



# Valley Water

Clean Water • Healthy Environment • Flood Protection



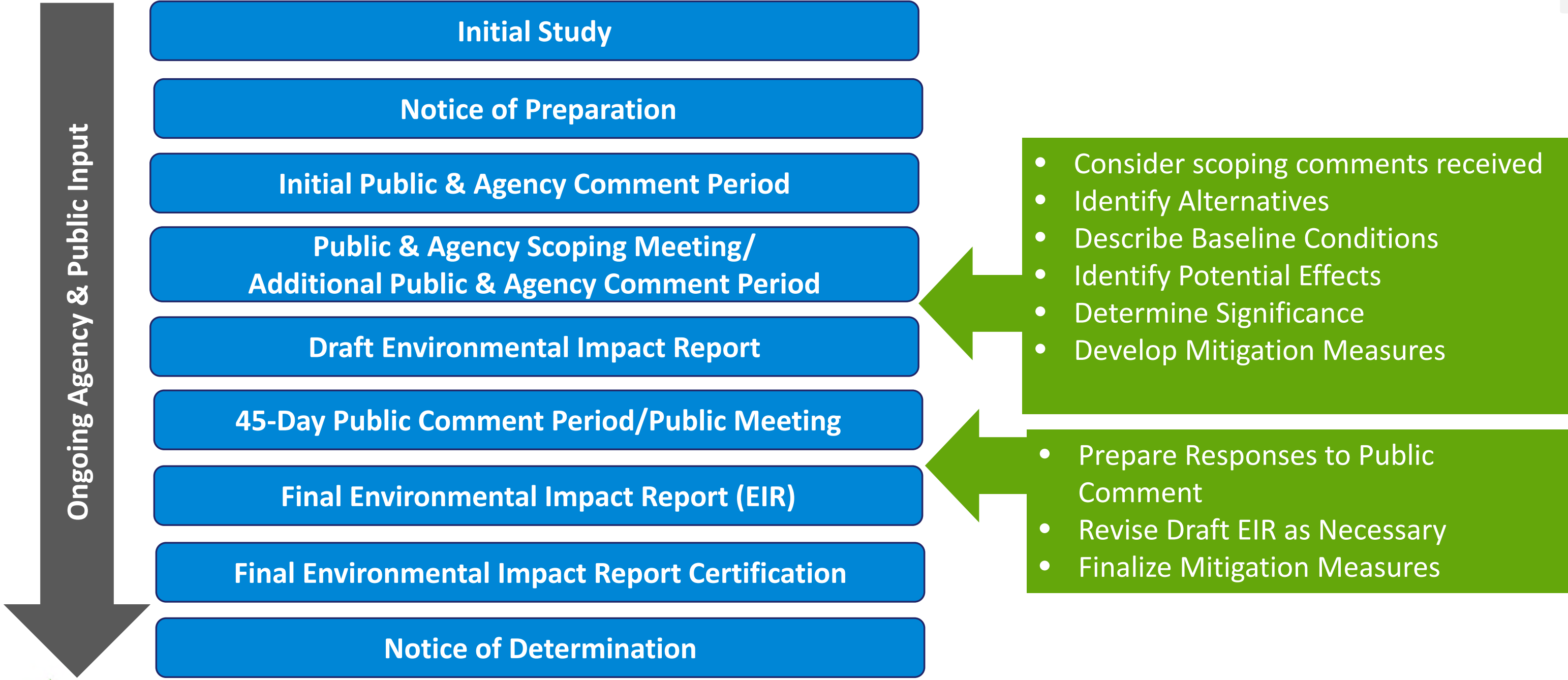
# Pacheco Reservoir Expansion Project

Environmental Impact Report Public and Agency Virtual Scoping Meeting



# California Environmental Quality Act (CEQA) Process and Meeting Purpose

# California Environmental Quality Act Process





*Pictured above: Existing Pacheco Reservoir*

## Scoping Meeting Purpose

- Provide orientation and updates on the Pacheco Reservoir Expansion Project (Project) and EIR
- Provide opportunity for additional public input on the Project
- Solicit input on scope and content to be included in the EIR

