



Pacheco Reservoir Expansion Project

California Water Commission

April 17, 2024

Purpose of Update: Provide Project update, review the final funding agreement schedule, discuss environmental related updates, and address public comments provided on October 18, 2023

- Project Updates
- Final Funding Agreement Schedule
- Environmental Related Updates
 - Update on Impacts to Henry Coe State Park and Coordination with California State Parks
 - Tribal Cultural Resources
- Public Comments
 - Incidental flood benefits
 - Project feasibility

Project Updates

- Signed \$1.4 Billion WIFIA Master Agreement and \$92 million loan for Pacheco planning/design (November 2023)
- Development of 60% Designs (Ongoing)
- Development of CEQA Initial Study for Design-Level Geotechnical Investigations (Spring 2024)
- Environmental Field Data Collection (Ongoing)
- Entered into Option Agreement for Mitigation Property Acquisition (February 2024)



Pictured above: Existing Pacheco Reservoir

Schedule Considerations and WSIP Milestones

- Refinements to power transmission facilities (PG&E)
 - Preliminary and final design of updated/refined facilities
 - Change to project description requires recirculation of Draft EIR
- Delays in geotechnical investigations to support 60% design

Fall 2021

Draft EIR, WSIP
Supplemental
Feasibility
Documentation &
CWC Feasibility
Determination

