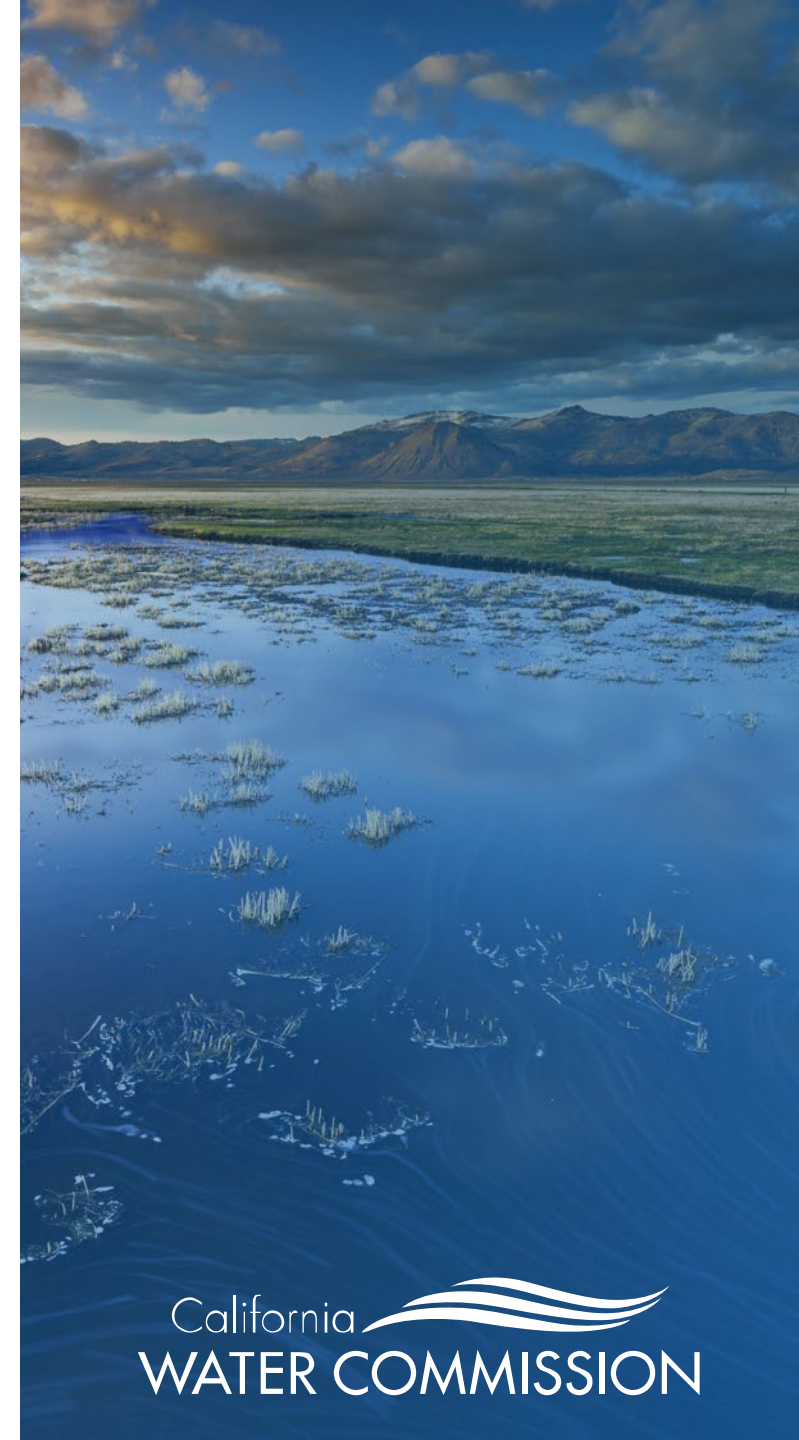


# **2021 Annual Review of the Construction and Operation of the State Water Project**

February 16, 2022

# The Commission's Obligation

- Water Code section 165 – conduct an annual review of the progress of the construction and operation of the State Water Project.
- The Commission reports its findings and recommendations to DWR and the Legislature.
- Goal 2 of the Strategic Plan – “how the SWP adapts and responds to hydrological extremes expected with climate change, restores critical ecosystems, and addresses aging infrastructure.”



