

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

**MEETING OF OCTOBER 6-7, 2021
VIDEO/TELECONFERENCE**

ITEM 8
CLIMATE CHANGE ACTION PLAN ANNUAL UPDATE

CHRONOLOGY	
November 20, 2019	<p>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 Strategy provides direction and guidance on the development and implementation of actions to address climate change impacts.</p> <p>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.</p>
March 10, 2021	<p>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.</p>

BACKGROUND
<p>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 define 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.</p> <p>The Resolution directs staff to focus its efforts, as resources allow, to address the impacts of climate change on four key resource areas and Policy Statements, where water quality and beneficial use protection strategies and actions will be most effective in the face of climate change:</p> <ul style="list-style-type: none"> (1) Protection of Wetlands, Floodplains and Headwaters, (2) Protection of Infrastructure,

BACKGROUND

- (3) Protection of Groundwater Quality & Supply, and
- (4) Protection of Headwater Forests and Promoting Fire Resiliency.

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. The Climate Change Action Plan provides additional guidance regarding the content of annual update

DISCUSSION

This item, the Climate Change Action Plan Annual Update (Annual Update) presents the first reporting to the Lahontan Water Board and public on progress related to implementation of the Climate Change Strategy and Climate Change Action Plan since adoption of the Climate Change Strategy in November 2019. The Climate Change Action Plan presents a framework in Section 5 for the content of the Annual Update. This discussion and the presentation to the Water Board follow that framework.

This Annual Update reports on climate change actions that were accomplished in the second half of fiscal year 2019-2020 and all of fiscal year 2020-2021, ongoing actions, actions proposed for the coming fiscal year (FY 2021-2022), updates on partnerships and outreach, and a summary of emerging issues and statewide policy updates.

Over the 18-month reporting period for this update, the Water Board has adopted seven Orders that include climate change related findings in support of Policy Statements 1, 2, and/or 3. Two of these Orders are newly adopted general permits related to small industrial and domestic wastewater treatment, and the other 5 are renewals of existing Waste Discharge Requirements or NPDES permits. Three additional Orders were adopted that do not include findings but support Policy Statement 3 related to groundwater protection. Other accomplishments include the adoption of the Climate Change Action Plan, a core program review for the Land Disposal Program that included a discussion of climate change impacts and future considerations for the program, and an enforcement action to restore wetlands and riparian areas that had been illegally modified.

One of the primary proposed actions for fiscal year 2021-2022 is implementation of the framework that was presented in the Climate Change Action Plan (section 4). This includes summarizing and tracking potential actions, using work planning to refine the proposed work, enhancing internal communication related to integration of climate change into our numerous programs, and producing this Annual Update. Additional

DISCUSSION

targeted projects include improving our permitting of projects in the Dredge and Fill program, updating expired permits which allows for incorporation of climate change issues, development of a groundwater remediation general permit, and development of a forestry program strategy.

Water Board staff continue to engage in numerous partnerships that support the Policy Statements, including with the California Tahoe Conservancy, the Sierra Meadows Partnership, and the State Water Resources Control Board. Water Board staff also support ongoing implementation of the numerous adopted Salt and Nutrient Management Plans and coordination with Integrated Regional Water Management groups.

Significant ongoing and emerging issues that are exacerbated by climate change include a substantial increase in freshwater harmful algal blooms, extreme heat, drought, and large wildfires. The State Water Resources Control Board and the State of California continue to take actions to mitigate against these issues, and update policies related to climate change resilience and protection of natural resources, including:

- [2020 Water Resilience Portfolio](#)
- [Executive Order N-82-20](#)
- [2021 State Adaptation Strategy](#)

CLIMATE CHANGE RESPONSE

Presentation of the Annual Update 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

The staff report was circulated with the Water Board's agenda package on September 1, 2021.

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	Water Board staff presentation (Laurie Scribe)	8 - 4
2	Summary of Climate Change Accomplishments December 2019 to June 2021	8 - 16

ENCLOSURE 1

Climate Change Annual Update

Item No. 9
Lahontan Water Board Meeting
September 15th, 2021



Laurie Scribe, Senior Environmental Scientist Specialist

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Presentation Outline

❖ Introduction

- Climate Change Strategy
- Policy Statements
- Climate Change Action Plan

❖ Annual Update

- First update since Strategy adoption November 2019
- Reporting period November 2019 – June 2021

❖ Questions, Comments, and Discussion



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Lahontan Water Board Climate Change Efforts