# Background



# Existing North Fork Dam and Pacheco Reservoir

## Dam

- 100-foot-tall earthen embankment dam
- 0.4 miles upstream of North Fork Creek and South Fork Creek confluence
- Construction completed in 1939

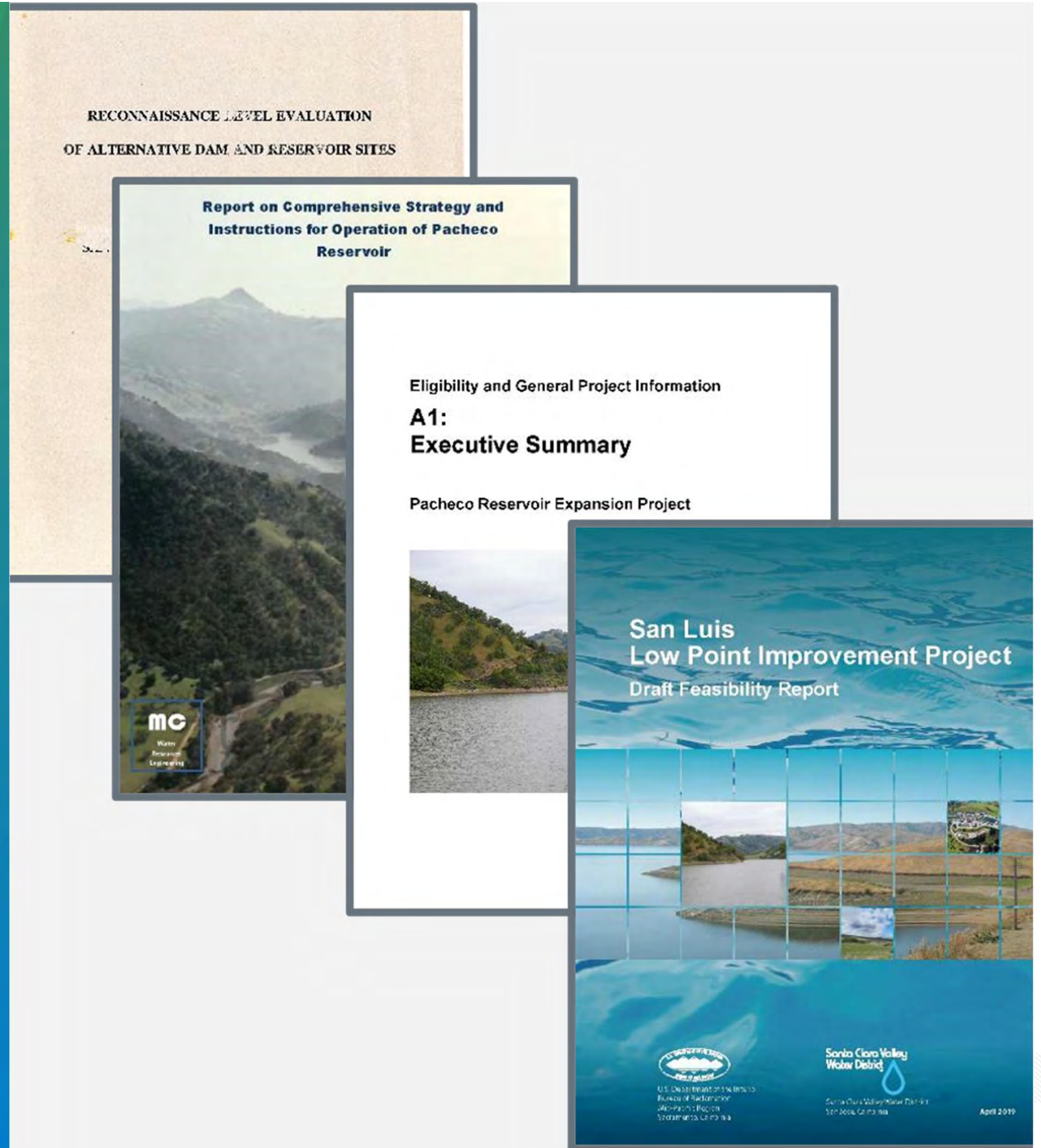
## Reservoir

- Current capacity: 5,500 acre-feet
- Operated for groundwater recharge along Pacheco Creek by Pacheco Pass Water District