Summer 2025

Recirculated Draft
EIR/Draft EIS

Summer 2026

Final EIR/EIS

Winter 2027

Public Benefit
Contracts w/CDFW
& DWR

Late Summer 2027

Permits/
Approvals

Early Fall 2027

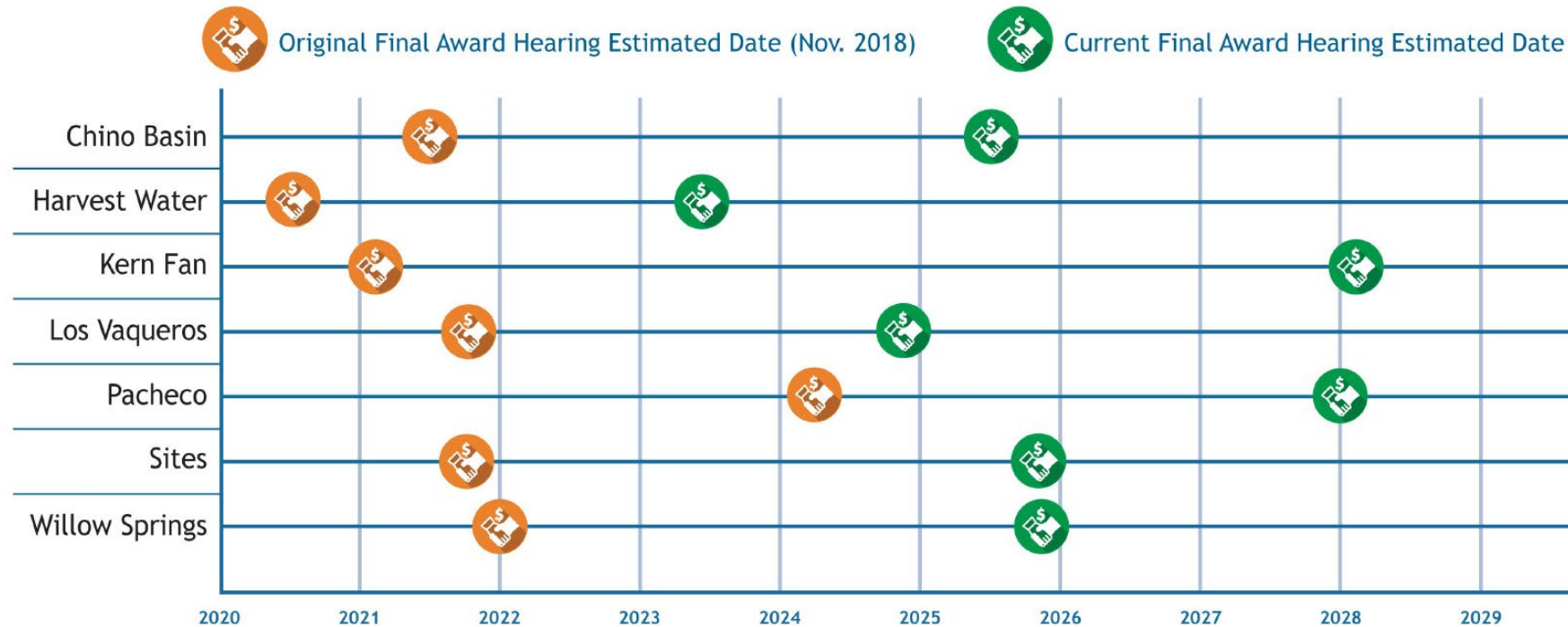
CWC Funding
Agreement

Fall 2027

Construction

Final Award Hearing Schedule Delays

- Delay range of approximately 3 to 6.5 years for suite of WSIP projects
- Pacheco similar to majority of WSIP projects (approximately 3.5 years)

