

# Delta Conveyance Project

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#### 3 out of 5 Californians Depend on Water that Flows from the Delta

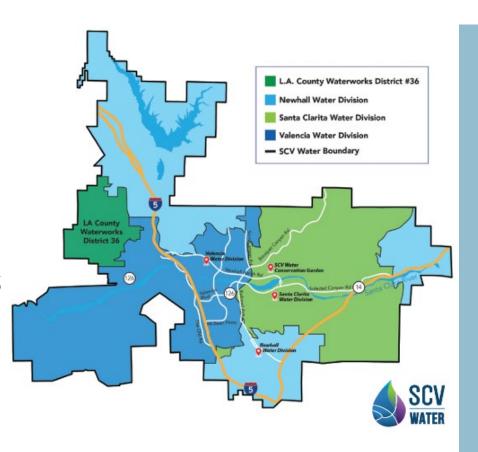
- 2/3 of California's water originates in the Sierra Nevada mountains
- 50% of California's water supply flows through the Delta
- 29 State Water Contractors including SCV Water purchase and distribute water through the State Water Project (SWP)
- 27m people receive clean, affordable water from SWP
- 750k acres of farmland are irrigated with SWP water





# Importance of SWP to SCVWA

- Population of ~278,000 within 196.8 mi<sup>2</sup> service area
- 75,000 retail connections
- Receives about 50% of its water through imported supplies
  - ~69% of imported supplies are from the SWP
  - For Yrs 2017-2021, total usage average 77k ac-ft – roughly 27k ac-ft through SWP





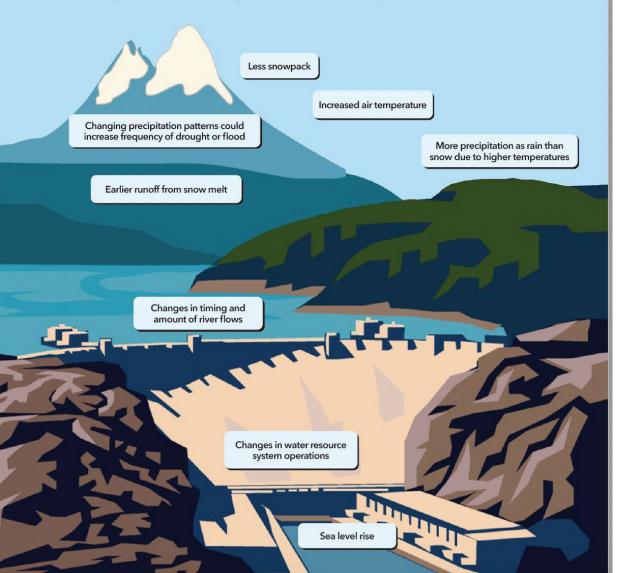
# Adapting to Climate Change

#### Global climate models forecast a range of future scenarios

- Changes in projected annual runoff (from -32% to +47%)
- More precipitation falling as rain instead of snow in winter months, than typical
- More extreme drought and flood cycles
- Flashier storms (pockets of intense precipitation scattered within dry stretches)
- This increased flow during the winter cannot be captured and moved
  - Flood protection
  - Flow, fishery and water quality requirements

# WATER SECTOR CLIMATE CHANGE VULNERABILITIES

Climate change is having a profound impact on California's water resources, as evidenced by lower water supply reliability, greater weather extremes, reduced snowpack, higher sea level, and changes in river flows. Further impacts include:



#### **Effects on Water Management**

- Existing facilities designed to capture water based on historic climate patterns
  - Snow in mountains and rain in valley
  - Snow functioned as additional storage, delaying water from flowing as snowmelt until late spring
- Historical pattern of accumulating snowpack followed by slower snowmelt and more stable streamflow is the basis for typical water and flood management
- These water management challenges will limit the yield of the State Water Project over time.
  - Agencies that receive SWP water will see their baseline deliveries decline.

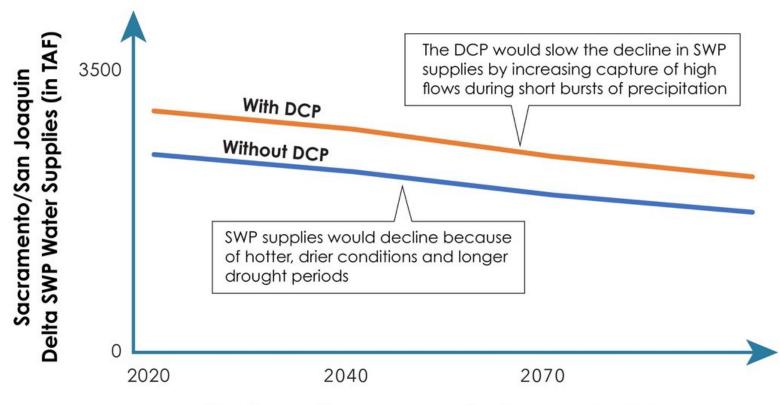


# How would the Delta Conveyance Project Help?

- Adding intakes in the north Delta would allow the capture and movement of water in the winter that would otherwise be unavailable.
- North Delta intakes would add capacity to safely divert in the winter during high flow conditions, while meeting water quality and species protections.
- This added ability to divert high flows will help guard against declining baseline water deliveries, protect water agencies' baseline supplies, and minimize future losses.
- Modernizing the aging SWP infrastructure will protect against seismic risk and sea level rise and aid in ensuring that we capture, move and store water when it is available and when it is safe for fish and water quality.



