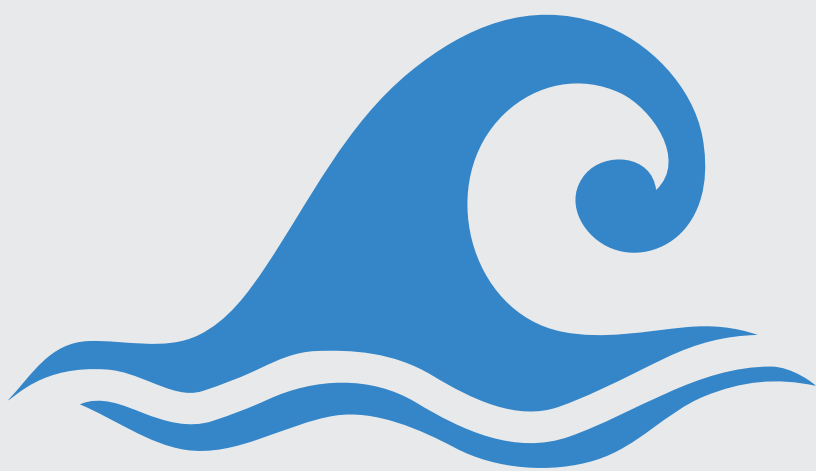


# Climate Change Action Plan: Overview



## What is the Climate Change Action Plan (CCAP)?

Valley Water's CCAP is a comprehensive guide to Valley Water's current and future mitigation and adaptation efforts. It builds upon Valley Water's existing climate change response efforts and presents goals and strategies to continue and expand these efforts.



## What is in the CCAP?

The CCAP discusses Valley Water's current greenhouse gas emissions and climate efforts, Santa Clara County's climate and projected climate changes, Valley Water's vulnerabilities and risks due to climate change impacts, and goals, strategies, and possible actions to mitigate and adapt to climate change. The CCAP also includes next steps towards the development of an on-going program to implement the CCAP. The following pages list each CCAP goal along with its associated strategies. These also include examples of possible actions which represent ideas as to how to achieve these goals and strategies.

## Why does Valley Water need a CCAP?

Climate change is expected to alter local climate in Santa Clara County, Valley Water's service area. Changes in air temperature, precipitation, and other climatic changes challenge Valley Water operations in numerous ways. For example, more droughts may lead to water supply challenges. Increasing storm intensity and sea level rise will complicate flood protection efforts. Local ecosystems may degrade in response to extreme weather and other climate change impacts. Valley Water's CCAP seeks to make Santa Clara County's water supply, flood protection efforts, and ecosystems more resilient to climate change impacts through this CCAP.

## How will Valley Water use the CCAP?

Valley Water will launch an implementation program to develop and coordinate CCAP actions following the CCAP's acceptance by Valley Water's Board of Directors. The implementation program will finalize, prioritize and facilitate climate actions, as well as monitor and report progress. This implementation will engage internal stakeholders extensively, as many of these actions align or overlap with other Valley Water's plans. Furthermore, external stakeholder input will continuously guide the process.

## How can I get involved with the development of the CCAP?

The CCAP team is currently seeking input on the CCAP's goals, strategies and actions. Feedback can be submitted through a survey. A link to this survey can be found at the end of this document. Further updates and information on how to continue to engage can be found on the Valley Water CCAP website, or Valley Water's social media pages.



# Goal 1:

## Reduce Direct Greenhouse Gas (GHG) Emissions

*Strategies shown below include examples of actions that may be recommended to achieve the goal. If you have additional ideas, please submit these through the survey.*

### Reduce Valley Water Fleet Emissions

- Continue adding electric vehicles and other fuel-efficient vehicles to Valley Water's fleet
- Expand knowledge on vehicle emission reduction techniques, devices, and equipment, and offer sustainability training
- Expand the use of Valley Water pool vehicle(s), if possible

### Reduce GHG emissions from trips between Valley Water offices and work sites

- Encourage remote and public transit options for off-site meetings
- Improve and maintain remote meeting technology throughout Valley Water
- Promote fuel-saving policies and protocols for Valley Water vehicles

