

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

**MEETING OF MARCH 10-11, 2021
VIDEO AND TELECONFERENCE ONLY**

ITEM 8
CLIMATE CHANGE MITIGATION AND ADAPTATION ACTION PLAN

CHRONOLOGY	
May 11, 2017	Water Board staff presented an informational item to the Lahontan Water Board “Staff Report on Developing A Climate Change Mitigation and Adaptation Strategy for the Lahontan Region.” This report summarized staff climate change efforts and numerous statewide directives, policies, and legislation relevant to the Lahontan region.
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 Climate Change Strategy provides guidance to staff 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 to for purposes of making progress toward protection of the four key resource areas, and to report annually regarding progress.</p>

BACKGROUND
<p>Lahontan Water Board staff 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>As resources allow, the Resolution directs staff to focus its efforts to address the impacts of climate change on the following key resource areas, where water quality and beneficial use protection strategies and actions will be most effective in the face of climate change: (1) Protection of Wetlands, Floodplains and Headwaters, (2) Protection of Infrastructure, (3) Protection of Groundwater Quality & Supply, and (4) Protection of Headwater Forests and Promoting Fire Resiliency.</p>

BACKGROUND

The Water Board can effectively respond to climate change by (1) focusing our work internally within core regulatory programs to protect and enhance water quality in each of these key resource areas listed above, and (2) by supporting external adaptation and mitigation efforts led by partner agencies that will protect and enhance these same key resource areas. When implemented, such internal and external efforts should facilitate the increased pace and scale of activities to protect and restore sensitive habitats, and to build more resilient and reliable infrastructure, groundwater supplies, and forested landscapes.

The Resolution directed staff to prepare an action plan. The preparation of this plan was delayed for several reasons, including a COVID-related temporary hiring freeze that resulted in the Regional Monitoring Coordination position being vacant for nearly 10 months. The new Regional Monitoring Coordinator, who serves as the climate change lead staff for the Lahontan region, was hired in November 2020. Progress on this item was also hampered by the vacancies in our executive leadership, with transitions of both the Executive Officer and Assistance Executive Officer positions.

DISCUSSION

The Resolution and the Climate Change Strategy direct the Water Board to develop an action plan to provide a detailed list of expected timelines and tasks to be implemented to protect the identified key resource areas. The action plan will define the specific work priorities, efforts, and actions that will be integrated into our regulatory and planning efforts to facilitate tangible climate mitigation and adaptation outcomes. However, neither the Resolution nor the Climate Change Strategy provides specific direction or processes to use to achieve such integration. Without more specific direction it was clear that developing, implementing, and tracking such actions would be challenging and confusing for staff.

The Climate Change Mitigation and Adaptation Action Plan (Action Plan) brought forth in this item provides a framework to clarify how actions are developed, prioritized, and reported upon. The Action Plan provides more context to the Water Board's role in mitigation and adaptation efforts and summarizes guidance contained in the Climate Change Strategy. It provides a needed road map that staff, managers, and executives can use to consistently integrate climate change actions into our programs and annual work planning. The Action Plan also contains direction for staff to provide the details of specific climate change actions that are completed, currently ongoing, and proposed using a Climate Change Action Plan Annual Update (Annual Update). The Action Plan provides a format for the Annual Update to provide information to the Board and the public in a consistent manner moving forward.

CLIMATE CHANGE RESPONSE

The Climate Change Mitigation and Adaptation Action Plan is consistent with [Resolution R6T-2019-0277](#), the Water Board’s Climate Change Mitigation and Adaptation Strategy in the following key resources areas: (1) Protection of Wetlands, Floodplains, and Headwaters; (2) Infrastructure Protection; (3) Protection of Groundwater Quality and Supply; and (4) Protection of Headwater Forests and Promoting Fire Resilient Landscapes.

In particular, the Action Plan will increase the efficacy of the Water Board’s implementation of climate change response actions by providing clarity to staff, executives, and Board members on how actions are developed, implemented and reported to support all of the key resource areas identified in the Resolution.

PUBLIC OUTREACH/INPUT

The staff report was circulated with the Water Board’s agenda package on February 17, 2021.

LAHONTAN WATER BOARD STAFF

Laurie Scribe, Water Board, Senior Environmental Scientist – Specialist
Ben Letton, Water Board, Acting Assistant Executive Officer

RECOMMENDATION

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

ENCLOSURE	ITEM	BATES NUMBER
1	Staff Report – Climate Change Mitigation and Adaptation Action Plan	8 - 5
2	Water Board staff presentation (Laurie Scribe)	8 - 25

ENCLOSURE 1



**CLIMATE CHANGE MITIGATION AND ADAPTATION ACTION PLAN
FOR THE LAHONTAN REGION**

March 2021



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CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

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1. Purpose and Intent of this Staff Report

The Climate Change Mitigation and Adaptation Action Plan (Action Plan) provides a framework for how Lahontan Regional Water Quality Control Board (Water Board) staff will develop, implement, and report on actions to adapt to and mitigate impacts from climate change. This framework is intended to remain consistent moving forward, and staff will use it as a guide to incorporate climate change mitigation and adaptation actions into our work planning and internal processes. Each year, staff will prepare an Action Plan Annual Update that will serve to report on specific actions that are recently completed, ongoing, and those likely to occur during the coming fiscal year, as well as provide updates on our collaboration and partnerships. The Action Plan Annual Update will be presented at a regularly scheduled Water Board meeting, and thus also serve as an opportunity for our Board members and the public to provide input on proposed actions.

In November 2019 the Lahontan Regional Water Quality Control Board adopted [Resolution R6T-2019-0277](#) and the Climate Change Mitigation and Adaptation Strategy Report (Climate Change Strategy). Resolution R6T-2019-0277 directs Water Board staff to prepare an action plan to provide a list and expected timelines of tasks within the context of annual work planning efforts that is guided by the overarching Policy Statements. It also directs staff to utilize the Climate Change Strategy as a guide to prioritizing, developing, or collaborating on actions to address impacts from climate change. The Climate Change Strategy builds upon prior work conducted by Water Board staff and major statewide climate policies that are summarized in the [2017 Staff Report](#) “Developing a Climate Change Mitigation and Adaptation Strategy for the Lahontan Region”.