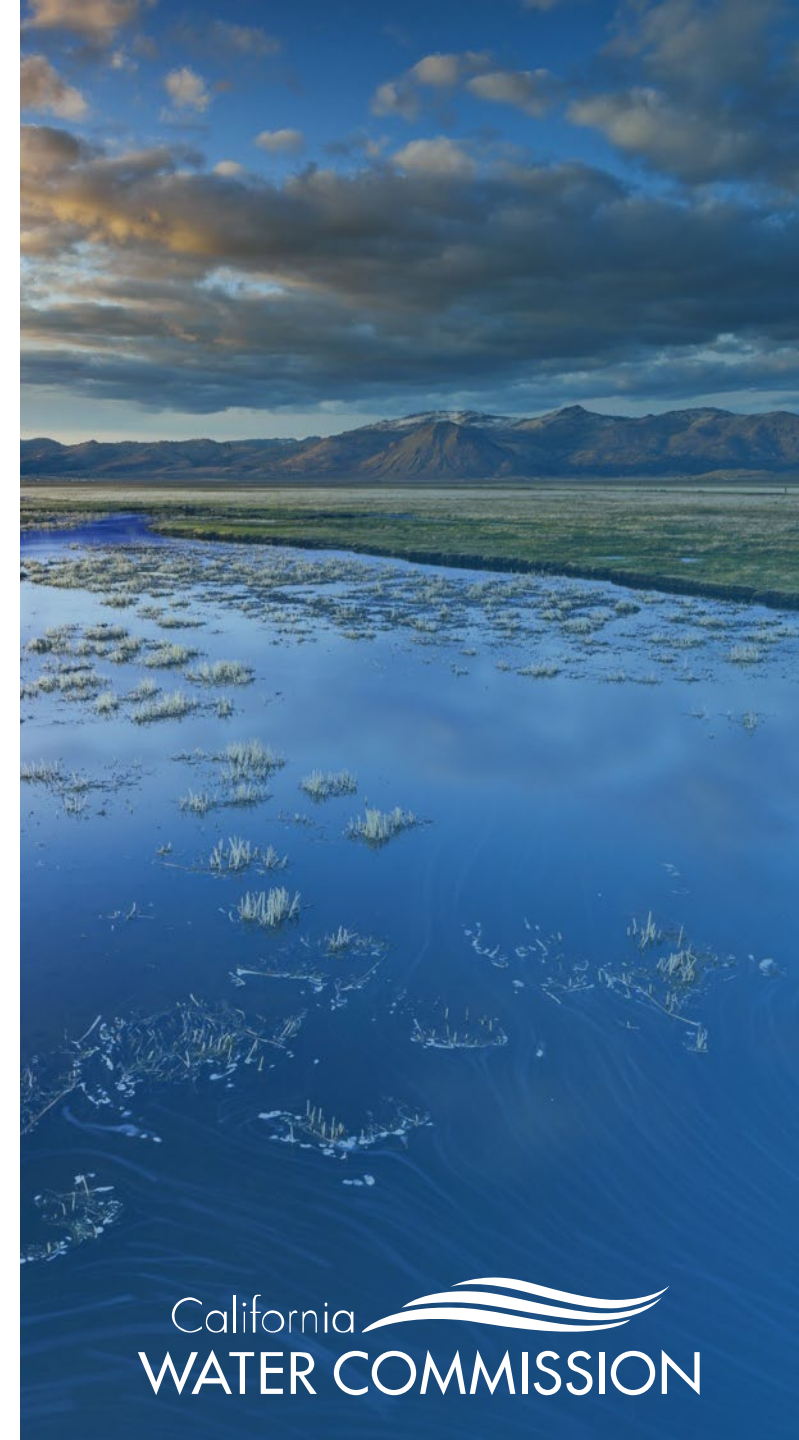
# 2021 Theme & Highlights

## Theme:

Creating a Resilient State Water Project: addressing climate change and aging infrastructure to provide multiple benefits for Californians.

## Highlights:

- Drought contingency planning
- Climate Change Vulnerability Assessment and Adaptation Plan
- Aging infrastructure