#### Declining Baseline



The Delta Conveyance Project would yield about **500,000** acre-feet of water/year, which is enough for about **5.2 million people**.



# Missed Opportunities

Winter 2021-22

236,000 acre-feet of water = enough water to supply:







January 2023

228,000 acre-feet of water = enough water to supply:





or

Nearly **800,000** households for one year



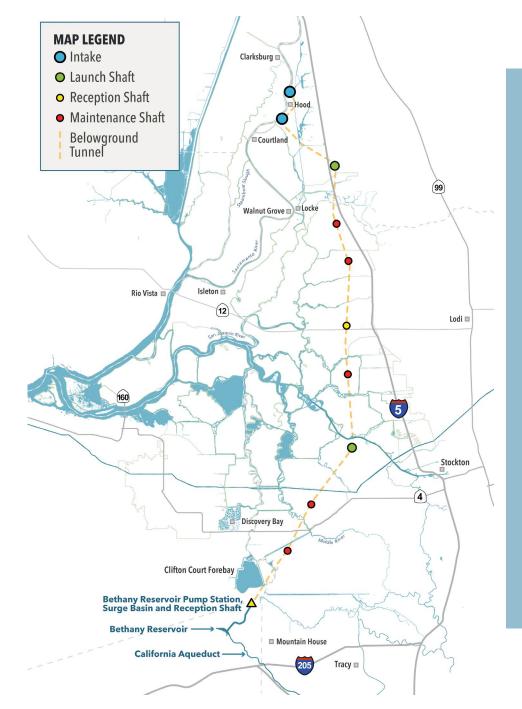
# What is the Project?

#### **Project**

- Bethany alignment
- 6,000 cfs
- 2 intakes
- Pumping plant connects the tunnel directly to Bethany Reservoir

#### **Tunnel by the Numbers**

- 2 new intakes in North Delta
- Each intake has capacity of 3,000 cubic feet per second (cfs) for a total of 6,000 cfs
- 1 below-ground tunnel for approximately 45 miles
- 36 feet tunnel diameter (inside)
- 140 170 feet approximate depth range of tunnel
- 18 inches thickness of tunnel segments



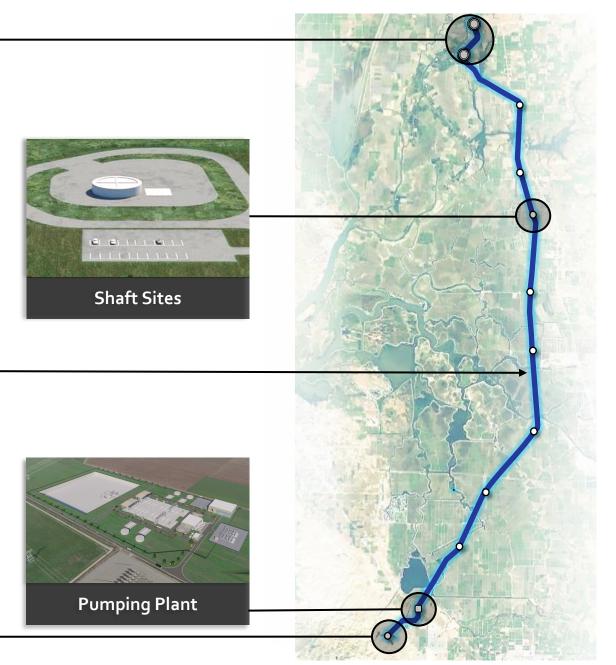


## Project Major Components











# Project Advantages

#### Bethany Reservoir Alternative:

State of the art fish screens for smaller intake footprint

Fewer tunnel launch shafts

Traffic focus on highways, interstates, exclusive haul roads

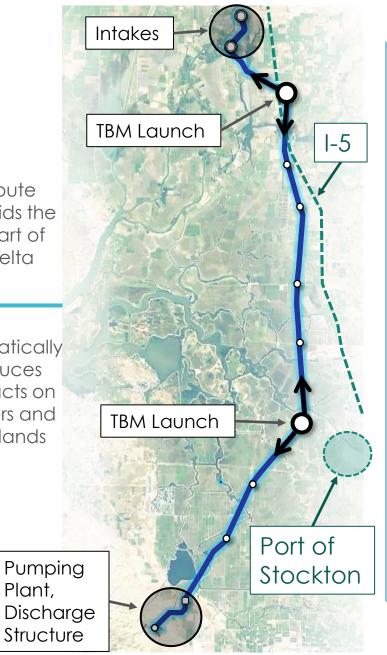
Route avoids the heart of Delta

Reliance on burying conduit for new power lines

Pumping plant on higher ground discharging directly into Bethany Res.