The Climate Change Strategy directs that the action plan should define specific work priorities, efforts, and actions that will be integrated into our regulatory and planning efforts; however, neither Resolution R6T-2019-0277 nor the Climate Change Strategy provide specific direction or processes to achieve such integration. Additional direction and clarification were needed to ensure progress in implementing Resolution R6T-2019-0277 and the Climate Change Strategy.

The direction in this Action Plan is intended to increase the efficacy of the Water Board’s climate change response planning, reporting, and implementation commitments by formalizing the approach Water Board staff will use to integrate climate change into work planning and decision making.

2. Water Board Role in Climate Change Adaptation and Mitigation

The Climate Change Strategy presents an overview of regional impacts of climate change on water quality and beneficial uses. Current and future impacts of climate change include increasing frequency of extreme weather events such as extreme storm events and extended drought, and prolonged fire seasons with larger and more intense fires. Changes in hydrology include more precipitation falling as rain versus snow, declining snowpack, and changes in the timing and volume of peak runoff. Vulnerabilities of water resources include, but are not limited

to, subsidence from over drafting of groundwater aquifers, erosion, flooding, related risks to water supply and wastewater infrastructure, and reduced groundwater availability coupled with the potential for concentrated groundwater pollutants.

It is important to acknowledge the Water Board's role as a regulatory agency in the context of potential climate change actions that we can achieve. The mission of the Water Board to protect and restore surface and groundwater quality for current and future generations means that inherently much of our agency's work will support climate change adaptation and sustainable water resources.

As a regulatory agency we have policy, permitting and enforcement tools that we can leverage to further the goals of building a sustainable water portfolio in eastern California. We also conduct water quality monitoring and can require others to conduct various types of water quality related monitoring. Our challenge is to apply current climate science and projected environmental changes to our water resources and water quality, and then take a proactive approach to addressing these issues through focused use of our available policy, permitting, monitoring and enforcement tools. It is our mission and duty to anticipate how climate change may impact water quality today, and into the future, to ensure that we are true to and fulfill our mission of protecting water resources for *existing and future generations*.

The Water Board believes water quality and beneficial use protection in the face of climate change will be most effective by supporting both *external* climate change adaptation and mitigation efforts undertaken by other agencies and organizations; and directing *internal* Water Board resources toward efforts and actions that improve conditions in the resource areas identified by the Policy Statements presented in Section 3.

Figure 1 provides types of Water Board initiated *internal* actions, areas where the Water Board and partners can collaborate and pursue shared actions, and areas where Water Board staff can support the *external* actions of others.

Mitigation, in the context of climate change, commonly refers to action taken to reduce the concentrations of greenhouse gases in the atmosphere, whereas adaptation refers to actions taken to build resilience, and to adjust to the impacts of climate change on society and the environment. Some actions, such as water and energy conservation, green infrastructure, and smart growth, are often considered as having impacts on both mitigation and adaptation.