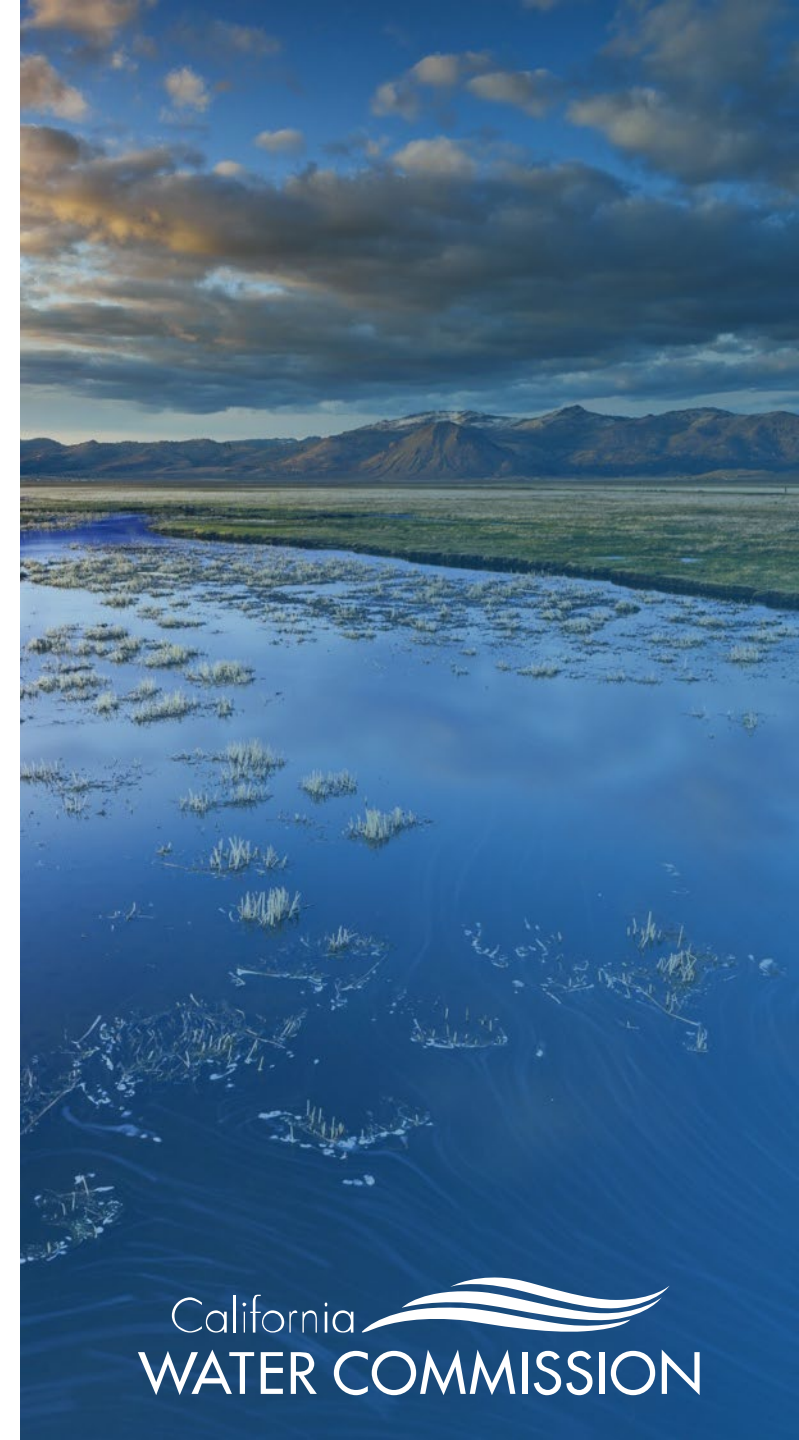


# SWP Water Delivery and Power Generation and Use



# 2021 Briefings

- Budget & Planning
- Aging Infrastructure
- Asset Management
- Dam Safety
- California Aqueduct Subsidence Program
- Delta Conveyance Project
- Climate Change Vulnerability Assessment & Adaptation Plan
- Green Infrastructure & Multi-Benefit Watershed Management
- Forecast Informed Reservoir Operations
- Flexible Resources Study
- Drought Contingency Planning
- Status of SWP Construction Projects



