and response approaches to increased threats from aquatic invasive species.

Adapting and planning for extreme weather events is another ongoing challenge. In 2019 the State Water Resources Control Board established the Emergency Management Program (EMP) to protect public health and water quality by providing emergency management (including preparedness, response, recovery, and mitigation) for emergencies that may impact water quality and/or water supply. Lahontan Water Board staff have had increasing engagement with the EMP over the past several years, including attending and presenting at an annual lessons-learned meeting.

DISCUSSION

The State Water Resources Control Board (State Board) and the State of California continue to take actions to mitigate and adapt to climate changes, and update policies related to climate change resilience and protection of natural resources. The State of California is continuing to make progress on the [5th Climate Change Assessment](#). These assessments contribute to the scientific foundation for understanding climate-related vulnerability at the local scale and informing resilience actions, while also directly informing State policies, plans, programs, and guidance. In August 2022 the Governor released California’s [Water Supply Strategy – Adapting to a Hotter Drier Future](#). In December 2023 the State Board released two key Water Supply Strategy implementation documents: [Planned Recycled Water Projects](#), and [Water Available for Brackish Groundwater Desalination](#). The report on brackish water desalination opportunities identified 16 groundwater basins in the southern Lahontan region with potential for future desalination.

CLIMATE CHANGE RESPONSE

Presentation of the Annual Report is consistent with Resolution R6T-2019-0277, the Water Board’s Climate Change Strategy by providing an update to the Lahontan Water Board as directed by Resolution R6T-2019-0277.

PUBLIC OUTREACH/INPUT

No public outreach was associated with this item.

PRESENTERS

Laurie Scribe, Water Board, Senior Environmental Scientist - Specialist

RECOMMENDATION

This is an informational item, and no formal action is requested, though Water Board members may give direction to staff.

ENCLOSURE	ITEM	BATES NUMBER
1	Summary of Climate Change Actions July 2023 to June 2024	7 - 5

ENCLOSURE 1

Board Item 7 - Climate Change Annual Report

Enclosure 1: Summary of Board Orders and other Actions Supporting the Climate Change Program, July 2023 to June 2024 (Fiscal Year 23/24)

Board Order or Action	Description
<u>Board Order R6T-2023-008</u>	Settlement Agreement and Stipulation for Entry of Administrative Civil Liability, Palisades Development, LLC for the Palisades at Olympic Valley Construction Project. The Climate Change Action Plan describes use of enforcement as a tool to ensure protection of water quality. (August 2023)
Creation of Funding Opportunities Subscription List	Staff enhanced communication with the public through creation of a “Funding Opportunities” subscription list that consolidates funding opportunities put forth by numerous different funders for projects addressing nonpoint source pollution and climate change. (September 2023)
<u>R6T-2023-0036 WFCRVP</u>	Adoption of the West Fork Carson River Vision Plan to address impairments of Water Quality Standards. This Vision Plan supports two of the Policy Statements from Resolution R6T-2019-0277, the Climate Change Strategy, namely Protection of Wetlands, Floodplains and Headwaters, and Protection of Headwater Forests and Promoting Fire Resiliency. The erosion control actions, and restoration projects proposed in the Vision Plan will help buffer the effects of climate-driven increases in erosion, decreases in watershed function, and flooding. Given the potential devastating impacts of wildfire on water quality in the WFCR watershed, this Vision Plan recognizes the water quality benefits of ongoing and future projects that reduce fuels and otherwise decrease the potential for wildfires. (October 2023)
Revised Regional Enforcement Priorities	Revised <u>regional enforcement priorities</u> now include a focus on coordination with existing external partners to identify opportunities for Supplemental Environmental Projects (SEPs) and identifying new external partners to expand the available SEPs throughout the region. SEPs are environmentally beneficial projects that a settling party agrees to undertake in the settlement of an enforcement action to offset a portion of a civil penalty, and often include restoration projects within the same watershed as the original violation. (November 2023)
<u>R6T-2023-0042 Fish Springs Fish Hatchery</u>	Adoption of revised National Pollutant Discharge Elimination System permit and Waste Discharge Requirements for the California Department of Fish and Wildlife Fish Springs Fish Hatchery. Requirements and prohibitions presented in the Order and associated Monitoring and Reporting Program are consistent with Resolution R6T-2019-0277, the Climate Change

	<p>Strategy, in the following Policy Statements: (1) Protection of Wetlands, Floodplains, and Headwaters; and (2) Protection of Groundwater Quality and Supply. The Facility’s settling pond treatment is a natural system providing a diverse plant community with cool water that supports cold freshwater habitats both within the settling basin and downstream of the effluent. The issuing of intake credits for nitrate, total nitrogen, and total dissolved solids maintains healthy headwater streams, and minimizes any nutrient levels causing harmful algae blooms which affect downstream users. The proposed WDRs effluent limitations help protect groundwater quality and supply and continue to protect sensitive habitats by implementing water quality objectives that protect beneficial uses of the receiving water. (December 2023)</p>
<p>Advancing Restoration Interagency Summit</p>	<p>Staff attended the December 12-13, 2023, Advancing Restoration Interagency Summit that was hosted by the California Landscape Stewardship Network. This summit brought together staff from the California Department of Fish and Wildlife, State Water Board, and Regional Water Board to foster collaboration and further explore ways to reduce regulatory hurdles for beneficial restoration projects. (December 2023)</p>
<p><u>R6-2024-0026 Mojave River Fish Hatchery</u></p>	<p>Adoption of revised National Pollutant Discharge Elimination System permit and Waste Discharge Requirements for the California Department of Fish and Wildlife Mojave River Fish Hatchery. Requirements and prohibitions presented in the Order and associated Monitoring and Reporting Program are consistent with Resolution R6T-2019-0277, the Climate Change Adaptation Strategy, in the following Policy Statements: (1) Protection of Wetlands, Floodplains, and Headwaters; and (2) Protection of Groundwater Quality and Supply. The Facility’s Discharge Point 001 flowing toward the Mojave River provides a diverse plant community with cool water that supports cold freshwater habitats downstream of the effluent. The proposed WDRs effluent limitations help protect groundwater quality and supply and continue to protect sensitive habitats by implementing water quality objectives that protect beneficial uses of the receiving water. (April 2024)</p>
<p><u>Board Order R6T-2024-0003</u></p>	<p>Settlement Agreement and Stipulation for Entry of Administrative Civil Liability, Town of Truckee and Teichert Construction for the Coldstream Roundabout Construction Project. The Climate Change Action Plan describes use of enforcement as a tool to ensure protection of water quality. This settlement includes completion of a Supplemental Environmental Project. (June 2024)</p>