Avoids new forebays or barge landings

Dramatically reduces impacts on waters and wetlands





## Cost Estimate Updates

Update design and footprint for proposed project

Updated contingencies and risk mitigation costs

Optimized schedule for delivery with updated soft costs

Updated property
/ ROW costs for
proposed project

Environmental mitigation conceptual design

- Latest Cost Assessment released in 2020 = \$15.9B (2020\$)
- Will issue updated Cost Estimate in Q2/2024 (2023\$)
- Use updated Cost Estimate in Benefit/Cost Analyses

Updated Cost
Estimate for EIR
Project (2023\$)

Evaluate Cost
Saving Concepts

Delta-wide geotechnical investigation

#### Opportunities:

- Improve constructability
- Design assumptions
- Industry innovation



## DCP Design Development



#### **Preferred Project Engineers Report**

- Succinct report documenting Engineering considerations for Bethany Reservoir Alternative
- Last engineering deliverable of the current Planning & Permitting SOW



#### Next Phase: Conceptual → Preliminary Design

- Geotechnical and environmental data
- Survey information
- Property access and land acquisition
- Feature Design Team procurements
- Environmental mitigation implementation



## Robust Community Engagement

- Environmental Justice/DAC focus—based on guidance about best practices from statewide EJ outreach experts, focused on raising awareness
- Formal Tribal consultation and informal Tribal coordination to develop Tribal impact analysis and mitigation
- Delta community engagement (Stakeholder Engagement Committee) to obtain local insight during conceptual design/engineering to avoid and minimize impacts
- Community Benefits Program for Delta communities
- Extensive overall outreach, broad array of informational resources



# Why Community Benefits?

Creating a Community Benefits Program for the Delta Conveyance Project is an acknowledgment that:

- The direct project benefits related to SWP water supply reliability do not directly benefit the communities of the Delta;
- The project, if approved, could have potential adverse effects that Delta communities experience through the term of construction; and
- The California Environmental Quality Act (CEQA) and other required environmental mitigation typically do not address all adverse effects on the local communities.



# Components of the Community Benefits Program

- Delta Community Fund
  - Proposed overarching fund to support community-prioritized projects in the Delta
- Project Implementation Commitments
  - Hiring targets, job training, and education
  - Local business utilization
  - Infrastructure and facilities



## CEQA Process and Status

- Draft Environmental Impact Report (DEIR) comment period closed December 2022
- 142-day comment period
- ~729 letters and other communications
- ~7,300 individual comments
- Covering a broad range of policy and environmental technical topics
- Final Environmental Impact Report (Final EIR) certified by DWR December 2023

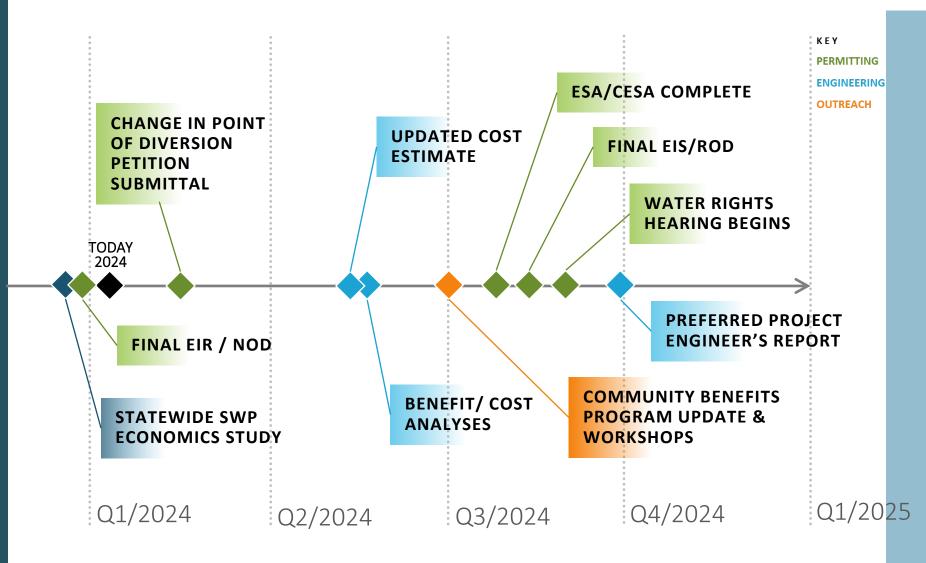


#### Future Steps

- National Environmental Policy Act (NEPA): Early 2024
- State and Federal Endangered Species Acts
- State Water Resources Control Board
- Community Benefits Program
- Financial (revised cost estimate and benefit-cost analysis)
- Public Outreach and Engagement



### DCP 2024 Milestones





# Questions?





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Multilingual Project Hotline 866.924.9955