- ❖ Public Outreach and Staff Report (May 2017)
- ❖ Resolution R6T-2019-0277 and the Climate Change Mitigation and Adaptation Strategy (November 2019)
- ❖ Climate Change Action Plan (March 2021)

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

Policy Statements

Action Plan - Annual Update

❖ Prior year's accomplishments and on-going efforts



❖ Proposed internal actions for coming year



❖ Updates on external partnerships/collaboration



❖ Updates on emerging issues and new policy



Accomplishments – Board Orders

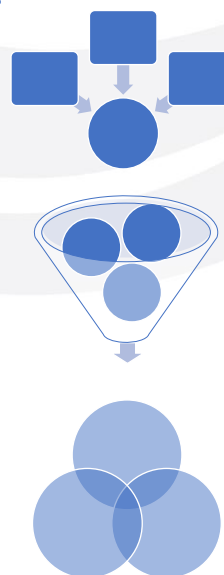
- Climate Change findings included in Board Orders:
 - 2 new General Orders
 - 5 revised WDRs or NPDES permits
- Enforcement action supporting protection of wetlands and riparian areas
- 3 Board Orders supporting groundwater protection
- Local Area Management Plan for Lassen County

Accomplishments

- Core Program Review – Land Disposal Program
- Irrigated Lands Program Development –Assessment of Agricultural Discharges and Requirements of the Eastern San Joaquin Review Order for the Lahontan Region
- Bacteria Water Quality Objectives Board Workshop
- Climate Change Mitigation and Adaptation Action Plan

Proposed Actions: Implement the Action Plan Framework!

- ❖ Action Development
 - Multiple inputs for generating actions
- ❖ Action Prioritization and Implementation
 - Integration with annual work planning
- ❖ Staff Communication and Coordination
 - All hands approach



Proposed Actions - Fiscal Year 2021-2022



Strategy to streamline permitting of low threat Dredge and Fill projects while still meeting ACOE and Basin Plan mandates



Begin to address the backlog of expired permits including WWTPs and Geothermal permits



- Groundwater Remediation WDR General Permit
- Basin Plan amendment to adopt the SGMA/DWR schema for basin numbers and names



Develop a forestry program strategy and approach for updating our Timber Waiver

Partnerships and Outreach

Partnership	Policy Statement	Partner Agencies	Status
California Tahoe Conservancy – Climate Adaptation Portfolio	1, 3, 4	multiple Tahoe basin agencies	Completed August 2021
Sierra Meadows Partnership	1, 3, 4	USFS, Point Blue Conservation, others	Ongoing
Lake Tahoe West Restoration Partnership	1, 3, 4	multiple Tahoe basin agencies	Ongoing
State Board Large Habitat Restoration General Order Development	1, 4	SWRCB, Regional Boards, conservation groups	Public comment closed 8/13/21

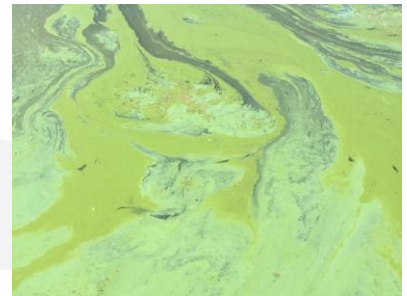
Partnerships and Outreach

Partnership	Policy Statement	Partners/ Associated Projects and Plans	Status
Salt and Nutrient Management Plan Implementation	2, 3	Accepted SNMPs: Mojave, Antelope Valley, Fremont Valley Basin, Ft. Irwin, Indian Wells Valley	Ongoing Implementation
SB19 Stream Gaging Plan	1, 3	DWR, SWRCB, DFW, DOC, CV Flood Protection Board	Planning Stages
Interagency Review Teams for wetland mitigation banking	1	Honey Lake Mitigation Bank; Walker River Mitigation Bank	Ongoing
Mojave Water Agency Technical Advisory Com.	2, 3	Multiple; group also serves as IRWM Plan support team	Ongoing

Significant and Emerging Issues

Freshwater Harmful Algal Blooms

- ❖ Increasing occurrence in the Region
- ❖ Serious public health threat
- ❖ Partnerships with County Health
- ❖ Water Boards' Framework and Strategy for Freshwater Harmful Algal Bloom Monitoring
- ❖ New FHAB position at Lahontan