### Reduce GHG emissions associated with Valley Water-owned equipment

- Promote use of renewable energy for Valley Water field equipment
- Continue to replace various types of agency-owned equipment with fuel efficient or electric models
- Improve the efficiency of heating and cooling equipment at agency facilities

### Continue to update Valley Water's GHG accounting practices

- Continuously update the methods used to calculate Valley Water's GHG inventory to utilize best practices
- Continue to expand the GHG inventory to account for additional sources and sinks

### Increase GHG sequestration on Valley Water properties and other areas

- Continue to plant native and drought-tolerant plants with high carbon sequestration rates in mitigation, enhancement, and landscaping projects
- Evaluate the need for purchasing carbon offsets to sequester carbon in non-Valley Water areas, such as the Sacramento-San Joaquin Delta region, as a method for maintaining carbon neutrality

### Minimize GHG emissions associated with planning, design, construction, operation, and maintenance of capital projects

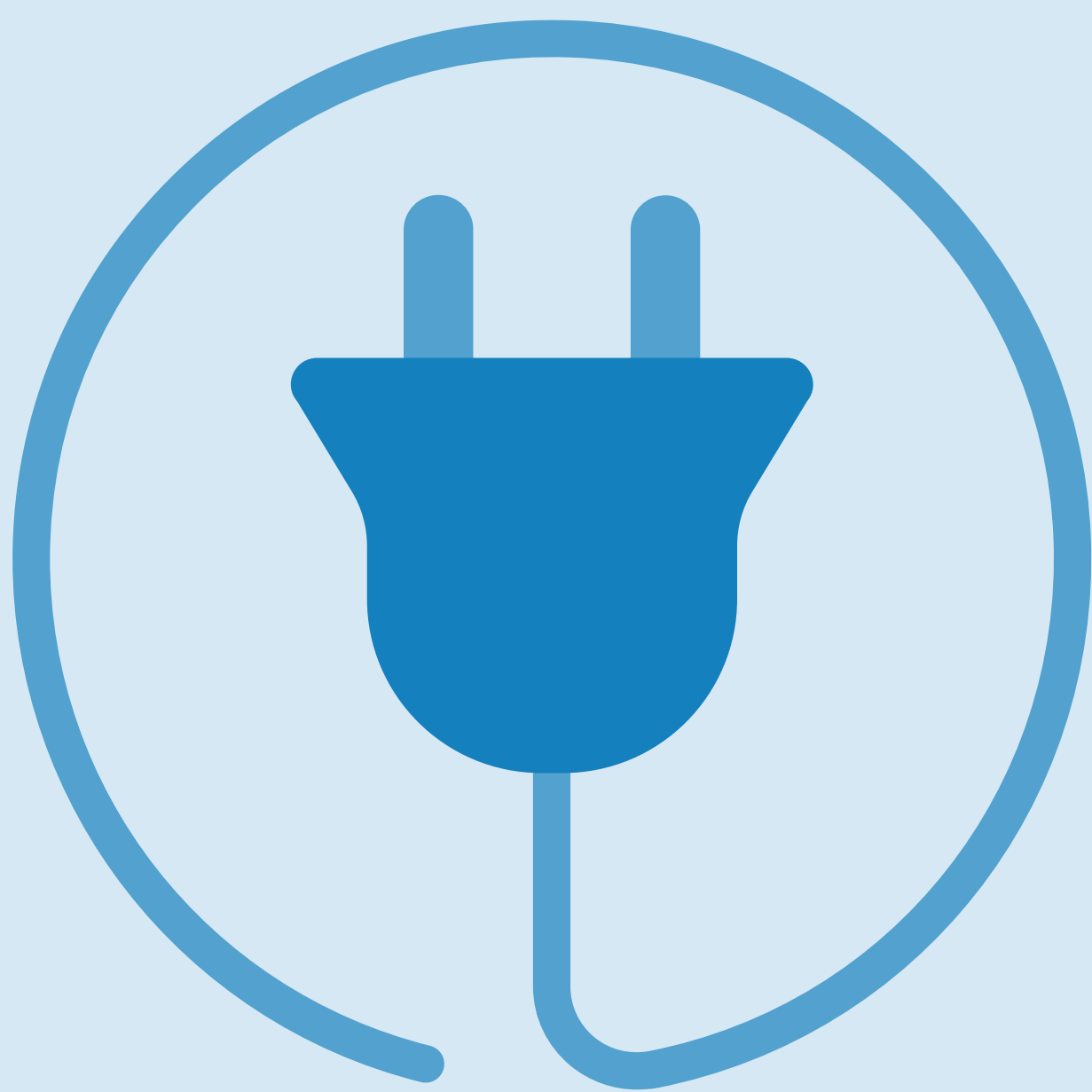
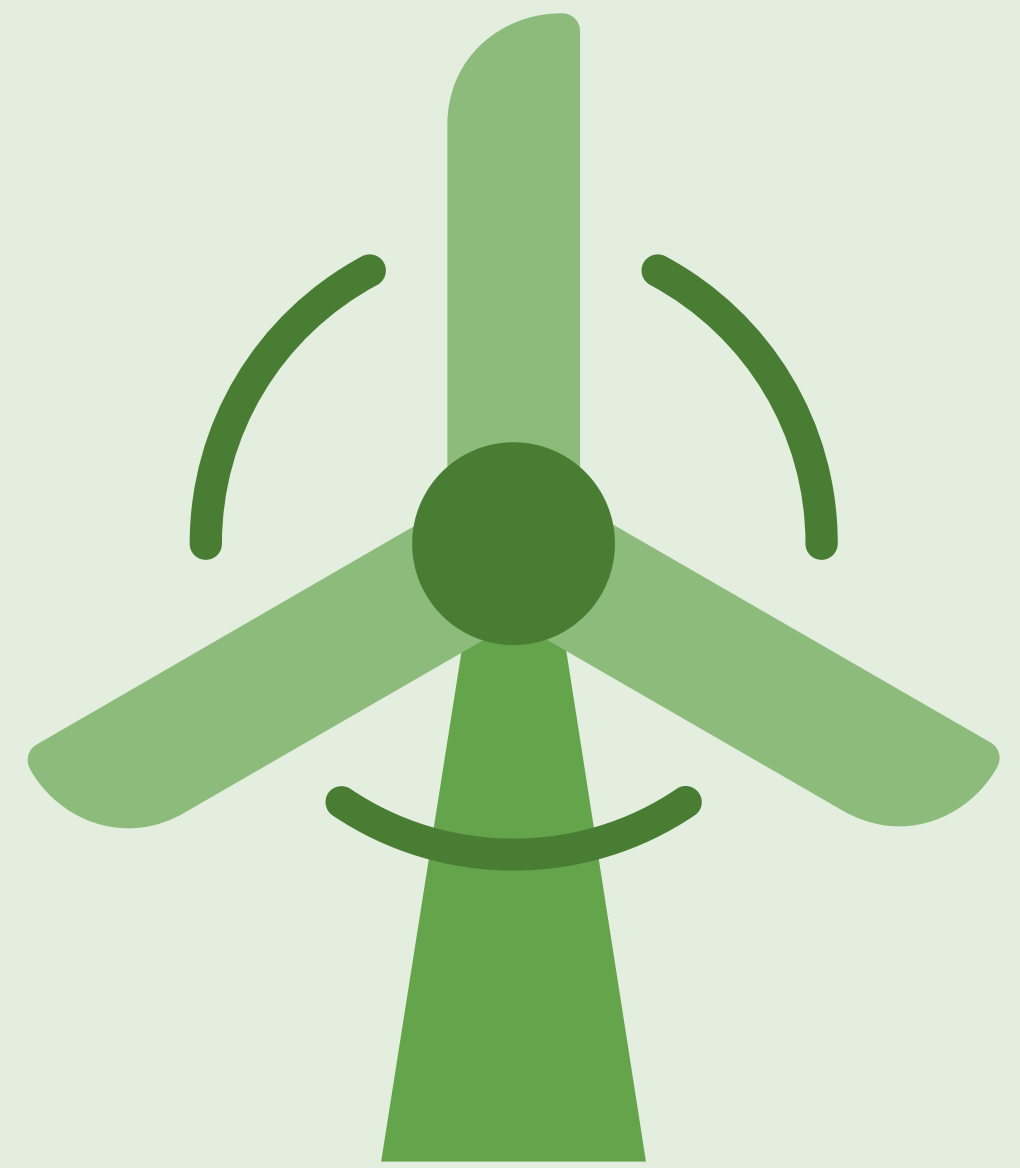
- Incorporate energy, water, and fuel efficiency into capital project planning, design, and long-term maintenance
- Update internal capital project work instructions to incorporate GHG reduction measures
- Promote knowledge and offer training on construction-related emission reduction technologies, devices, and equipment