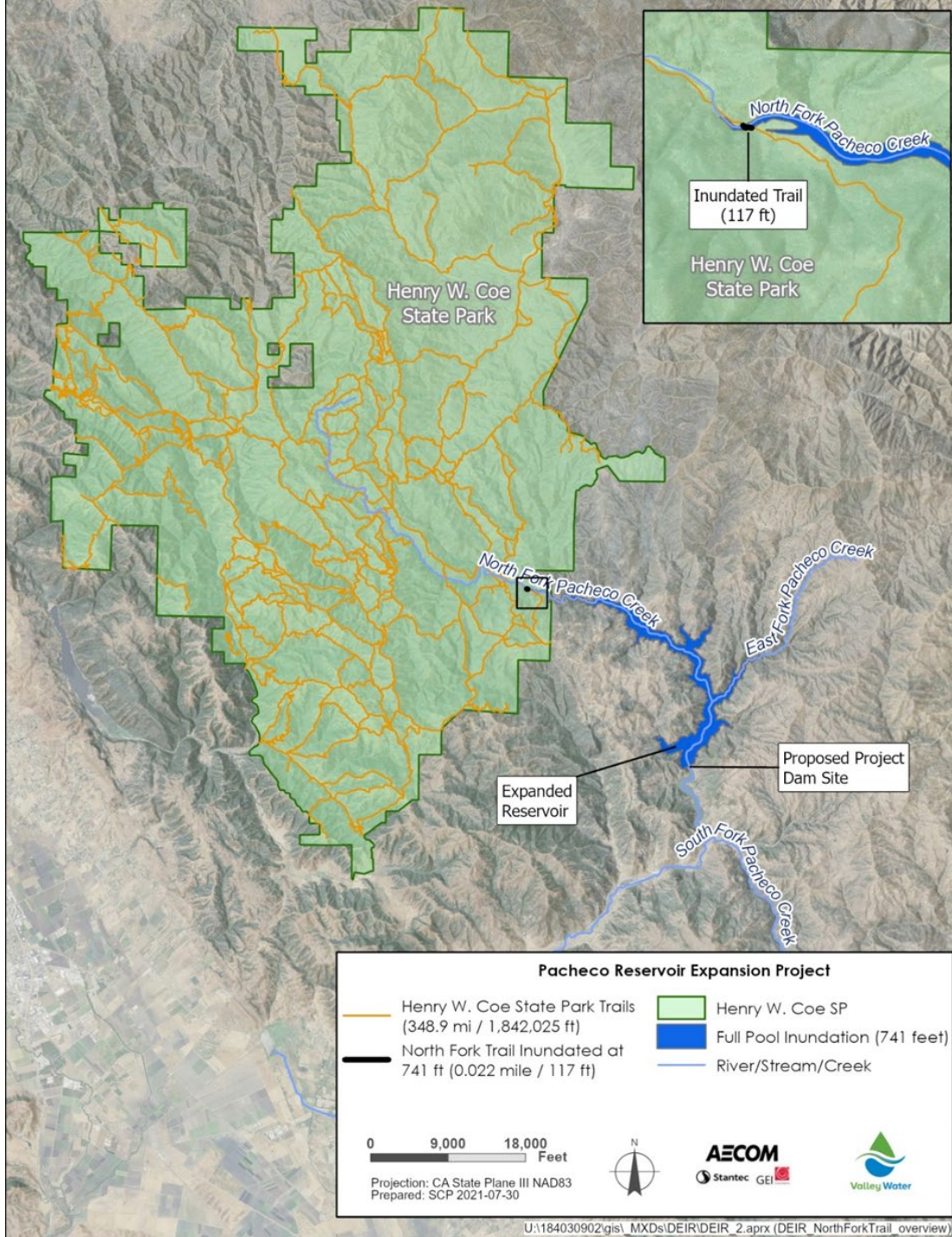


Impacts to Henry W. Coe State Park

Operation of the reservoir at full pool (140,300 AF) would:

- Inundate up to 13.6 acres of the 87,000-acre Park
- Periodically impact 117 linear feet of the North Fork Trail