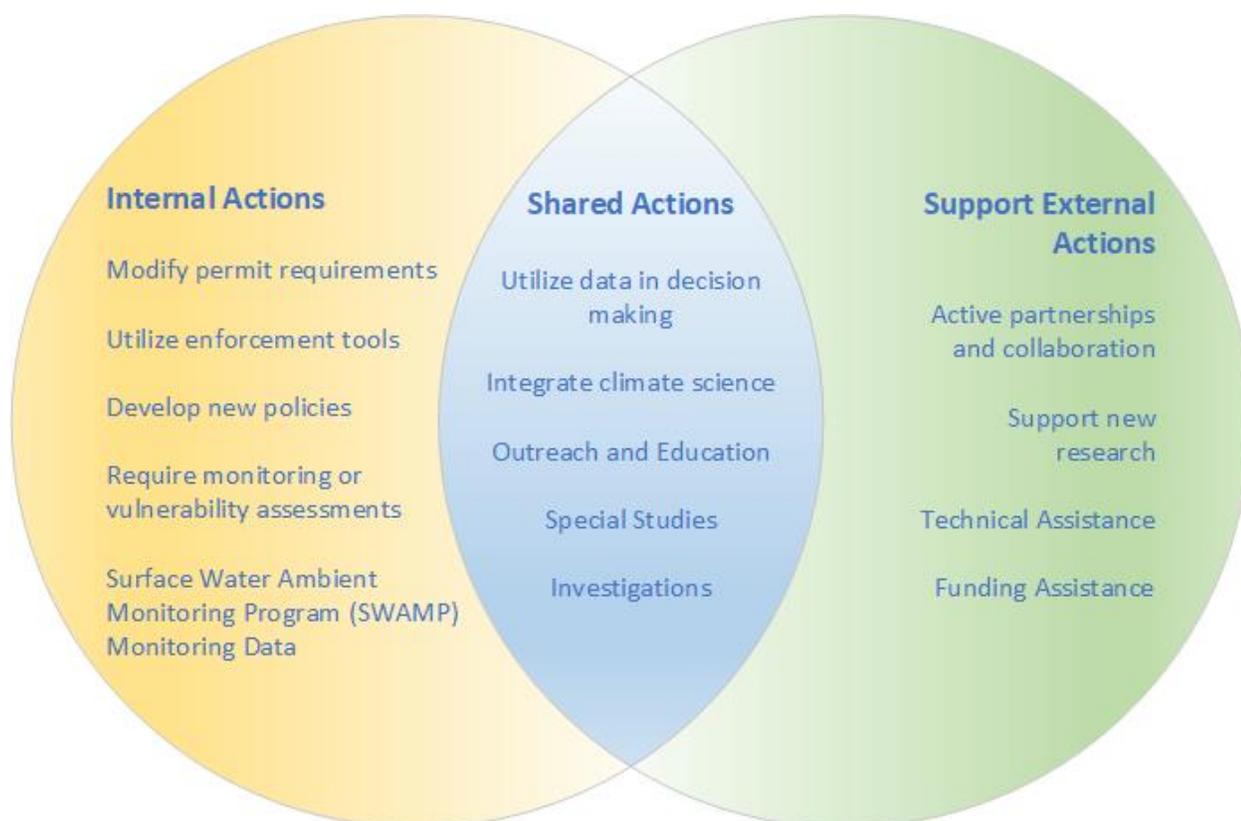


Figure 1 - Types of Mitigation and Adaptation Actions

The State Water Resources Control Board (State Water Board) [Resolution 2017-0012](#) “Comprehensive Response to Climate Change” encourages the Water Board to take certain actions related to both mitigation and adaptation. The direction in this resolution was considered when developing the Climate Change Strategy and Policy Statements. The Water Board has a role in both mitigation and adaptation actions, although more of our internal actions may fall within the realm of adaptation, such as adapting to changes in water quality, quantity, and preparing for extreme climate events. Although the Water Board does not directly implement forest and meadow restoration projects that support capture of greenhouse gases or directly regulate air emissions, our permitting actions in forestry and wetlands regulation impact these critical climate change mitigation resources, as does our support of implementing agencies. Additionally, as an agency, the Water Board can support mitigation by taking actions such as supporting telework options, leasing energy efficient buildings, and utilizing virtual meetings instead of traveling when possible.

As noted above, the Climate Change Strategy presents a dual approach of directing *internal* actions and supporting *external* efforts of partners. Collaboration, partnerships, and stakeholder involvement are a cornerstone of our approach to make progress towards climate change mitigation and adaptation goals. The Water Board has recognized that certain actions and activities will be best handled internally, due to our expertise and statutory authority; however, there is recognition that other actions and activities are more appropriate and better suited for partners and stakeholder groups. Examples may include local governments, associations, non-governmental organizations, and community groups that are in a better position to influence land

use planning efforts or spearhead projects that directly mitigate greenhouse gas emissions or offset greenhouse gas through increased levels of carbon sequestrations (e.g., Sierra meadows restoration and enhancement projects, healthy forest initiatives). In these cases, the appropriate role of the Water Board is to support *external* efforts by facilitating necessary permitting and act in a supportive role to help these entities achieve mutual goals and objectives.

Table 1 below provides some specific examples of on-going *internal* program implementation work and on-going support for *external* actions that is already occurring at the Water Board. These actions are conducted as part of implementing the various programs under the Water Board’s prevue.

Table 1 - Examples of On-going Internal and External Climate Change Actions

Examples of On-going Internal Work	Examples of On-going Support for External Efforts
Site cleanup program activities that protect groundwater resources and require remediation of polluted groundwater	Writing letters of support for groups and agencies seeking funding for restoration projects.
Issuing permits to control discharges to land	Participation in technical advisory committees to assist with project development by implementing agencies
Issuing enforcement actions requiring cleanup of illegal discharges to water	Managing funds, grants, and contracts for scientific research
Clean Water Act Section 401 Water Quality Certification permitting and enforcement to ensure applicants first avoid, then minimize and mitigate impacts to wetlands and riparian systems	Participation in State Water Board efforts to develop a general permit for large habitat restoration projects which will improve and streamline permitting of restoration projects
Implementation and enforcement of the Timber Waiver to minimize sediment and road related impacts from forest management activities	Participating in stakeholder groups formed to develop Salt and Nutrient Management Plans to further the goals of the state’s Recycled Water Policy
Expansion of the freshwater harmful algal bloom program to investigate the increasing incidence and severity of algal blooms	Collaborating with the California Tahoe Conservancy as they develop the Lake Tahoe Climate Adaptation Action Portfolio

3. Policy Statements and Guidance for Program Staff and Managers

The Policy Statements, adopted in Resolution R6T-2019-0277, describe areas that the Water Board will make progress over the long-term to promote greater levels of water quality protection and water resource resiliency to climate change, while solidifying the Water Board’s commitment to respond to these issues through improvement of select policies, programs and permits.

The Policy Statements help provide focus to Water Board staff, managers, and executive management when developing specific actions. The Climate Change Strategy provides additional guidance and direction to consider when developing actions to support the Policy

Statements. Guidance from the Climate Change Strategy is summarized immediately below each Policy Statement and should be referenced and used regularly by program staff, program managers, supervisors, and agency executives during development of new actions, including, but not limited to: new permits, revisions to existing permits, development of new policies, Core Program reviews.

Policy Statement 1: Protection of Wetlands, Floodplains and Headwaters - Support external efforts and initiate necessary regulatory actions to facilitate improved meadow, wetland, and floodplain conditions and stream flows in headwater areas to achieve greater levels of watershed resiliency.

Climate Change Strategy guidance related to this Policy Statement:

- Recognize the importance of maintaining instream flows to protect native species, aquatic life, and stream health.
- Support statewide efforts to develop biologically-relevant instream flow recommendations, and consider setting instream flow criteria to protect beneficial uses, especially in areas affected by cannabis cultivation.
- Consider taking actions that will help increase the pace and scale of restoration work.
- Consider development of a riparian protection policy as presented in the 2018 triennial review to prevent, minimize, and mitigate the impacts of hydromodification upon both groundwater and surface water supplies.

Policy Statement 2: Infrastructure Protection - Support external efforts and initiate necessary regulatory actions to help build and maintain sustainably functioning infrastructure so built systems remain safe and reliable during extreme weather events including heat waves, extreme precipitation, severe droughts, and wildfires.

Climate Change Strategy guidance related to this Policy Statement:

- Facilitate better location, design, and construction of water, stormwater, and wastewater infrastructure (including conveyance treatment and delivery systems) through planning and regulatory programs.
- Concentrate initial implementation on improving the resiliency of water and wastewater infrastructure; however, adaptation efforts may be expanded to include other infrastructure sectors such as power, communication, waste disposal, and transportation.
- Asses requiring risk assessments, upgrades and improvements to the facilities described above.
- Provide technical and financial assistance to rural communities to upgrade antiquated infrastructure.