## Goal 2: Expand Renewable Energy and improve Energy Efficiency

*Strategies shown below include examples of actions that may be recommended to achieve the goal. If you have additional ideas, please submit these through the survey.*

### Continue to support increased renewable energy in the agency's energy portfolio

- Examine and pursue opportunities to increase renewable energy in Valley Water's energy portfolio
- Continue to expand renewable and carbon-free procurement



### Continue to improve energy efficiency at agency facilities

- Improve efficiency of office equipment and expand energy and water saving measures
- Further develop a policy that improves building sustainability, maintain regular energy assessments, and implement energy-saving technologies as they are available
- Promote energy efficient behaviors through staff education
- Continue monitoring energy optimization practices and expand most impactful efforts

# Goal 3:

## Reduce Indirect GHG Emissions

*Strategies shown below include examples of actions that may be recommended to achieve the goal. If you have additional ideas, please submit these through the survey.*

### Reduce emissions from Valley Water employee commutes

- Expand use of laptops instead of desktops, file sharing platforms, and other appropriate technologies to support paperless work and meetings.
- Continue to invest in electric vehicle charging stations and improve their convenience

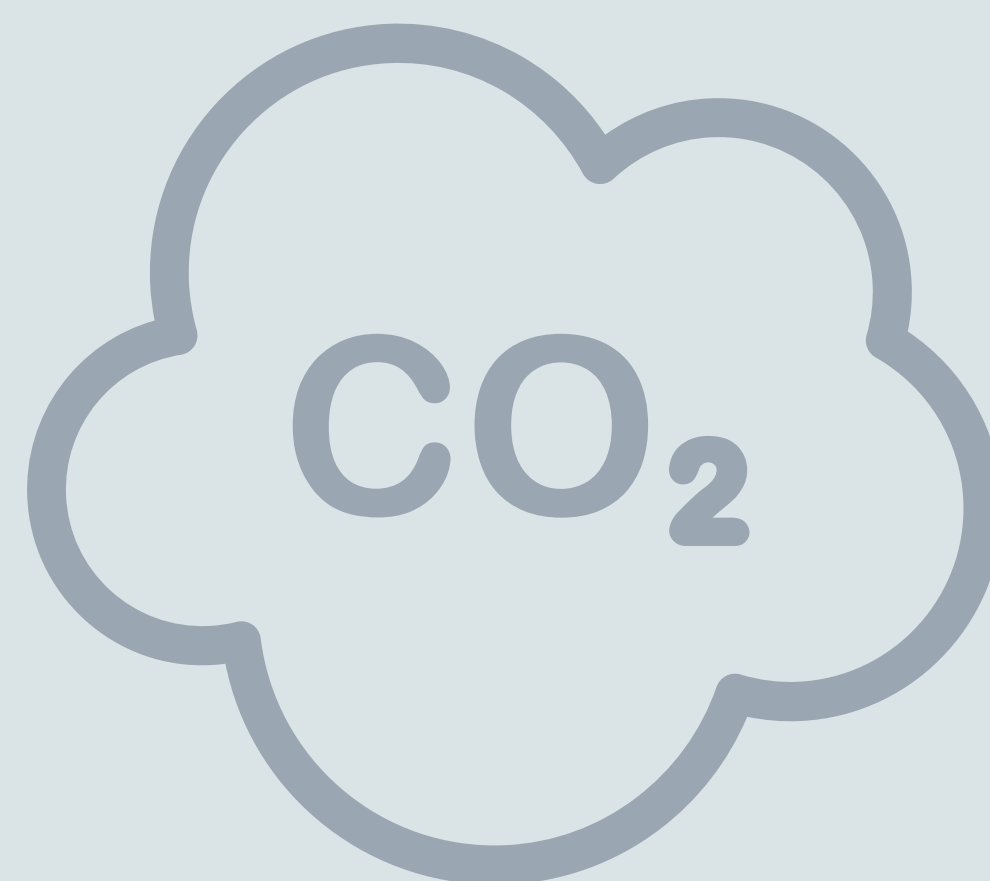


### Reduce waste produced at facilities

- Expand waste reduction measures as a part of the Green Business Program
- Develop an agency-wide approach for diverting and minimizing waste
- Promote the use of reusable items and spread awareness on the climate impact of waste
- Expand electronic document management to minimize paper use, and make double-sided printing the default

### Continue to create and expand other efforts to minimize indirect emissions

- Spread awareness of Valley Water's purchasing policy to consider environmental implications
- Continue to divest from major polluters