Inundation would increase reservoir capacity by 41 percent





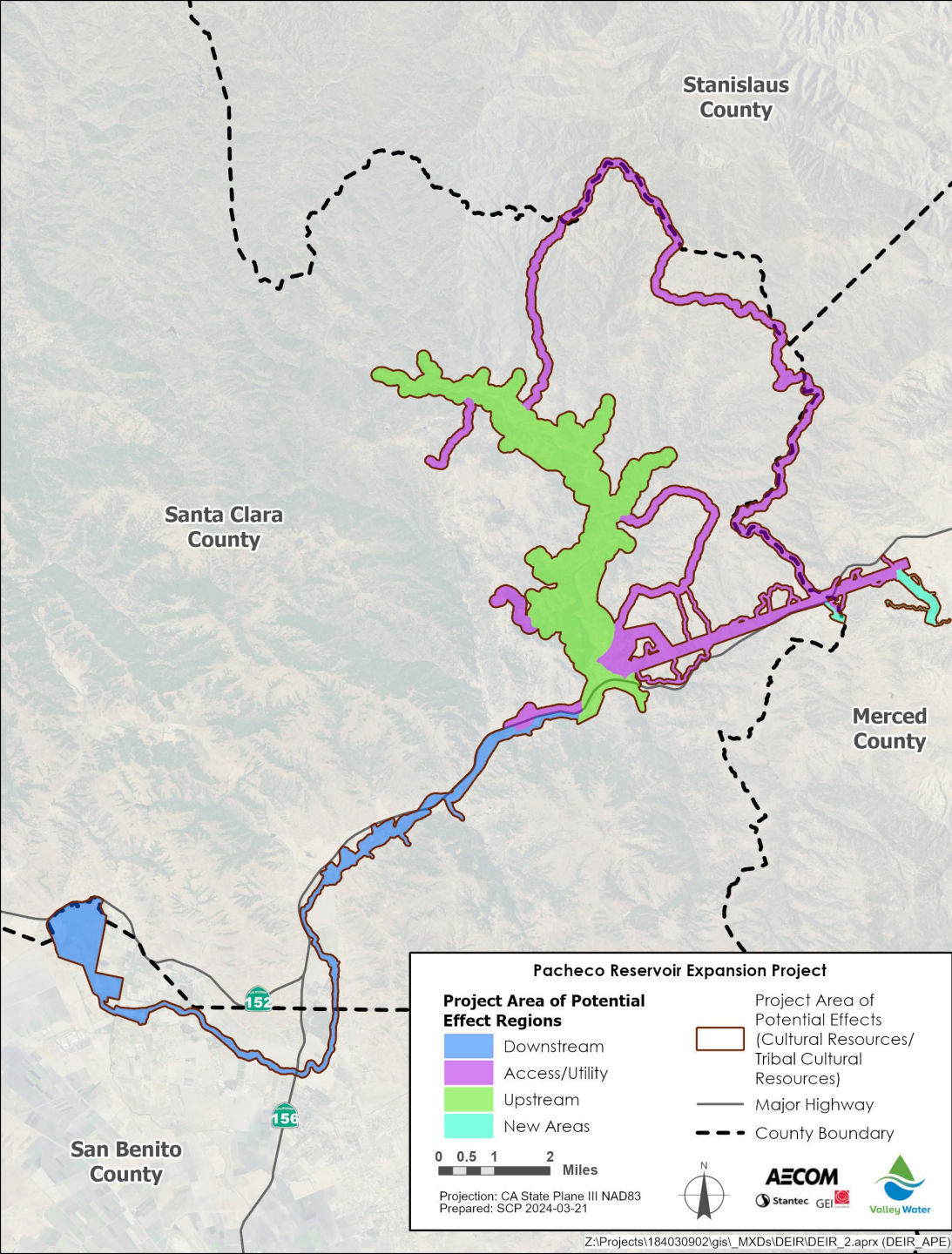
Impacts to Henry W. Coe State Park

7

- Valley Water has been coordinating with State Parks
- Inundation and trail impact mitigation is consistent with Public Resources Code (Section 5019.53) and Henry W. Coe State Park General Plan
- Comment letter provided by California State Parks to Draft EIR acknowledged impacts and stated that continued collaboration and coordination will be needed

Tribal Cultural Resources

- **Types**
 - Records Search
 - Pedestrian surveys
 - Testing and evaluation
- **Field Investigation Status**
 - Upstream (green)
 - Results in Draft EIR
 - Access & Utility Areas
 - Completed in 2023* (purple)
 - Planned 2024 (turquoise)
- **AB 52 Tribal Consultation**
 - Amah Mutsun Tribal Band
 - Providing monitoring of cultural field investigations



*Pedestrian surveys and testing and evaluation of sites completed for properties where legal access was provided prior to 2024.

Flood Control Benefits



January 2017 Flooding along Pacheco Creek

- 2017 WSIP Application identified non-monetized Public Benefits for Flood Control along Pacheco Creek and included supporting technical analyses
- 2018 WSIP Technical Review Finding *For Flood Control, the applicant discussed its proposed Flood Control benefit in depth and provided supporting documentation for its claim. Staff concurs with the following items: a) the project provides incidental flood benefits through the utilization of available surcharge reservoir storage when the reservoir is operating at the full operating pool level/elevation; b) the flood benefit is incidental and should not be monetized; and c) additional flood benefits may be achieved when additional reservoir storage is available and a flood event occurs before the reservoir is full.*

Project Feasibility and Financing 10

- Project feasibility evaluated multiple times
 - Technical
 - Economic
 - Environmental
 - Financial
- Costs and benefits both anticipated to increase with inflation
- Multiple funding and financing streams