# Findings

## Overarching

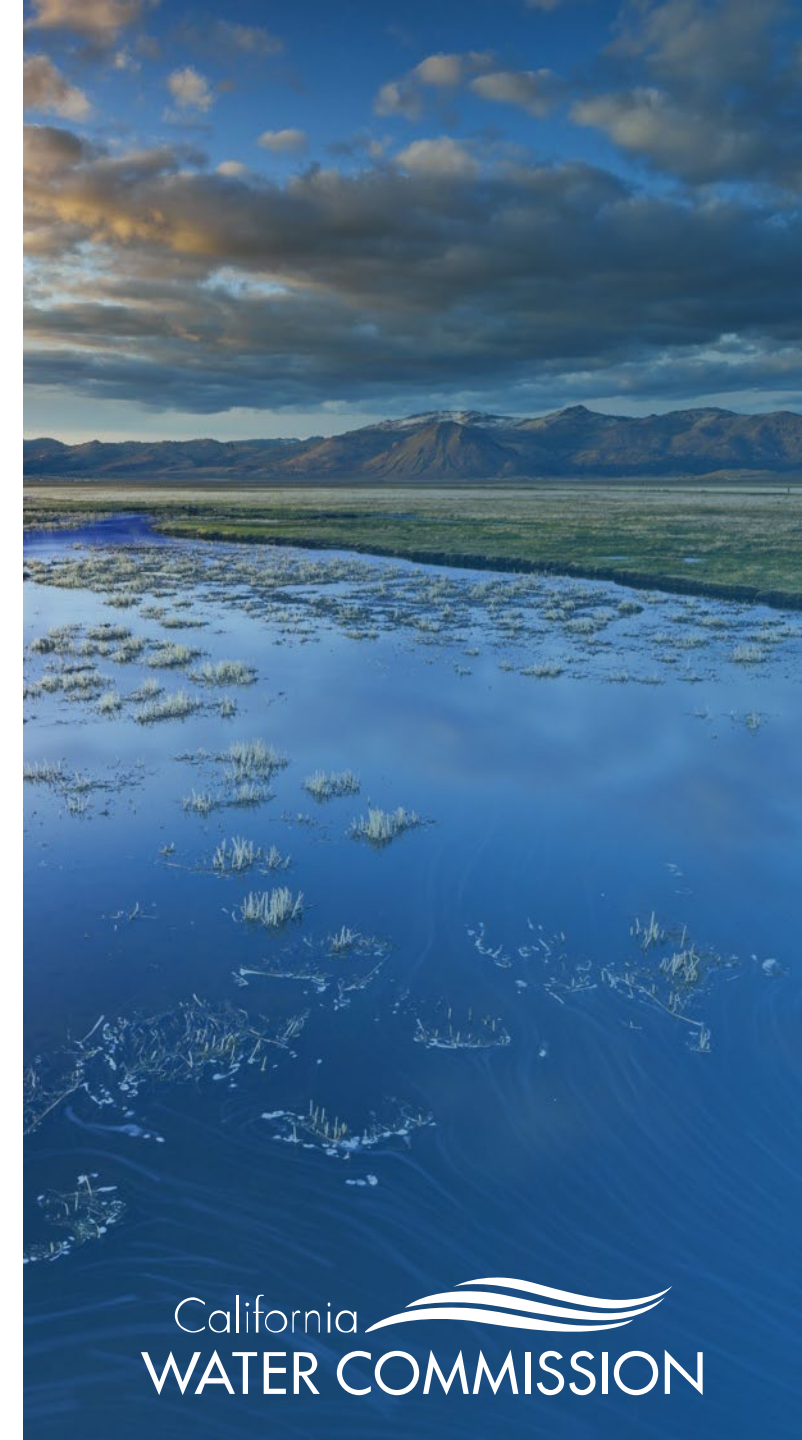
- Delivered water for Californians and the environment
- Provided renewable energy and advanced emission reduction
- Adapted business practices for COVID-19 pandemic

## Budget & Planning

- Informed CWC of SWP financial goals and budget
- 2021 approved SWP budget was \$969 million, including operations and capital costs

## Aging Infrastructure

- Delivery of timely capital improvement projects and maintenance practices mitigated aging infrastructure risks