- Support California's Department of Water Resources' efforts to lower the carbon intensity of imported water
- Strengthen a sustainability training program for Valley Water employees



# Goal 4: Water Supply Adaptation

*Strategies shown below include examples of actions that may be recommended to achieve the goal. If you have additional ideas, please submit these through the survey.*

## Expand and diversify local water supplies

- Increase capture of stormwater and floodwater, such as through green infrastructure projects
- Resolve regulatory challenges to innovative local water solutions and increase coordination on alternative water uses

## Improve demand management and support water conservation efforts

- Support programs to reduce pipeline leakage
- Promote efforts related to water conservation and reuse
- Increase coordination between Valley Water, land use agencies, and water retailers on water and land use management
- Engage in proactive, consistent, and coordinated drought and water shortage contingency planning

## Implement source water improvement and water treatment actions

- Design and develop invasive species control strategies for Valley Water's facilities and conveyance structures that are specific to target organisms
- Promote and participate in research projects related to climate change impacts on source water quality
- Conduct a study to identify potential adaptive water treatment actions that increase the resilience and flexibility of treatment systems to the impacts of climate change

## Support efforts to maintain and enhance source water quality

- Expand participation in collaborative projects focusing on protecting and improving imported source water quality
- Expand support for local and imported source water quality efforts, through outreach on water reuse and source water quality

## Increase reliability of imported water

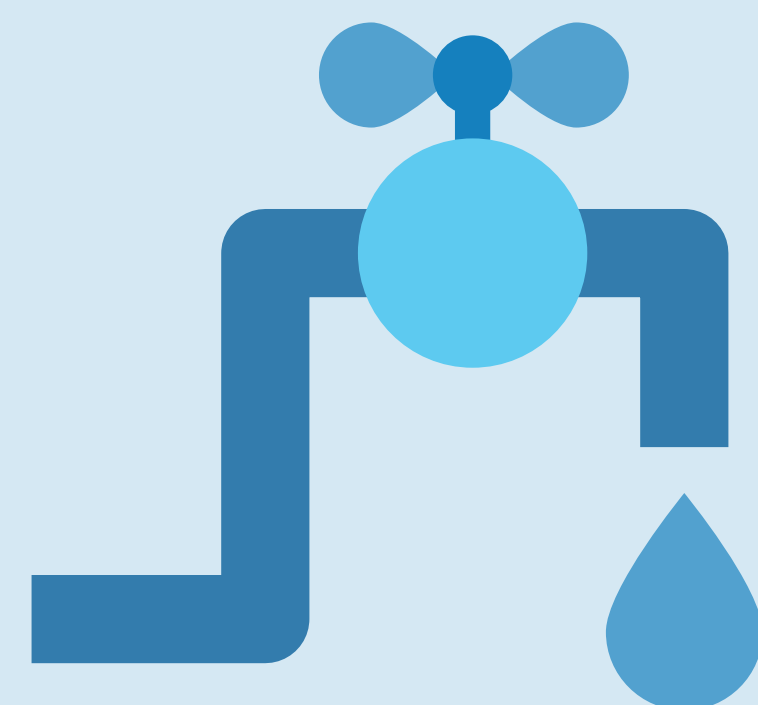
- Collaborate on and support Sierra Nevada watershed protection and restoration projects
- Support state efforts to develop emergency preparedness plans to respond to large Delta levee failure events that threaten imported water supplies