# Studies Related to Pacheco Reservoir

- Historical evaluations of water storage in Santa Clara County
- 2014 Reoperation Study
- Water Storage Investment Program
- San Luis Low Point Improvement Project
- Valley Water ongoing efforts





# Relationship of CEQA Processes

## San Luis Low Point Improvement Project

- Primary objectives focused on addressing (1) supply interruptions due to San Luis Reservoir “low point” water quality issues, and (2) associated water supply reliability
- Expansion of Pacheco Reservoir is 1 of 5 action alternatives
- Draft EIS/EIR released July 2019; Final EIS/EIR is pending
- Valley Water to potentially certify and approve EIR reflecting Pacheco Reservoir expansion as best alternative to address the low point problem in San Luis Reservoir

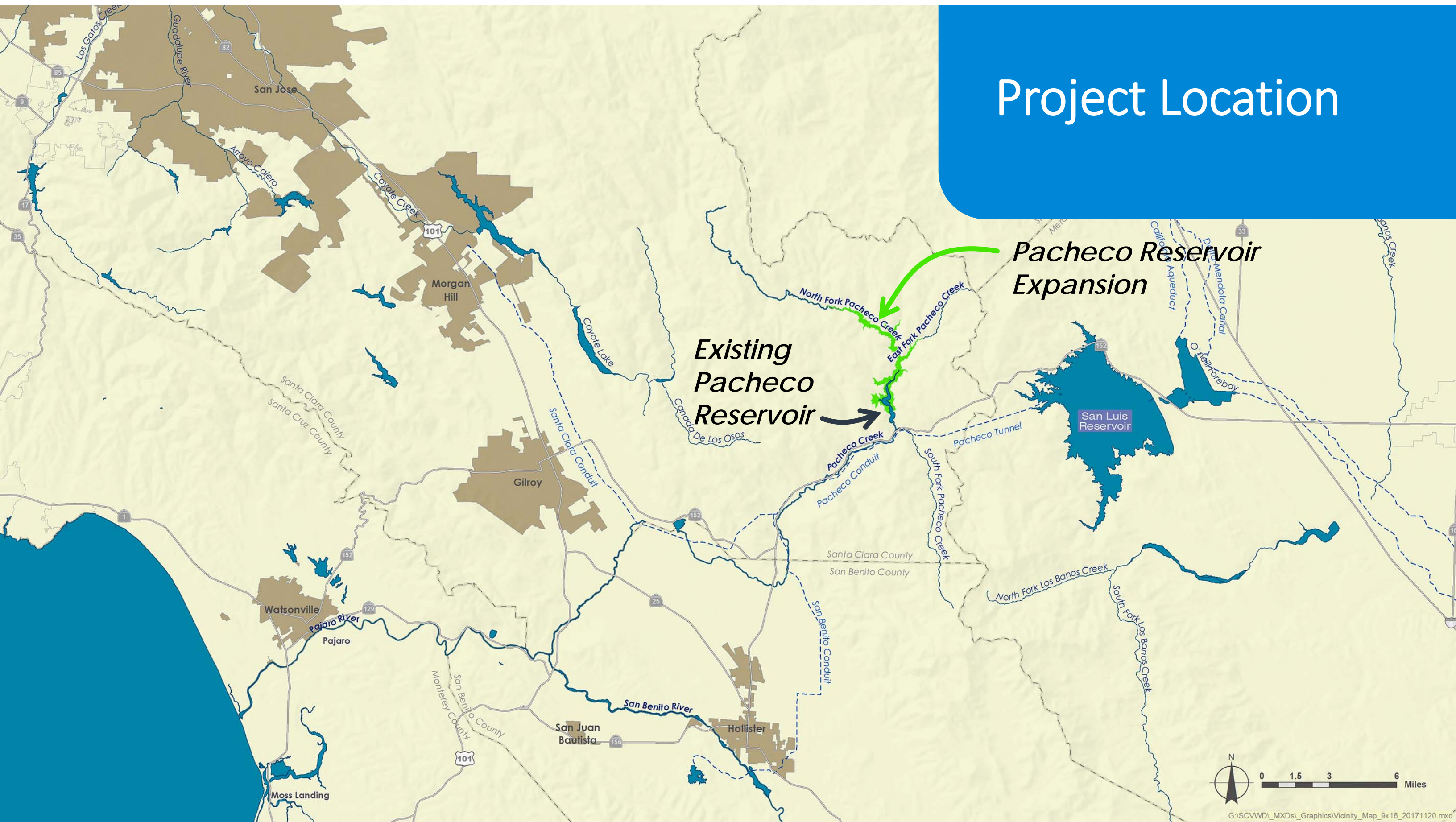
## Pacheco Reservoir Expansion Project

- Primary objectives focused on (1) water supply reliability/emergency water supplies, and (2) increase suitable habitat in Pacheco Creek for federally threatened South-Central California Coastal Steelhead
- Multiple alternatives evaluating potential expansion of Pacheco Reservoir
- Draft EIR anticipated late 2021
- EIR will support Valley Waters' approval of the Pacheco Reservoir Expansion Project's detailed construction activities and long-term operational plans, as well as support permitting by State and local responsible agencies



# Project Location and Planning Objectives

# Project Location



**Pacheco Reservoir Expansion**

**Existing Pacheco Reservoir**



# Needs for Pacheco Reservoir Expansion Project

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Improve Resiliency and Emergency Water Supply



45% of water supply imported from Delta; 66% chance of Delta earthquake in next 50 years

Restore Federally Threatened Steelhead Fish Habitat



