

ALAMEDA COUNTY  
WATER DISTRICT

# Climate Adaptation Plan

Public Summary

Alameda County Water District (ACWD) has prepared a Climate Adaptation Plan (CAP) to better understand and plan for a changing climate. The CAP provides a high-level assessment of ACWD's climate risks and provides direction for building climate resilience into our water system.

**KEY DEFINITIONS:**

*What is climate change?*

Due to the heavy use of fossil fuels, greenhouse gases are warming the planet at an unnatural rate, causing extreme weather and a series of cascading impacts.

*What is resilience?*

The ability to plan for, prepare for, respond to, and recover from a climate threat (such as sea level rise, drought, or wildfire).

*What is adaptation?*

For our CAP context, the ability to adapt our water system to reduce the negative impacts from various climate risks.



# Understanding climate risks and our adaption strategies is the first step toward resilience



## Regulatory Changes

Anticipated changes may decrease local and imported water availability and may result in changes to operations, planning, or policy.

**Current Adaptation Strategies:** Participation in partnerships like the California Urban Water Agencies (CUWA) to collaboratively anticipate and prepare for regulatory change.



## Increased Storm Intensity and Flooding

Climate change is likely to cause more intense storm events, which can increase polluted runoff, damage infrastructure, increase landslide potential, and impact emergency response.

**Current Adaptation Strategies:** Existing emergency action plans and operating procedures, landslide response plan, and watershed partnerships.



## Sea Level Rise

Rising sea levels can introduce salt into coastal aquifers (saltwater intrusion), wetlands, and river systems, which can impact groundwater quality, coastal infrastructure, and cause shoreline erosion.

**Current Adaptation Strategies:** Longstanding groundwater protection and management programs, including efforts to improve modeling and monitoring for groundwater quality.



## Wildfire

Wildfires resulting from drier conditions and increased temperatures can damage infrastructure, increase public safety power shutdowns, and worsen surface water quality.

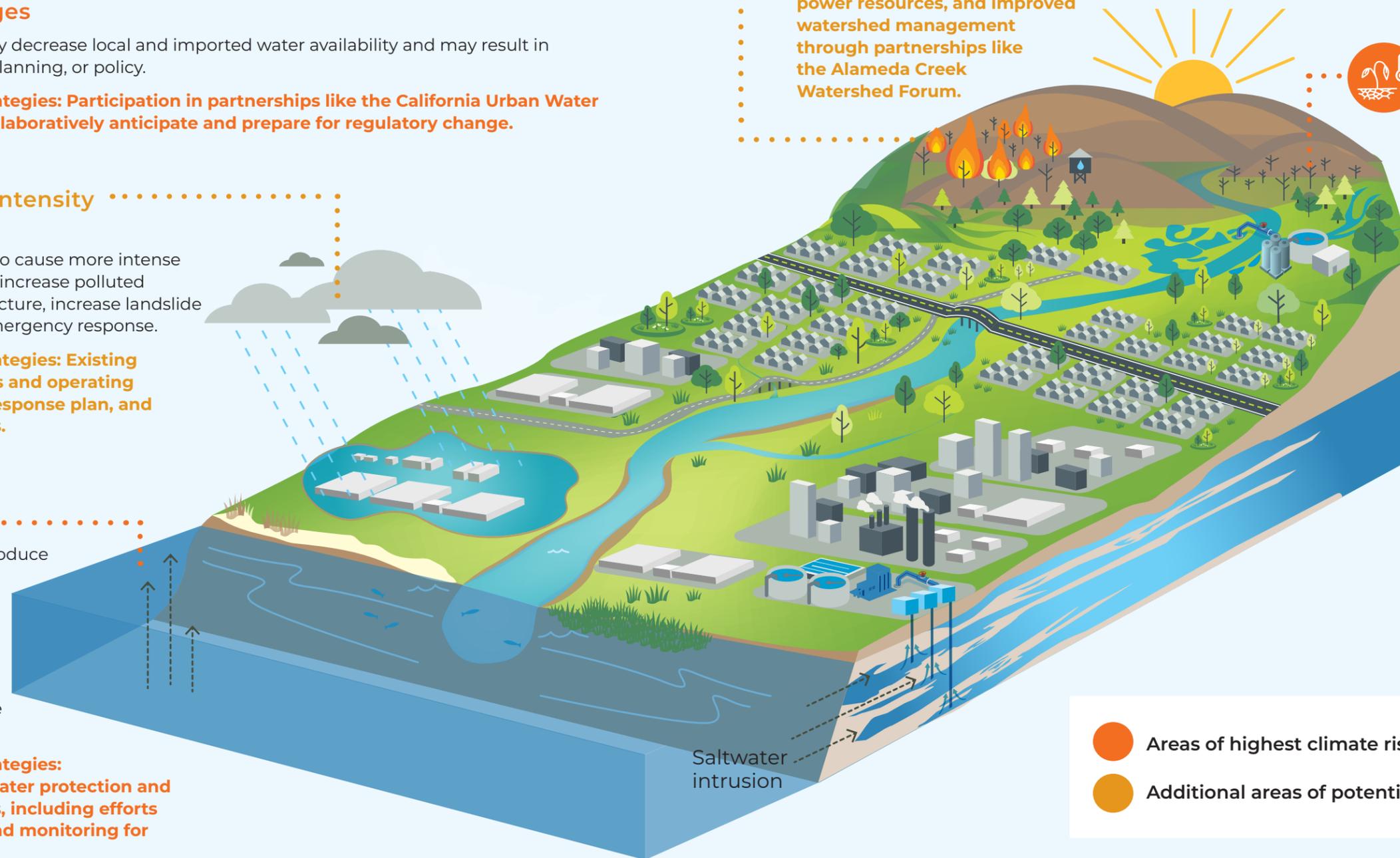
**Current Adaptation Strategies:** ACWD's existing backup power resources, and improved watershed management through partnerships like the Alameda Creek Watershed Forum.



## Drought and Rising Temperatures

Rising temperatures can cause drier conditions. Risks for ACWD include reduced local and imported water supplies, reduced groundwater recharge, increased demand, damage to cool water habitats, and reduced water quality.

**Current Adaptation Strategies:** Water conservation measures, advanced metering infrastructure (AMI), water shortage planning, system upgrades, and groundwater recharge management.



Since 1990, ACWD has spent over \$300 million on reliability investments that have contributed to greater climate resilience.

### Next steps for achieving climate readiness



# Recommended Strategies for Increased Climate Resilience

The CAP recommends the following strategies for ACWD to reduce climate change impacts; protect ecosystems, watersheds, and water quality; and protect local water supplies while addressing other ACWD priorities.

Scan for full CAP report



## Watershed Investment & Ecosystem Management

- Capture stormwater for recharge and later use
- Restore native species
- Manage vegetation to help prevent wildfires



## Water Quality & Treatment Improvements

- Adjust reservoir management to improve water quality
- Enhance water treatment processes to improve water quality



## Operational Enhancements

- Adjust operations for drought conditions
- Operate facilities remotely
- Improve system flexibility
- Increase reservoir capacity
- Enhance groundwater recharge



## Water Supply Enhancement

- Expand groundwater desalination facilities
- Develop new local supplies such as water reuse
- Secure new imported water supplies through new projects or water transfers



## Partnerships

- Protect regional shoreline
- Maintain a water supply within the Bay Area that is resilient to drought
- Protect habitat and water supply within the Alameda Creek Watershed



## Water Demand Management

- Use advanced metering to identify leaks
- Further engage with customers to help them reduce water use
- Restrict lawn watering
- Provide rebates for turf removal

## Stay Connected



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