

# 2022 Annual Review of the Construction and Operation of the State Water Project

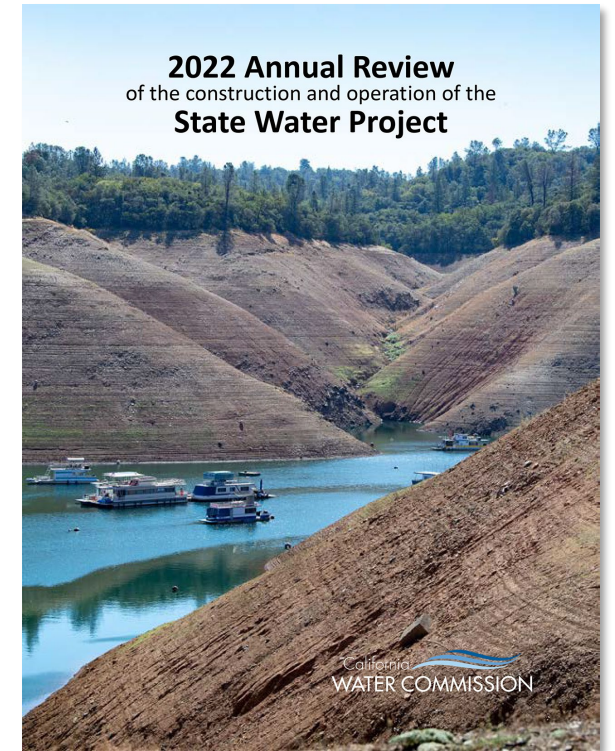
January 18, 2023





# 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 – “focus on how the SWP adapts and responds to hydrological extremes expected with climate change, restores critical ecosystems, and addresses aging infrastructure.”