Policy Statement 3: Protection of Groundwater Quality and Supply - Support external efforts and initiate necessary regulatory actions to protect groundwater quality and

improve groundwater recharge for purposes of protecting source water and building sustainability and drought resiliency.

Climate Change Strategy guidance related to this Policy Statement:

- Ensure programs and policies support sustainable groundwater management efforts and groundwater protection including stormwater infiltration and reuse, water conservation and recycling.
- Recognize the importance of maintaining instream flows that support sustainable groundwater supply.
- Consider actions that protect groundwater quality and improve groundwater recharge rates.
- Support low impact development.
- Support efforts to reduce methane emissions from landfills, dairies, and confined animal facilities while still protecting water quality.
- Promote actions consistent with and supporting Governor Newsom's Executive Order N-10-19.
- Consider developing a source water protection policy and riparian protection policy as described in the 2018 Triennial Review.

Policy Statement 4: Protection of Headwater Forests and Promoting Fire Resiliency - Support external efforts and initiate necessary regulatory actions to facilitate the pace and scale of projects implemented to build long-term resilience of headwater forests including those that (1) reduce vulnerability to catastrophic fires and pest infestations, and (2) support resilience in recovery efforts.

Climate Change Strategy guidance related to this Policy Statement:

- Create an efficient approach to permitting that will support the increasing pace and scale of forest health improvement and fire prevention projects while protecting water quality from road building and landscape disturbance.
- Support forest product infrastructure (lumber mills and biofuel-generation plants).
- Improve coordination with land management agencies including the US Forest Service, Bureau of Land Management and National Parks.

The Climate Change Strategy also provides guidance related to partnerships and outreach, including for staff to:

- Support outreach and education to water users and partners, including related to the Safe and Affordable Drinking Water Fund
- Coordinate with appropriate partners on emergency preparedness and shift resources to efficiently respond to and recover from extreme climate related emergencies.

- Engage with the State Water Board and other relevant agencies to develop (1) water quality monitoring to detect trends in climate change impacts, and (2) reporting requirements to gauge effectiveness of response efforts using performance-based criteria.
- Continue participation with key partners and stakeholder groups such as Integrated Regional Water Management groups, the Sierra Meadows Partnership, the Sierra Water Workgroup, the California Tahoe Conservancy, and the Alliance of Regional Collaboratives for Climate Adaptation and their subgroups in the Lahontan Region – the Sierra Climate Adaptation and Mitigation Partnership and the Los Angeles Regional Collaborative for Climate Action and Sustainability.

4. Action Plan Framework

This section provides a framework and direction for how climate change actions are developed, implemented, and reported. This framework establishes a strong link between the Climate Change Strategy and annual work planning efforts that implement the Water Board’s various programs. **The intent is for program staff, program managers, and executives to use this framework as a road map to develop, prioritize, implement, and report on actions, and to understand how communication should occur within the organization. This direction will ensure that climate change actions remain a focus during annual work planning.**

Currently the lead staff person for climate change at the Water Board is the Regional Monitoring Coordinator. If, in the future, the climate change lead role shifts to a different position, the roles and responsibilities described below would shift to the new climate change lead. Roles and responsibilities further are described in the Sections 4.1 and 4.2 below and summarized in Table 2 at the end of this document.

4.1 Development of Specific Internal Actions

When developing specific actions staff should consider the Policy Statements and guidance from the Climate Change Strategy that is summarized in Section 3 above. Climate change mitigation and adaptation actions can be identified and developed through multiple inputs, including:

- triennial review process
- program roundtable meetings
- quarterly climate change coordination meetings host by State Water Board
- recognition of emerging issues
- partnerships and outreach efforts

These inputs are described further below, however, staff are encouraged to bring potential actions forward through other venues, such as, internal communication at unit meetings, staff meetings, and directly to the Regional Monitoring Coordinator. As staff encounter potential actions or ideas, they should continually evaluate them against the Policy Statements and

guidance provided in Section 3, and then communicate them to the Regional Monitoring Coordinator. Potential actions that support the Policy Statements will be catalogued and maintained on a master list that is managed by the Regional Monitoring Coordinator. This list will then be used for further development and prioritization during annual work planning as described in Section 4.2 below.

In addition to the on-going inputs described below, the Regional Monitoring Coordinator will review potential actions that were developed prior to this Action Plan for consistency with the Policy Statements and incorporation into the master list. Potential actions were previously developed from internal working groups that were active from 2015-2017, a public engagement survey in 2016, and public outreach meetings held in 2016. Potential actions pulled from these prior efforts will serve to build the foundation of the master list.

4.1.1 Triennial Review

Pursuant to state and federal laws, the Water Board is responsible for periodically reviewing water quality standards and, as appropriate, modifying and adopting standards contained in the Water Quality Control Plan (Basin Plan) for the region. This process is known as “triennial review.” Examples of topics that are evaluated during the triennial review include developing new or revising existing water quality objectives; evaluating, adding, or removing beneficial use designations for specific surface water bodies and/or ground water basins; developing new policies; and developing new or revising existing control measures such as waste discharge prohibitions. Topics for triennial review are generated by Water Board staff and through public comments during the process, with a final list of actions adopted by the Water Board. This process can foster development of climate change actions, as well as contribute to prioritization and implementation of those actions.

The Regional Monitoring Coordinator will work with staff conducting triennial review to develop potential climate change related actions that can be considered for public and Board input. Potential actions that do not make the final list adopted by the Water Board will be retained on the master list for future consideration.

4.1.2 Program Management and Roundtables

Most Water Board programs have an internal Program Manager who attends regularly scheduled Roundtable discussions with Program Managers and staff from other Water Board regions and the State Water Board.