## Increase flexibility and resilience of water utility operations and assets

- Improve hydrologic forecasting to better adapt to changing hydrology and extremes
- Address aging infrastructure through continued implementation of the Infrastructure Reliability Plan
- Expand efforts to improve the resilience of local and imported storage, managed recharge facilities, and conveyance and increase groundwater storage

## Support ecological water supply management objectives

- Develop climate resilient water supply options to support fisheries and other aquatic and stream-dependent resources
- Continue to implement adaptive management to support fisheries
- Continue to participate in joint efforts with partner water agencies to support ecosystem restoration, research, and management and in statewide environmental flows discussions



# Goal 5: Flood Protection Adaptation In Santa Clara County

*Strategies shown below include examples of actions that may be recommended to achieve the goal. If you have additional ideas, please submit these through the survey.*



## Minimize riverine flooding risks

- Research, design, and implement multi-benefit flood protection projects such as green infrastructure to increase channel conveyance capacity and protect or improve ecosystem resilience
- Expand procedures to plan and design capital projects for long-term stream resilience
- Create natural floodplain areas, stream-upland transition areas, and upland buffers around streams
- Expand procedures to plan and design capital projects around long-term stream resilience

## Minimize flood risk in coastal areas

- Expand collaboration on fluvial and coastal flood protection projects
- Increase the connectivity of coastal habitats along the Bay's shoreline with the tidal zones of streams
- Install tidal gages to monitor sea level rise
- Continue to work on capital projects and coordination with cities to address sea level rise related flooding risk

## Implement projects and plans to increase the flexibility and resilience of flood protection operations and assets

- Develop planning, design, and maintenance procedures to address assets' climate related flood impacts
- Develop asset management plans for flood protection assets that incorporate climate change solutions and promote adaptation, resilience, and flexibility
- Implement projects that maximize stream climate resilience

## Improve the flood preparedness of people, property, and habitat

- Coordinate with land use agencies to protect and restore historic floodplain areas and vegetated buffers along creeks
- Consider relocation, purchase, and/or structure elevation of properties subject to recurring flooding risk, when possible
- Continue to obtain land in areas vulnerable to flooding for improved flood protection and channel restoration
- Continue to enhance monitoring and maintenance programs of flood protection infrastructure

## Expand the use of flood forecasting and modeling tools in the planning and design of agency projects to maximize protection from flood risks

- Model predicted changes in the frequency and magnitude of flooding events to inform project planning and design
- Seek additional technologies to improve forecasting of floods, storm surges, and other events resulting from rising sea level and changing flood patterns
- Expand the use of rain and stream gauges in monitoring and maintenance of assets to help identify areas of risk

# Goal 6: Ecosystem Adaptation in Santa Clara County

*Strategies shown below include examples of actions that may be recommended to achieve the goal. If you have additional ideas, please submit these through the survey.*