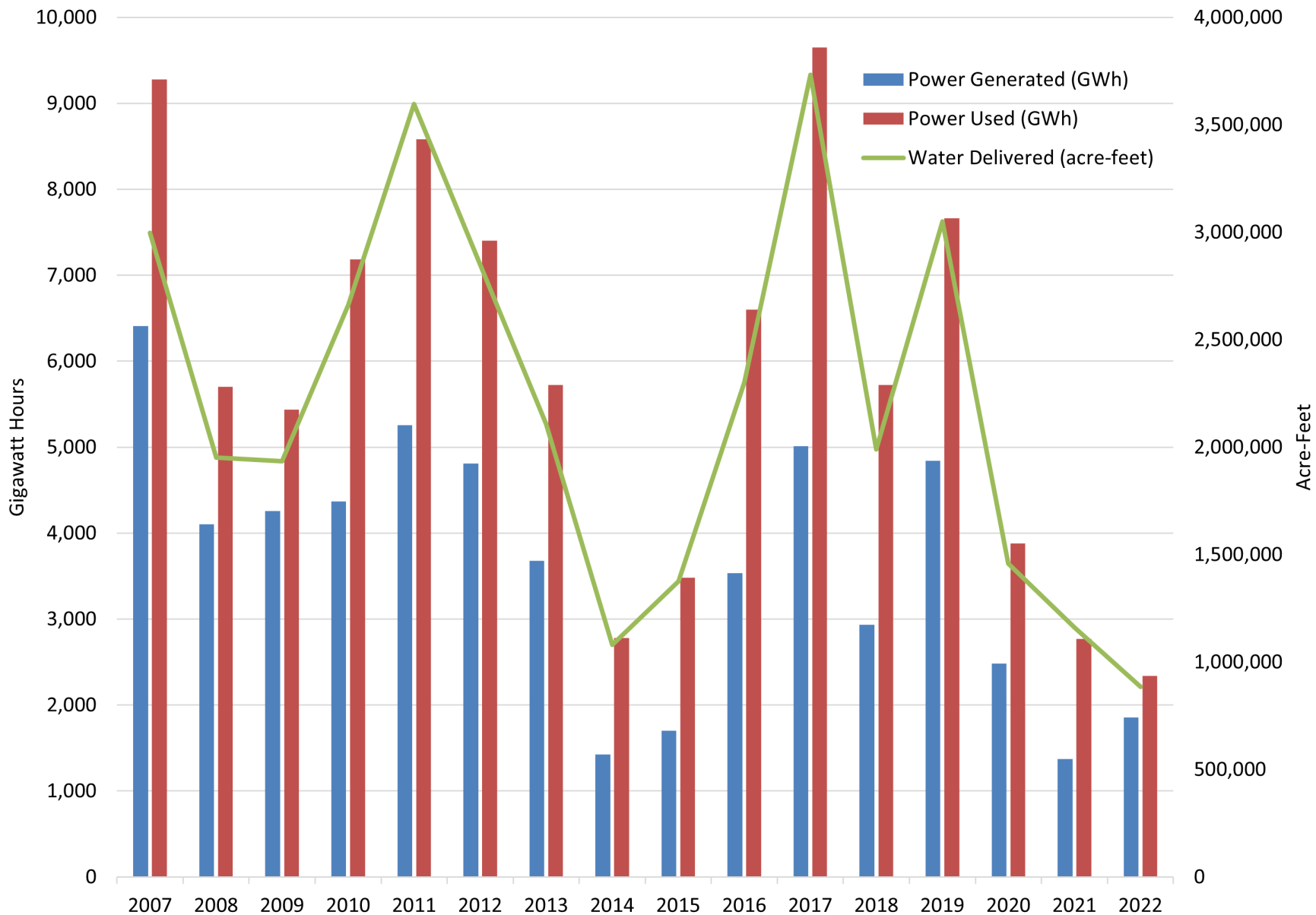




# 2022 Theme: Preparing for climate extremes – Ensuring a reliable State Water Project to meet the challenges of drought, flood, and wildfire.

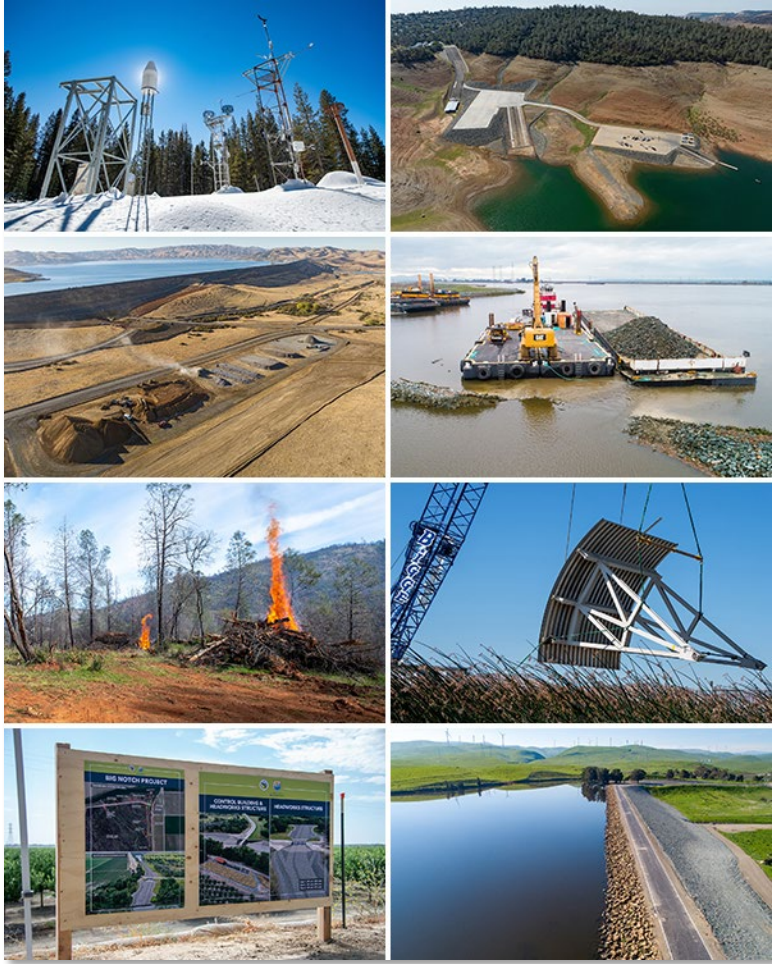






# SWP Water Delivery and Power Generation and Use

# 2022 Briefings



- Adaptive Forecasting Processes
- Delivery Capability Report
- Drought Planning for 2022
- Annual Budget & Multi-year Cost Planning
- Asset Management & Staffing Changes
- Drought Outlook for 2023
- Wildfire Response Planning
- Climate Change Adaptation Plan
- Water Supply Contract Extensions
- Construction Update