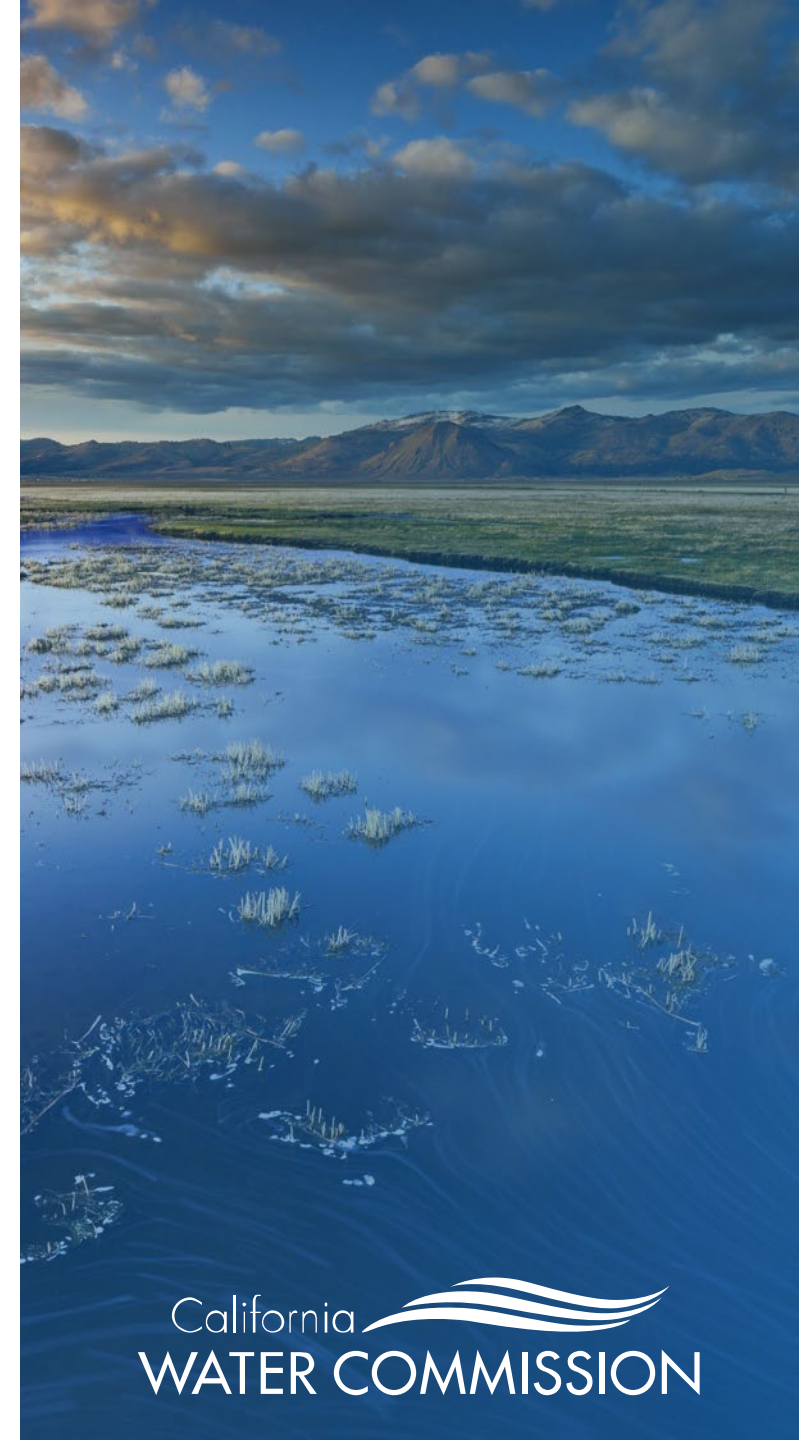
# Findings

## Asset Management

- Implemented a risk-informed process to prioritize capital and extraordinary operations and maintenance projects

## Dam Safety

- Advanced dam safety assessments, design and construction projects, and risk management at SWP dams to address seismic and flood hazards and aging infrastructure issues