Staff attending Roundtables and other coordination meetings should note climate change actions and ideas brought forth during these discussion for consideration and applicability to the Lahontan region. Potential climate change actions arising from Roundtables should be evaluated against the Policy Statements and guidance in Sections 3 and then conveyed to the Regional Monitoring Coordinator for addition to the master list.

4.1.3 Quarterly Climate Change Coordination Meetings

Water Board staff, typically the Regional Monitoring Coordinator, attend quarterly climate change coordination meetings hosted by State Water Board staff. These meetings are attended by staff from other Regional Boards and State Water Board Divisions. These quarterly meetings provide a forum to learn about actions other Regional Boards are taking and may generate useful actions to consider applying in this Water Board region.

The Regional Monitoring Coordinator will note actions with relevance to our region during these meetings, evaluate these potential actions against the Policy Statements and guidance in Section 3, and then add them to the master list of potential actions.

4.1.4 Emerging Issues

New or emerging issues related to climate change mitigation and adaptation may arise from new climate science, new statewide executive orders, updates to statewide climate policies, new State Water Board resolutions or direction and new regulations.

When program staff, program managers, executives, and Water Board members, encounter these emerging issues captured in developing climate science, statewide executive orders, updates to statewide or State Water Board climate policies and resolutions, they should share these directly with the Regional Monitoring Coordinator to help evaluate to what extent these emerging issues are relevant to the Lahontan region and should be considered in developing new actions to address the issue or meet new requirements. The Regional Monitoring Coordinator will add these potential actions to the master list and further evaluate them during annual work planning.

4.1.5 Partnerships and Outreach

Resolution R6T-2019-0277 directs staff to collaborate with stakeholders and the State Water Board to identify policies, regulations, and funding to address the impacts of climate change on water quality. Some of this collaboration occurs through the Roundtable and quarterly meetings described above. This will also occur through interagency partnerships, collaboration with regional climate change groups, and outreach activities. Supporting external partnerships and the work of others is a cornerstone of our Climate Change Strategy, however we will need to exercise some discretion in who we partner with and the extent of collaboration to balance our limited staff resources. The primary goal of this aspect is to further the work of others; however, these partnerships may also be a source of potential internal actions.

Program staff and program managers should consult with the Regional Monitoring Coordinator when determining which climate change focused interagency partnerships and external partnerships are worth supporting. Final determination of partnerships and outreach that will be pursued, will be consistent with the guidance provided in Section 3. Input received as a part of these interagency and external partnership and outreach will be vetted through the Regional

Monitoring Coordinator, with potential actions added to the master list and evaluated for implementation during annual work planning.

4.2 Prioritization and Implementation of Actions

Many factors affect our prioritization and implementation of climate change mitigation and adaptation actions, with resource constraints being a primary factor. Prioritization may also be driven or affected by new policies and executive orders adopted at a statewide level. As noted in the Climate Change Strategy, given that current staff resources and future funding dedicated to climate change response are limited, the Water Board acknowledges that successful implementation of the Climate Change Strategy and the activities identified in the Action Plan Annual Update will rely largely on supporting existing partnerships and leveraging the efforts of stakeholders, and prioritizing select actions within the Water Board's authority.

The Regional Monitoring Coordinator will maintain lists of potential actions generated through the inputs described in Section 4.1 above. Given that potential climate change actions will be developed through multiple inputs, it is expected that there will be more potential actions than can be implemented given current resources. Prioritization of potential actions will be necessary and will allow staff to demonstrate progress over time to support the Policy Statements.

The annual work planning process will be the primary means of vetting potential climate change actions and prioritizing actions for further development and implementation. This process involves interaction between unit supervisors, program managers, and executive management to determine the expected work achievements to occur in the coming fiscal year. The process takes into consideration current staffing resources, budgets, and overarching Water Board priorities.

The first tier of prioritization within annual work planning should focus on implementing climate change actions for the non-discretionary work that is certain to occur, including permit updates and renewals, core program reviews, and triennial review. These work items have existing staffing resources and are certain to occur. The Regional Monitoring Coordinator will work with program staff during permit updates, core program reviews, and triennial reviews to leverage the in-depth knowledge of these staff to prioritize and implement appropriate climate change actions. A second tier of prioritization will focus on discretionary items such as responding to emerging issues and supporting the work of partner groups and collaborations.

4.2.1 Permit development, updates, and renewals

Annual work planning will determine which permits need to be renewed or updated, and if new permit development will occur. Potential climate change actions to consider related to permitting include developing new or revised permit language, new or revised requirements, and revised monitoring, reporting or assessment requirements.

As various permits are renewed, updated, or developed, the Regional Monitoring Coordinator will engage with staff in the program to develop and implement specific actions that will support the Policy Statements and the guidance provided in Section 3.

4.2.2 Core Program Reviews

Core program reviews are an internal process that provides an opportunity for review of a regulatory program. Water Board staff implement approximately 18 different regulatory programs. In any given year, one or two programs may undergo a core program review, however the frequency is dependent on internal resources. Typically, a core program review describes the program, provides a discussion of programmatic challenges and resource limitations, including unaddressed work, and the innovative ways in which staff are confronting those challenges to meet the needs of the program. Core program reviews may also provide recommendations for implementation of existing strategies, new strategies that can be implemented without external resources, and new strategies that would require external resources are provided for improving efficiencies to better protect water quality. During core program reviews the Regional Monitoring Coordinator will engage with staff in the program and the Program Manager to develop and implement specific actions that will support the Policy Statements and guidance provided in Section 3.

4.2.3 Triennial Review

As noted in Section 4.1, triennial reviews will be a source of new potential actions, and the process will prioritize actions through public and Water Board input. Resolution R6T-2019-0277 provides direction to staff to prioritize climate change adaptation actions (including permit and policy changes) during triennial reviews and shift annual resources/workplans to support building climate change mitigation and adaptation activities into water quality programs.

4.2.4 Emerging Issues

Part of the Regional Monitoring Coordinator's duties is to understand the implications of emerging issues on the Lahontan region and consider how these affect our programs and direction provided by the Climate Change Strategy. It is important that our climate change actions consider and integrate emerging science and policies. Some emerging issues, such as new executive orders may require revisions to existing prioritized actions.