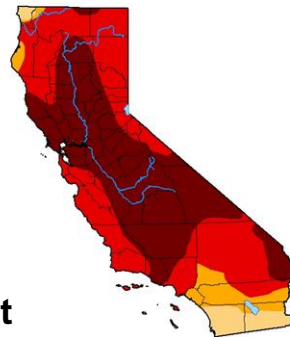
Significant and Emerging Issues



Extreme Heat

- ❖ Impacts to power supply at critical facilities

U.S. Drought Monitor
California



August 10, 2021
(Released Thursday, Aug. 12, 2021)
Valid 8 a.m. EDT

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:
Richard Tinker
OPC/N/OA/NWS/NCEP



Drought

- ❖ Groundwater supply and quality impacts
- ❖ Surface water impacts

Significant and Emerging Issues

Wildfires

- ❖ Increasing size and frequency
- ❖ Threat is nearly year-round
- ❖ 2020 worst year on record, over 4 million acres burned
- ❖ Drought and extreme heat compounding factors
- ❖ Tamarack Fire

➤ [CA Wildfire and Forest Resilience Action Plan](#)



Policy and Program Updates - SWRCB

- ❖ **Division of Water Rights** - Recommendations for an Effective Water Rights Response to Climate Change
- ❖ **Recycled Water Program** - Release of Volumetric Annual Reporting of Wastewater and Recycled Water, 2019 Calendar Year Results;
- ❖ **Stormwater Program** – Strategy to Optimize Resource Management of Stormwater:
 - Final Report: Evaluating Potential Methods to Quantify Stormwater Capture
 - California Drywell Guidance Research and Recommendations.(March 31, 2020)

Policy Updates - Statewide

- ❖ 2020 Water Resilience Portfolio
- ❖ Executive Order N-82-20:
 - CA Biodiversity Collaborative
 - 30x30 – Strategic Pathways Document
 - Natural and Working Lands Climate Smart Strategy
- ❖ 2021 State Adaptation Strategy (coming late 2021)

New Technology tools:
[Atmospheric River Forecasting Tool](#) from
 the Center for Western
 Weather and Water
 Extremes



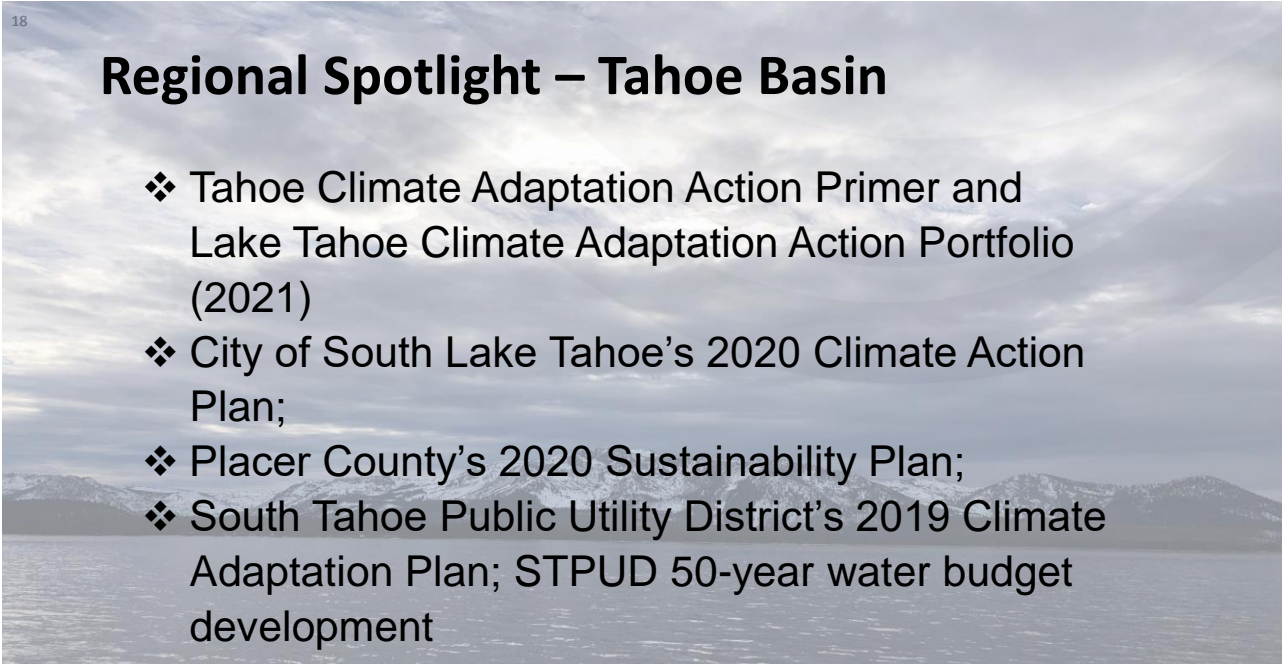
Global Spotlight – Intergovernmental Panel on Climate Change Sixth Assessment Report