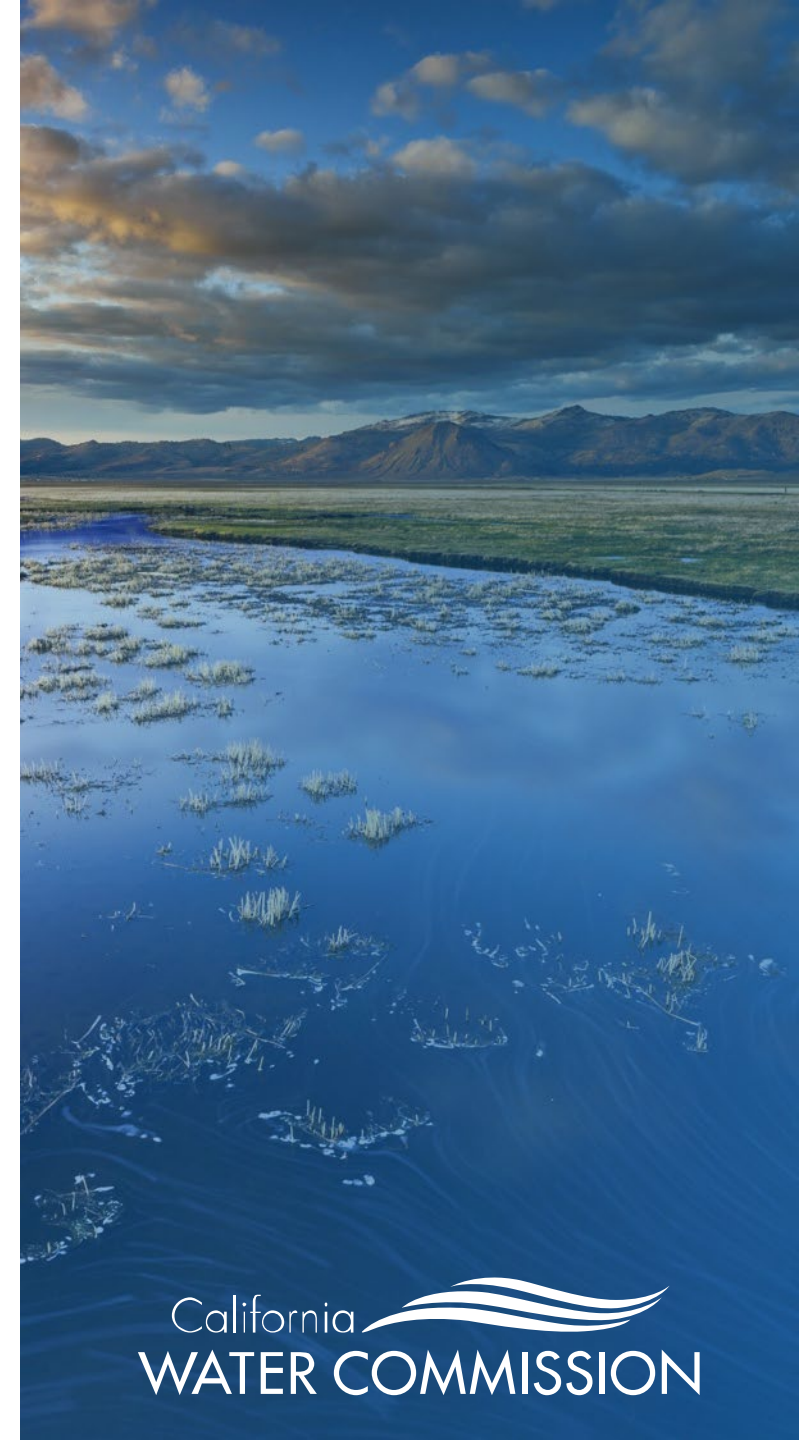
# Findings

## California Aqueduct Subsidence Program

- Advanced near-term and long-term solutions to capacity and conveyance loss on due to subsidence

## Delta Conveyance Project

- Kept the Commission and the public informed on plans for a single-tunnel Delta conveyance system
- Engaged stakeholders in the consideration of a community benefits program





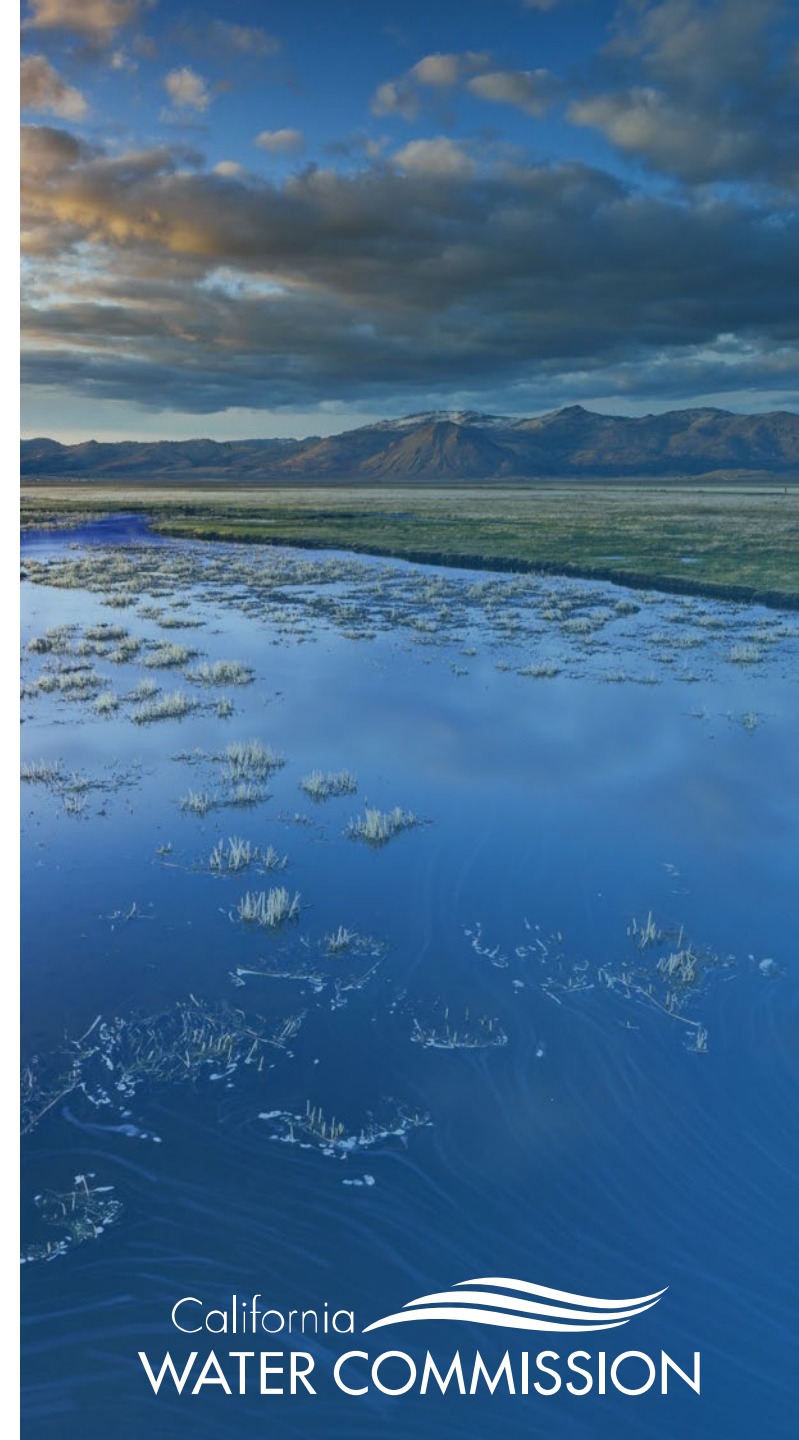
# Findings

## Climate Change Vulnerability Assessment & Adaptation Plan

- Explored adaptation strategies for the SWP to improve the system's resilience to climate change