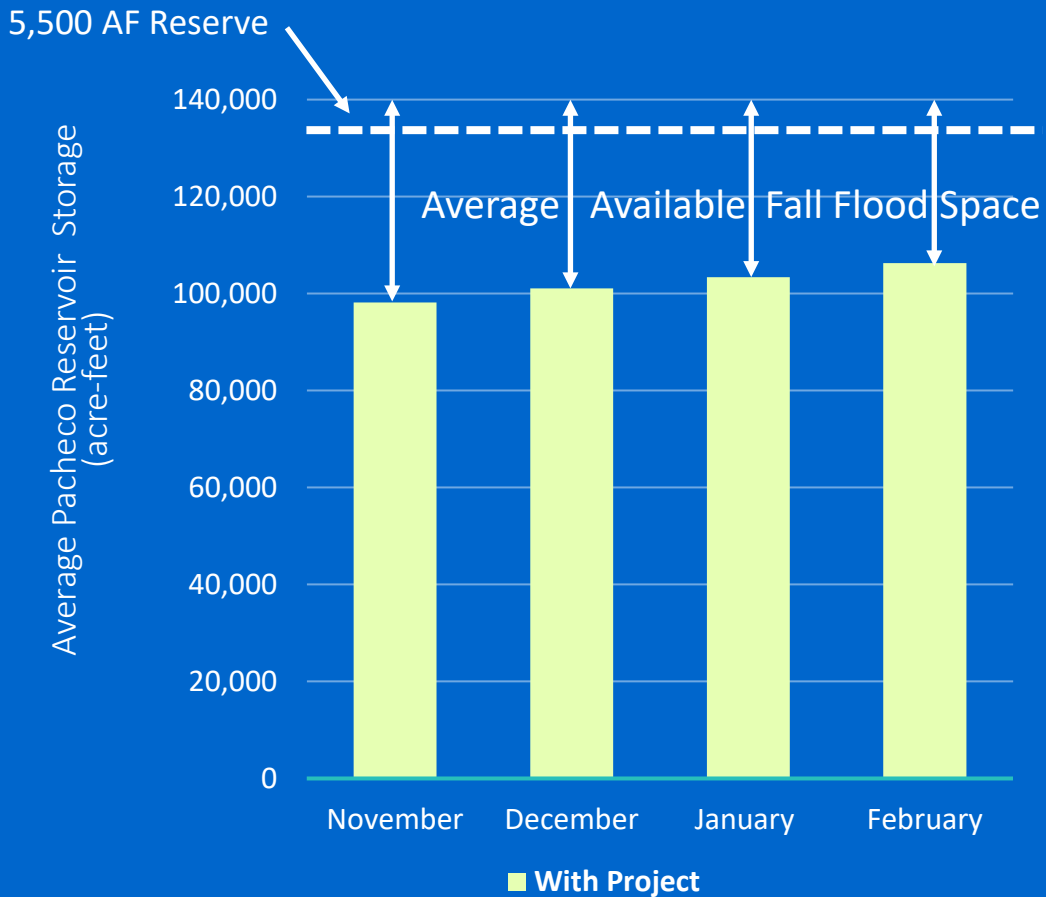


Pictured above: Existing Pacheco Reservoir

Reduces Flooding in 11 Downstream Communities

The project will protect vulnerable communities against flooding

- Expanded reservoir will reduce peak flows:
 - Additional storage in expanded reservoir available to capture flood flows
 - Attenuation of flows/reduction of flood peaks due to routing of flows through larger reservoir and modified spillway configuration
- Reservoir expansion can reduce peak flood flows by up to 46 % in Pacheco Creek



Based on modeling conducted for 2021 WSIP Supplemental Feasibility Documentation and 2021 Draft EIR

Feasibility Findings 12

- 2021 WSIP Supplemental Feasibility Documentation included evaluation of both earthfill and hardfill dam alternatives
- Staff evaluation approved by CWC in December 2021
 - \$1.874 Billion Construction Cost (April 2021 \$)
 - \$2.161 Billion Total Costs (April 2021 \$)
 - \$2.375 Billion Quantified Benefits (April 2021 \$)
 - 1.1 B/C Ratio
 - \$214.5 million Net Benefits (April 2021 \$)
- Construction cost estimate decreased with refined level of design
 - \$2.279 Billion – Feasibility-level design construction cost estimate (April 2022 dollars)
 - \$1.996 Billion - 30% design construction cost estimate (April 2022 dollars)



Pictured above: Pacheco Creek below Existing North Fork Dam

Financing Considerations

13



Pictured above: Existing Pacheco Reservoir

- WSIP Maximum Conditional Eligibility Determination of \$504 million
- EPA WIFIA Low Interest Loan
 - Up to \$1.4 billion through Master Agreement
 - \$92 million loan signed in November 2023 for planning and design
- Project Partners
 - San Benito County Water District
 - Pacheco Pass Water District
 - Ongoing Discussions with Multiple Agencies



Valley Water

Clean Water • Healthy Environment • Flood Protection

Changes to Capital Costs

Document	2021 WSIP Supplemental Feasibility Documentation	2021 WSIP Supplemental Feasibility Documentation	2022 Valley Water 30% Design
Dam Type/ Reservoir Capacity	Hardfill Dam/140 TAF	Earthfill Dam/140 TAF	Earthfill Dam/140 TAF
Capital Cost (Date)	\$1.875 billion (April 2021)	\$2.003 billion (April 2021)	\$1.996 (April 2022)
Escalated Capital Cost (April 2022)	\$2.093 billion	\$2.279 billion	\$1.996 billion

Change in Dam Type

Increased Level of Design