4.2.5 Partnerships and Collaboration

Although there may be some specific internal actions that arise from partnerships and collaboration, the primary goal of this aspect is to further the work of others. Regarding prioritization of actions, Resolution R6T-2019-0277 provides some direction to staff to prioritize implementation of actions (technical support, funding opportunities) identified in the Action Plan to ensure that disadvantaged communities have the tools needed to prepare for natural disasters and build resiliency to climate change impacts.

5. Climate Change Action Plan Annual Update

Resolution R6T-2019-0277 and the Climate Change Strategy direct staff to report annually to the Water Board on progress of program specific, climate change response related actions from the previous year. Each year, during a regularly scheduled Water Board meeting the Water Board's Executive Officer, or their designee, will present an information item for the Action Plan Annual Update. The Action Plan Annual Update will report on climate change actions that were accomplished in the previous fiscal year, ongoing actions, actions proposed for the coming fiscal year, updates on partnerships and outreach, and a summary of any relevant emerging issues or statewide policy updates.

The Action Plan Annual Update will be presented publicly as a Water Board meeting item, and then will be posted to the Water Board's climate change webpage after the meeting.

The following provides a proposed format for Action Plan Annual Update.

5.1 Accomplishments from Prior Year

This section of the Action Plan Annual Update will include a summary of the prior year's accomplishments and status updates on multi-year actions, including climate change related actions from triennial review. Information for this topic will be compiled using "Green Sheets" and program updates prepared for the annual "Priorities and Accomplishments" item. This may also include reporting on enforcement actions that support the Policy Statements. Green Sheets are prepared for all items presented at Water Board meetings and are used to summarize various details about items. Permit updates, new permits, core program reviews, and triennial review will be brought for Water Board consideration, so Green Sheets will be used to help track these items for reporting purposes.

5.2 Proposed Actions for Coming Year

This section will present the proposed internal actions for the coming year. Actions proposed for the coming year will represent only those actions that were prioritized during annual work planning and have sufficient projected staff resources to be accomplished in the coming year.

5.3 Partnerships and Outreach Updates

This section will provide a summary and updates on active involvement with external partnerships, stakeholder engagement, and outreach activities conducted during the prior fiscal year. This will also include any anticipated changes or new partnerships and outreach proposed for the coming year.

5.4 Updates on Emerging Issues

The final section of the Action Plan Annual Update will include updates on major emerging issues, climate science, research, and new policies relevant to Lahontan region; this may also include bringing in experts to provide presentations. Given the large body of emerging science,

research, and policy around climate change, this section will focus on updates to significant items such as California’s Climate Change Assessments or the California Water Action Plan, and statewide policy such as new Executive Orders or Resolutions that will impact the Lahontan region.

Table 2 - Climate Change Action Development and Implementation: Roles and Responsibilities¹

	Action Development	Action Implementation
Program Staff and Program Managers	Convey potential actions to the RMC ² from: <ul style="list-style-type: none"> • Triennial review • Program Roundtables • Emerging Issues • Partnerships and Outreach • Other meetings and discussions 	Work with the RMC to incorporate actions into: <ul style="list-style-type: none"> • New permits, updates, and renewals • Core program reviews • Triennial review
Regional Monitoring Coordinator	Work with staff and managers to develop potential actions and catalog actions from: <ul style="list-style-type: none"> • Triennial review • Program Roundtables • Quarterly climate change meetings • Emerging Issues • Partnerships and Outreach 	Work with staff and managers to incorporate climate change actions into: <ul style="list-style-type: none"> • New permits, updates, and renewals • Core program reviews • Triennial review
Supervisors/Managers	Work with staff and RMC to develop potential actions from: <ul style="list-style-type: none"> • Triennial review • Program Roundtables • Emerging issues 	Work with staff and RMC to incorporate actions into: <ul style="list-style-type: none"> • Annual Work Plans <ul style="list-style-type: none"> ○ New permits, updates, and renewals ○ Core program reviews
Executive Management	<ul style="list-style-type: none"> • Convey potential actions from Management Coordinating Committee and Deputy Management Committee to RMC • Convey emerging issue and potential actions suggested by Water Board members to the RMC 	<ul style="list-style-type: none"> • Review and approval of triennial review list, annual work plans, and Action Plan Annual Update

¹ It is understood that the roles and responsibilities here are not always applicable to all staff or managers; for example, triennial review is primarily conducted by staff in the Planning and Assessment Unit.

² RMC is the Regional Monitoring Coordinator

	Action Development	Action Implementation
Water Board members	<ul style="list-style-type: none"> • Convey climate change related emerging issues to the Executive Officer • Convey potential actions from Water Quality Coordinating Committee meetings to the Executive Officer 	<ul style="list-style-type: none"> • Provide input and direction during triennial review Board item • Provide input and direction on Action Plan Annual Update list of proposed items

ENCLOSURE 2

Climate Change Mitigation & Adaptation Action Plan

Item No. 8
Lahontan Water Board Meeting
March 10th, 2021



Ben Letton, Acting Assistant Executive Officer
Laurie Scribe, Senior Environmental Scientist Specialist

Presentation Outline

❖ Introduction

- Prior Water Board Climate Change Actions
- Climate Change Action Plan

❖ Action Plan Overview

- Defining Roles
- Policy Statements and Guidance
- Development and Prioritization of Actions
- Action Plan Annual Update