## Green Infrastructure & Multi-Benefit Watershed Management

- Supported and led projects to enhance the climate and ecosystem resiliency of the Delta and Upper Feather River Watershed



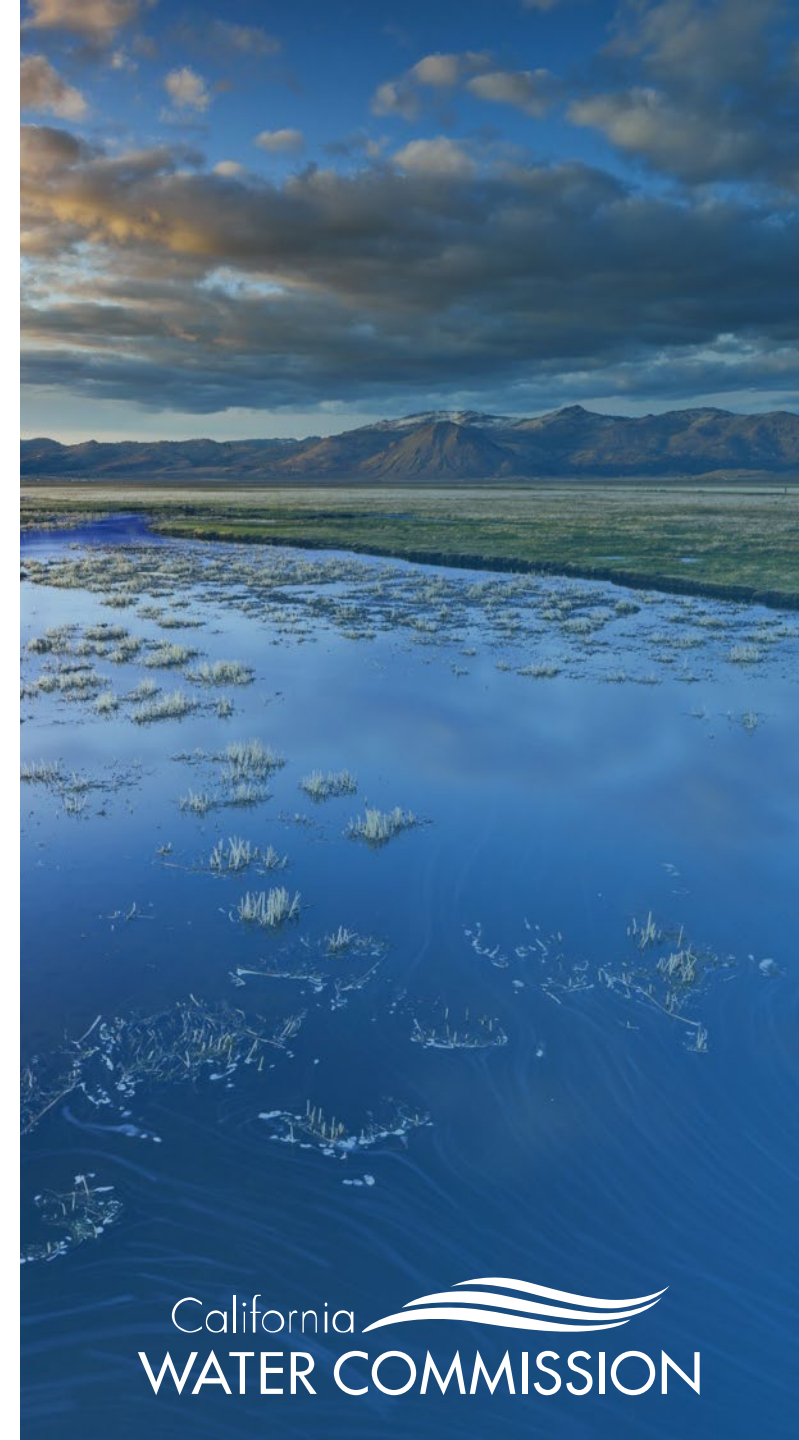
# Findings

## Forecast Informed Reservoir Operations (FIRO)

- Furthered FIRO efforts with the intent of operating Lake Oroville more optimally under changed hydrology

## Flexible Resources Study

- Completed a draft Flexible Resources Study that looks at how SWP can aid California in reaching its climate and energy goals