# Findings

## **The Commission finds that, in 2022:**

- DWR took steps to better account for climate change in its water supply forecasting by pursuing data augmentation, forecast model improvements, and partner collaboration.
- DWR advanced multiple climate change-informed planning processes, which included initiating a SWP Climate Change Adaptation Plan, and integrating a range of risk-informed future climate change projections and robust data in the drafting of the 2023 Delivery Capability Report.

# Findings

- DWR improved its modeling of burn-scarred areas in the Feather River watershed to evaluate how fire has and will continue to impact snowpack accumulation and the timing and amount of runoff
- DWR took actions to mitigate the impacts from the 2022 drought by considering more extreme scenarios in its water supply planning and engaging in more frequent, earlier cross-agency coordination. DWR is involved in early drought planning for 2023, which entails conservative planning and continued multi-agency collaboration.

# Findings

- DWR apprised the Commission of its financial goals, SWP budget, and cost projections, indicating that its 2022 approved SWP budget was \$923 million, including operations and capital costs.
- To address the challenges of aging SWP infrastructure, DWR's Asset Management Program used a risk-informed process to prioritize capital and extraordinary operations and projects for the repair, refurbishment, and replacement of infrastructure. DWR filled 67 positions during the 2021-22 fiscal year to assist with these projects and received authorization for 35 new positions for fiscal year 2022-23.



# Findings

- To ensure long-term financing of the capital needs and mitigate affordability concerns due to cost compression, DWR executed contract extension amendments with 25 SWP Contractors, extending their terms for an additional 50 years (from 2035 to 2085). DWR is in the process of executing the remaining four amendments.
- DWR informed the Commission about key construction activities undertaken in the past year to manage and maintain the SWP, including the installation of an emergency drought barrier to prevent Delta saltwater intrusion.

# Recommendations

## The Commission recommends that:

- DWR provide the Commission with information about how SWP operations will need to adapt to increasing aridity and the reduction in available water supply caused by hotter, drier conditions, including how this will impact water supply contracts.
- DWR inform the Commission of how it balances the needs of its multiple beneficiaries – including the environment and smaller water districts and communities – over the long term and particularly in years of extreme drought.



# Recommendations

- DWR inform the Commission about how it is continuing to respond to drought conditions, including how it supports water transfers to offset drought impacts.
- DWR continue to provide the Commission with information about water supply forecasting and allocations.
- DWR keep the Commission updated on its employment of the latest technologies for real-time data collection and measurement to help with water management decision making.

# Recommendations

- DWR keep the Commission apprised of its work to better understand atmospheric rivers, and how it is using this knowledge to prepare for floods and to improve SWP climate resiliency.
- DWR keep the Commission apprised of its work to understand the water supply implications of wildfire and any subsequent actions taken to address wildfire-related issues.



# Recommendations

- DWR continue to provide the Commission with financial and capacity updates and projections that reflect future resource needs to address the anticipated challenges of climate change and aging infrastructure.
- DWR share with the Commission its long-term plans for aging infrastructure repair.

# Recommendations

- DWR keep the Commission apprised of its efforts to advance large-scale infrastructure construction and maintenance in a manner that is inclusive of diverse stakeholders and accounts for the challenges of a changing climate. Specifically:
  - how planning for new Delta Conveyance Project is progressing, and how DWR is considering impacts to the Delta as place; and
  - how projects to address the near-term impacts of subsidence on the California Aqueduct are being coupled with efforts to stem the underlying causes of subsidence.



# Recommendations

- DWR works with Commission staff to increase the Commission's understanding of SWP operations through facility tours.





<https://cwc.ca.gov/Programs-and-Topics>