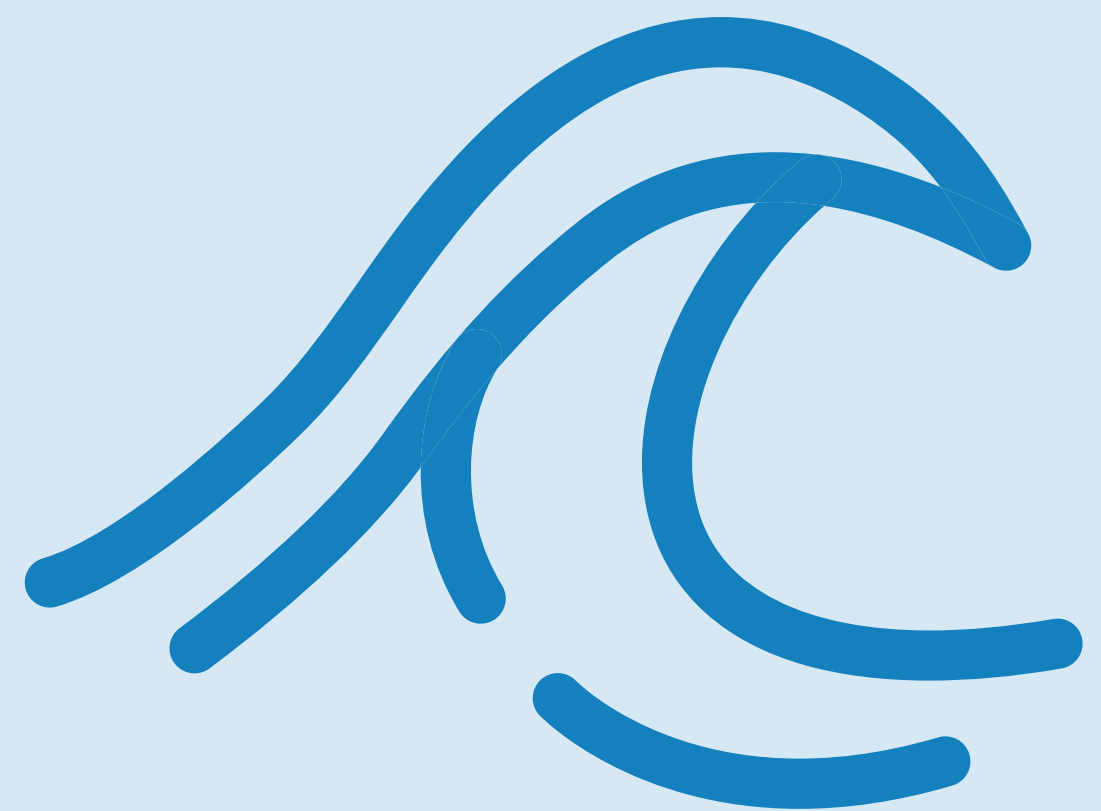


## Protect and enhance riverine, coastal, and other watershed ecosystems to improve climate resilience

- Identify and prioritize habitat enhancement needs and incorporate them into stream stewardship and mitigation projects
- Develop climate-resilient best practices to be used in the implementation of habitat conservation and restoration
- Consider adopting policies that promote environmental stewardship principles to address climate change impacts
- Expand efforts to protect, restore, enhance, and maintain riparian areas and wetlands, and transitional and upland buffers around those features

## Develop and expand programs and plans that support more climate-resilient ecosystems

- Support mutually beneficial inter-agency programs, plans, and projects that restore regional ecosystems
- Develop policies and guidelines for handling effects of wildfires
- Consider adopting policies to promote habitat connectivity when planning, designing, operating, and maintaining Valley Water's flood protection and water supply infrastructure
- Expand the guidelines and standards for land use near streams to include climate change resilience considerations



## Expand the availability of data on regional ecosystems to avoid detrimental climate change-related ecosystem impacts

- Research climate impacts on invasive species to guide efforts at prevention and removal
- Expand monitoring and modeling of the effects of climate change-related events on ecosystems, stream flows, and water quality
- Participate in research projects related to climate impacts on Valley Water's mission areas



# Goal 7: Emergency Preparedness

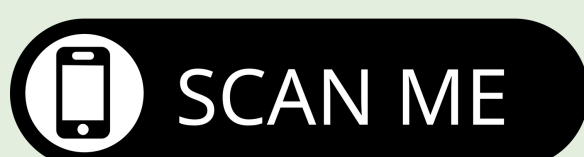
*Strategies shown below include examples of actions that may be recommended to achieve the goal. If you have additional ideas, please submit these through the survey.*

## Maximize Valley Water's emergency preparedness for climate-related impacts

- Expand and improve procedures for responding to climate-related emergencies
- Expand safety and continued operation of Valley Water assets during climate-related emergencies
- Continue to develop a centralized approach to understand future climate changes and impacts. Develop climate modeling and analysis methods to better assess, predict, and respond to climate change



**Interested in learning more about Valley Water's climate change efforts and staying up to date on the CCAP?  
Visit our webpage!**



Scan the code to go to our climate change action plan webpage.

Scan by holding your camera over the code or by using a "QR code scanner" app