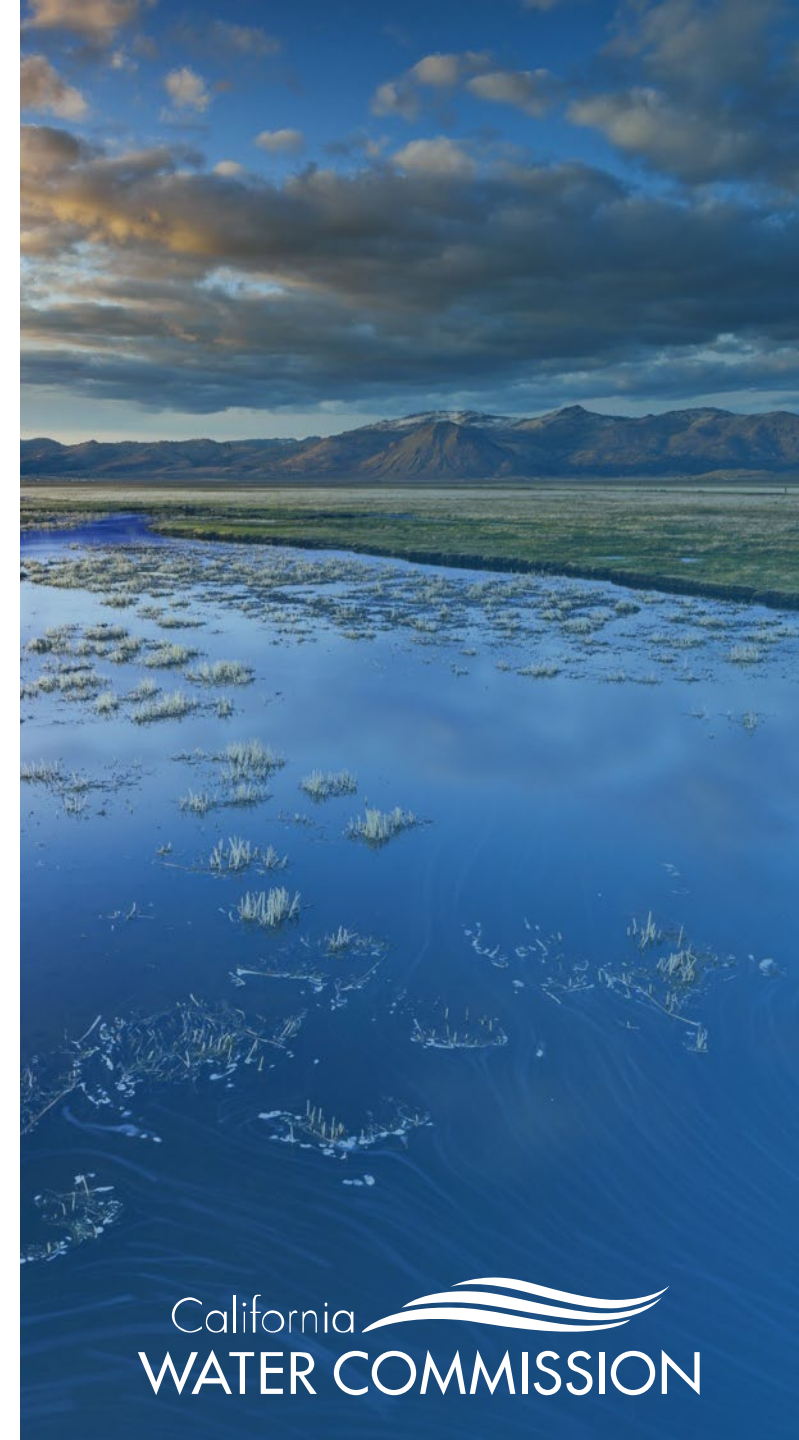
# Findings

## Drought Contingency Planning

- Took actions to mitigate the impacts from the 2021 drought
- Involved in early drought planning for 2022 and 2023

## Status of SWP Construction Projects

- Informed the Commission about key construction activities undertaken in the past year



# Recommendations

Provide information about how DWR is adapting its planning and operations to address the challenges of a changing climate.

- Using updated modelling and novel weather forecasting
- Using green infrastructure to strengthen the SWP's climate and ecosystem resilience
- Preparing for long-term drought, large-scale flooding, and massive wildfires
- Accounting for staff and public safety
- Working across silos with other state or federal agencies

# Recommendations

Provide financial and capacity updates and projections that reflect future resource needs to address the anticipated challenges of climate change.

- Organizing and staffing its teams to address aging infrastructure, climate change
- Financing climate-resilient infrastructure
- Aligning beneficiaries and funding sources to deliver SWP benefits over the long-term

# Recommendations

Provide information about efforts to advance large-scale infrastructure construction and maintenance.

- Planning for new Delta Conveyance Project
- Addressing the impacts of subsidence on the California Aqueduct

Provide information about balancing the needs of its multiple beneficiaries over the long term and particularly in years of extreme drought.