❖ Questions, Comments, and Discussion



Getting to the Action Plan

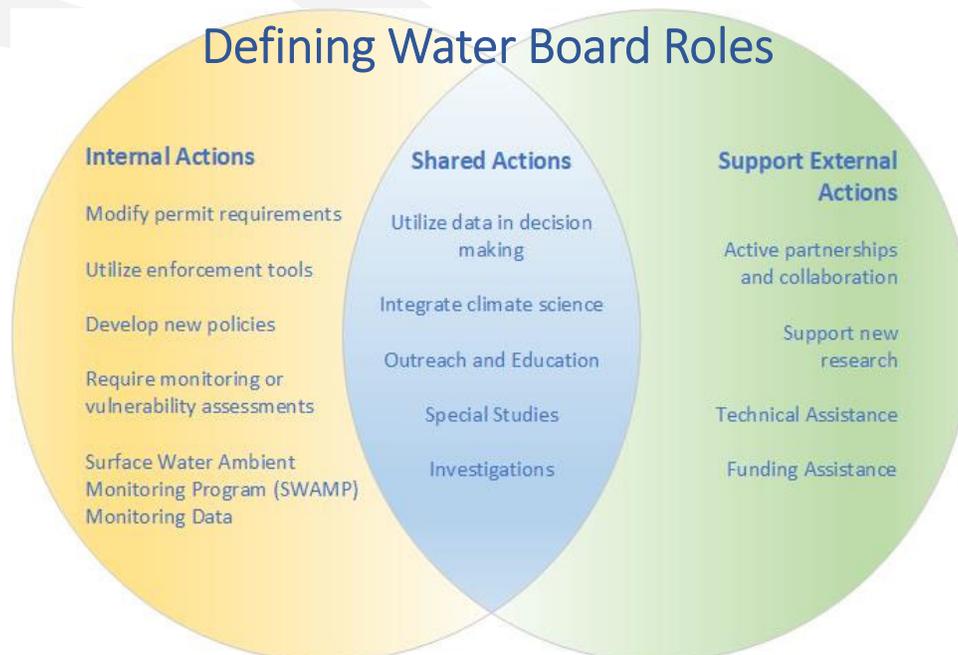
- ❖ Public Outreach and 2017 Staff Report
- ❖ Resolution R6T-2019-0277
- ❖ Climate Change Mitigation and Adaptation Strategy
- ❖ Purpose and Intent of the Action Plan – Clarifying the Road Map



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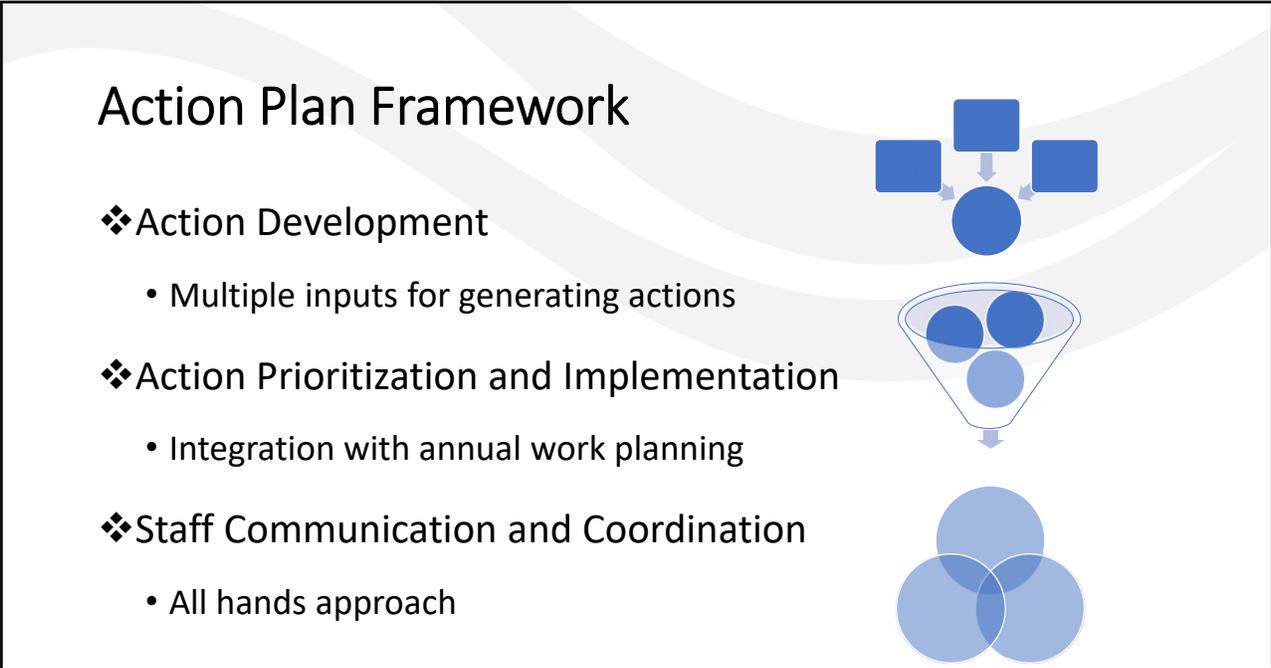
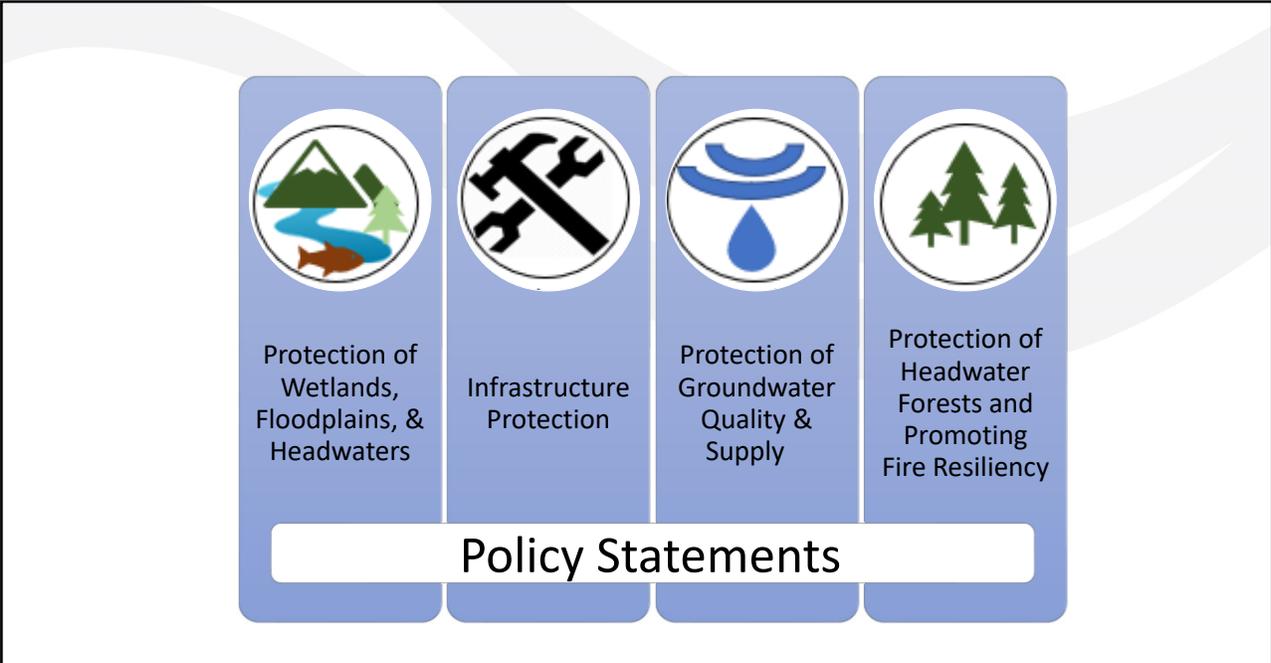
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Defining Water Board Roles



