Building Resiliency in California Water Management

NASEM Committee on Public Infrastructure for Effective Climate Mitigation and Adaptation Workshop



What is public infrastructure?











California Department of Water Resources

Mission

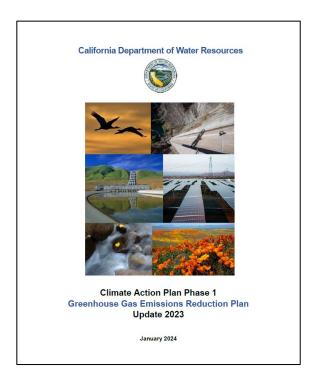
To sustainably manage the water resources of California, in cooperation with other agencies, to benefit the state's people and protect, restore, and enhance the natural and human environments.

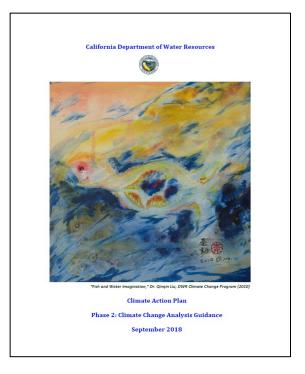


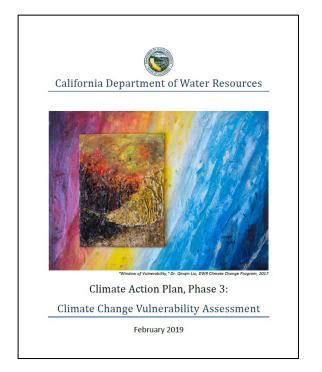


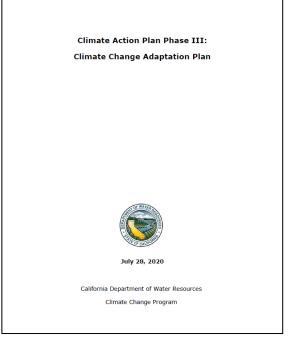
Climate Action Plan

CA DWR's Comprehensive Response to Climate Change











Strategic Plan 2023

Goal 1: Be an Employer of Choice

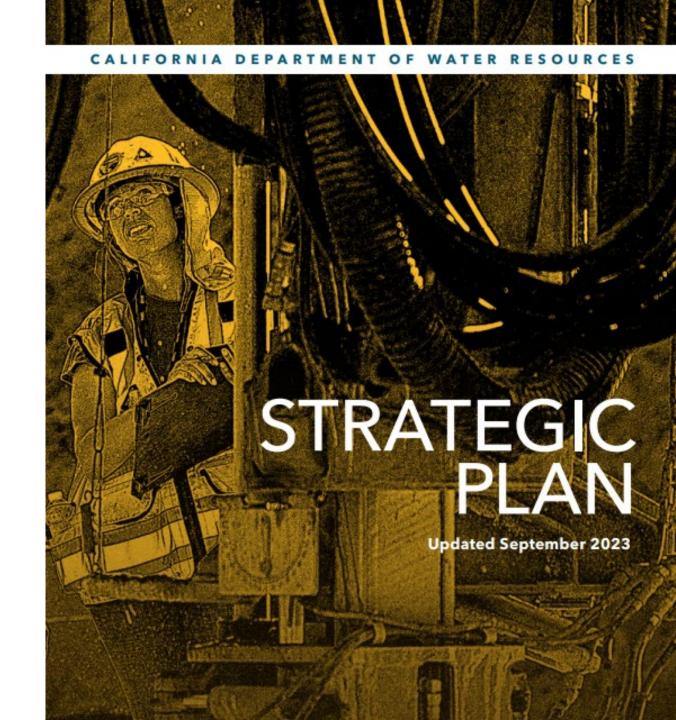
Goal 2: Build Community Capacity

Goal 3: Pursue Innovative Infrastructure Solutions

Goal 4: Respond to Public Safety Emergencies

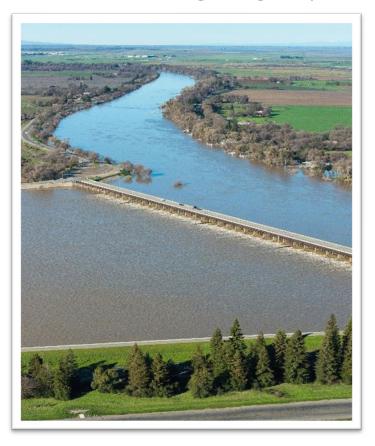
Goal 5: Integrate and Transform California Water Management



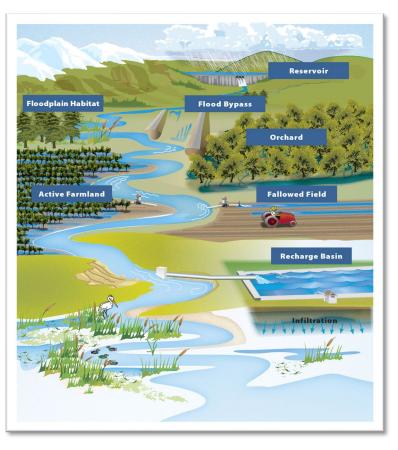


California Water Plan Update 2023

Climate Change Urgency



Watershed Resilience



Equity in Water Management





Climate Vulnerabilities across all Water Sectors

Forest and Wildfire Management

Rising temperatures, extended periods of dryness, and increasing wildfire potential will further stress and challenge management of headwater forests and lands and impact public health and safety.

Hydropower

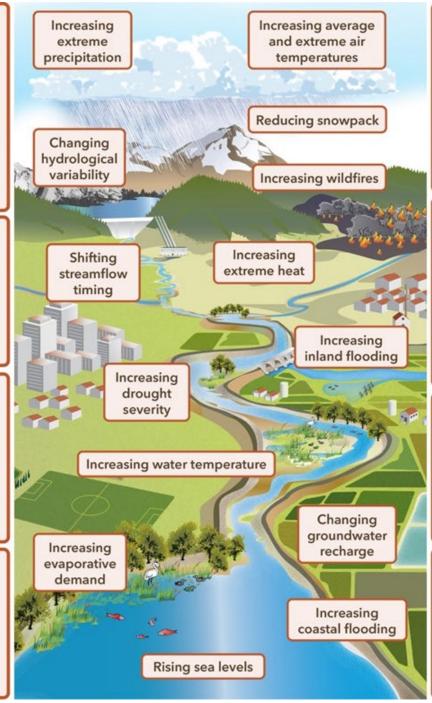
Changing snowpack and melt timing, increasing peak electrical demands, and extreme heat events will challenge hydropower management.

Ecosystems

Higher temperatures, changing hydrology, rising sea levels will change habitats for many species and the pace of ecosystem adaptation will be challenged.

Groundwater

Changing recharge patterns, seawater intrusion in coastal aquifers, and increasing demands will continue to put pressures on groundwater systems.



Water Supply

Changing hydrological patterns including reduced snowpack, earlier melt, extended droughts, and increasing evaporative demands will stress reservoir operations and impact overall availability of water supplies.

Flood Management

More intense precipitation events, specifically atmospheric rivers, less snow-more rain, flood-after-fire events, and rising sea levels will contribute to greater flood risk in inland and coastal areas.

Water Quality

Increasing temperature, reduced spring and summer streamflow, extreme runoff and flood-after-fire events will continue to challenge water quality management.

Recreation

Changing snowpack, changing river and streamflows, more variability in lake levels, and rising sea levels will stress recreational resources.



Partnerships with federal, state, local and academics

DWR supports numerous partnership initiatives that improve science-practitioner collaboration, foster the use of the best available science in water management, and create unique public outreach on the impacts of climate change on the State of California.





























Thank you

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