Sixth Assessment Report – 4 reports:

- [AR6 Climate Change 2021: The Physical Science Basis](#)
- [AR6 Climate Change 2022: Impacts, Adaptation and Vulnerability](#)
- [AR6 Climate Change 2022: Mitigation of Climate Change](#)
- [AR6 Synthesis Report: Climate Change 2022](#)

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Regional Spotlight – Tahoe Basin

- ❖ Tahoe Climate Adaptation Action Primer and Lake Tahoe Climate Adaptation Action Portfolio (2021)
- ❖ City of South Lake Tahoe’s 2020 Climate Action Plan;
- ❖ Placer County’s 2020 Sustainability Plan;
- ❖ South Tahoe Public Utility District’s 2019 Climate Adaptation Plan; STPUD 50-year water budget development

California Water¹⁸ Boards

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Comments, Questions, and Discussion



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California Water¹⁹ Boards

ENCLOSURE 2

Summary of Climate Change Accomplishments December 2019 to June 2021

Adopted Orders that include Climate Change Findings:

- [Board Order No. R6T-2020-0017](#)
General Waste Discharge Requirements for Small Industrial Wastewater Treatment Systems
- [Board Order No. R6T-2020-0015](#)
General Waste Discharge Requirements for Limited Domestic Wastewater Treatment Systems (Limited Domestic Order)
- [Board Order No. R6V-2021-0022](#)
Waste Discharge Requirements for the California Department of Transportation, Valley Wells Safety Roadside Rest Area, San Bernardino County
- [Board Order No. R6V-2021-0021](#)
Revised Waste Discharge Requirements for the Marine Corps Logistics Base, Barstow, Yermo Annex, Industrial Wastewater Treatment and Recycling Facility, San Bernardino County
- [Board Order No. R6V-2021-0020](#)
Revised Waste Discharge Requirements for Golden Queen Mining Company, LLC and the U.S. Department of the Interior, Bureau of Land Management, Soledad Mountain Project, Kern County
- [Board Order No. R6V-2021-0015](#)
Time Schedule Order, Board Order for Hot Creek Fish Hatchery, Mono County
- [Board Order No. R6V-2021-0014](#)
National Pollutant Discharge Elimination System Permit, Board Order for Hot Creek Fish Hatchery, Mono County

Adopted Orders that support Policy 3 – Groundwater Protection:

- [Board Order No. R6V-2020-0062](#)
Post-Closure Waste Discharge Requirements for Inyo County Recycling and Waste Management, Keeler Sanitary Landfill, Inyo County
- [Board Order No. R6V-2020-0031](#)
Revised Waste Discharge Requirements for DV Natural Resources and the U.S. Department of the Interior, Bureau of Land Management, Briggs Project, Inyo County
- [Board Order No. R6V-2020-0028](#)
Waste Discharge Requirements, Water Reclamation Requirements, and National Pollutant Discharge Elimination System Permit for the Victor Valley Wastewater Reclamation Authority Regional Wastewater Treatment Plant, San Bernardino County

Adopted Board Orders support other Policy Statements:

- [Resolution R6T-2020-0057](#)
Approving an Amendment to the Water Quality Control Plan for the Lahontan Region to Add Definition for Three New Beneficial Uses – Tribal Tradition and Culture (CUL) Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB); Supports Policy Statements 1, 3, and 4.
- [Board Order No. R6T-2021-0007](#)
Cleanup and Abatement Order for North Tahoe Properties, LLC, 1615 River Road, Tahoe City, Placer County; Supports Policy Statement 1.
- [Resolution No. R6T-2020-0029](#)
Approving the Local Agency Management Program for Lassen County; Supports Policy Statements 1 and 3.

Other actions (non-Board Order) supporting the Climate Change Strategy:

- Core Program Review – Land Disposal Program; included discussion of climate change impacts and future considerations for the program
- Irrigated Lands Program Development – Staff Report, Assessment of Agricultural Discharges and Requirements of the Eastern San Joaquin Review Order for the Lahontan Region; Supports Policy Statements 1, 3; January 2021
- Bacteria Water Quality Objectives Board Workshop; Supports all Policy Statements; January 2021
- Climate Change Mitigation and Adaptation Action Plan; Supports all Policy Statements; March 2021