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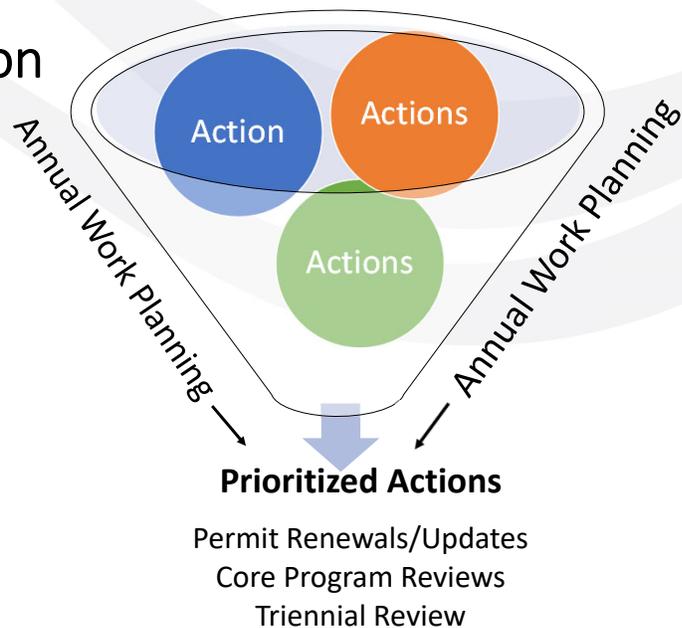
Action Development



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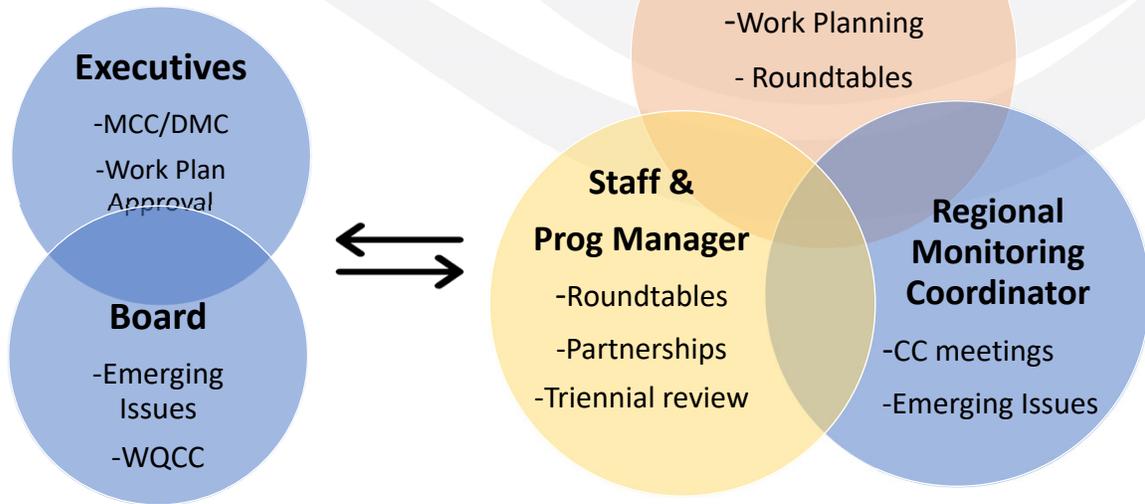
Action Prioritization and Implementation



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Communication and Coordination



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Action Plan Annual Update

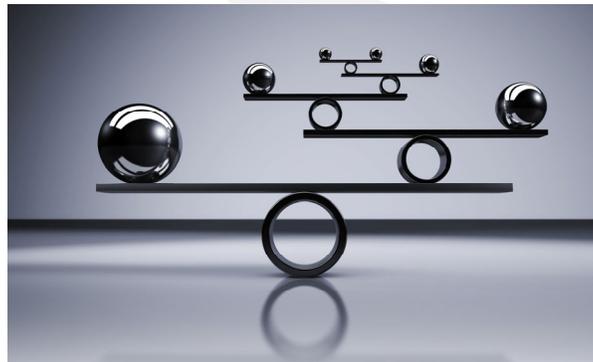
- ❖ Prior year's accomplishments and on-going efforts
- ❖ Proposed internal actions for coming year
- ❖ Updates on external partnerships/collaboration
- ❖ Updates on emerging issues
 - Climate Science
 - New statewide policies
 - New regulations



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Comments, Questions, and Discussion



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