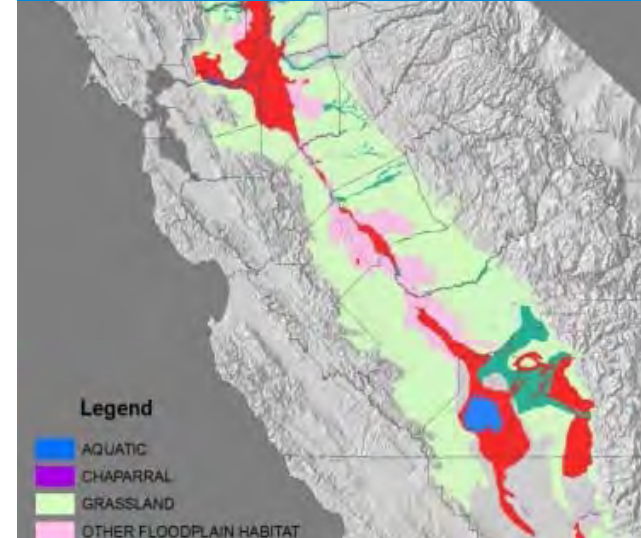
90% population decline in Pajaro watershed from 1960s to 1990s

Eliminate Water Quality Issues from San Luis Reservoir



Water quality issues during summer months in 57% of years

Improve Delta Watershed Wetlands



90% of Delta watershed wetlands have disappeared

Opportunity for Incidental Reduction of Downstream Flooding



Extensive flooding even for frequent/small events; 20-year flood in 2017 (pictured)

# Project Objectives

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## Primary Objectives

- Increase municipal and industrial and agricultural water supply reliability including emergency response
- Increase suitable habitat in Pacheco Creek for federally threatened South-Central California Coast steelhead

## Secondary Objectives

- Improve drinking water quality and minimize supply interruptions from San Luis Reservoir
- Increase water supplies for Incremental Level 4 wildlife refuges

# Alternatives





*Pictured above: Existing Pacheco Reservoir*

## Alternatives Overview

- Multiple alternatives will be assessed, including No Project Alternative
- Based upon ongoing planning, modeling, field investigations, and design efforts
- Informed by ongoing stakeholder and regulatory agency coordination

# Facilities/Features Common to All Action Alternatives

- *New Dam, Expanded Reservoir and Appurtenant Structures*
  - Dam, spillway, inlet/outlet works
- *Connection with Pacheco Conduit and Conveyance Facilities*
  - Pipeline/tunnel, pump station
- *Decommissioning of Existing Dam and Channel Restoration*
- *Access and Roadway Improvements*
  - SR 152 access improvements and permanent and temporary access roads
- *Power Transmission Line Upgrades and Utility Relocations*
- *Borrow, Disposal, Stockpiling, and Staging Areas*



# Primary Variations Between Action Alternatives

## Facilities

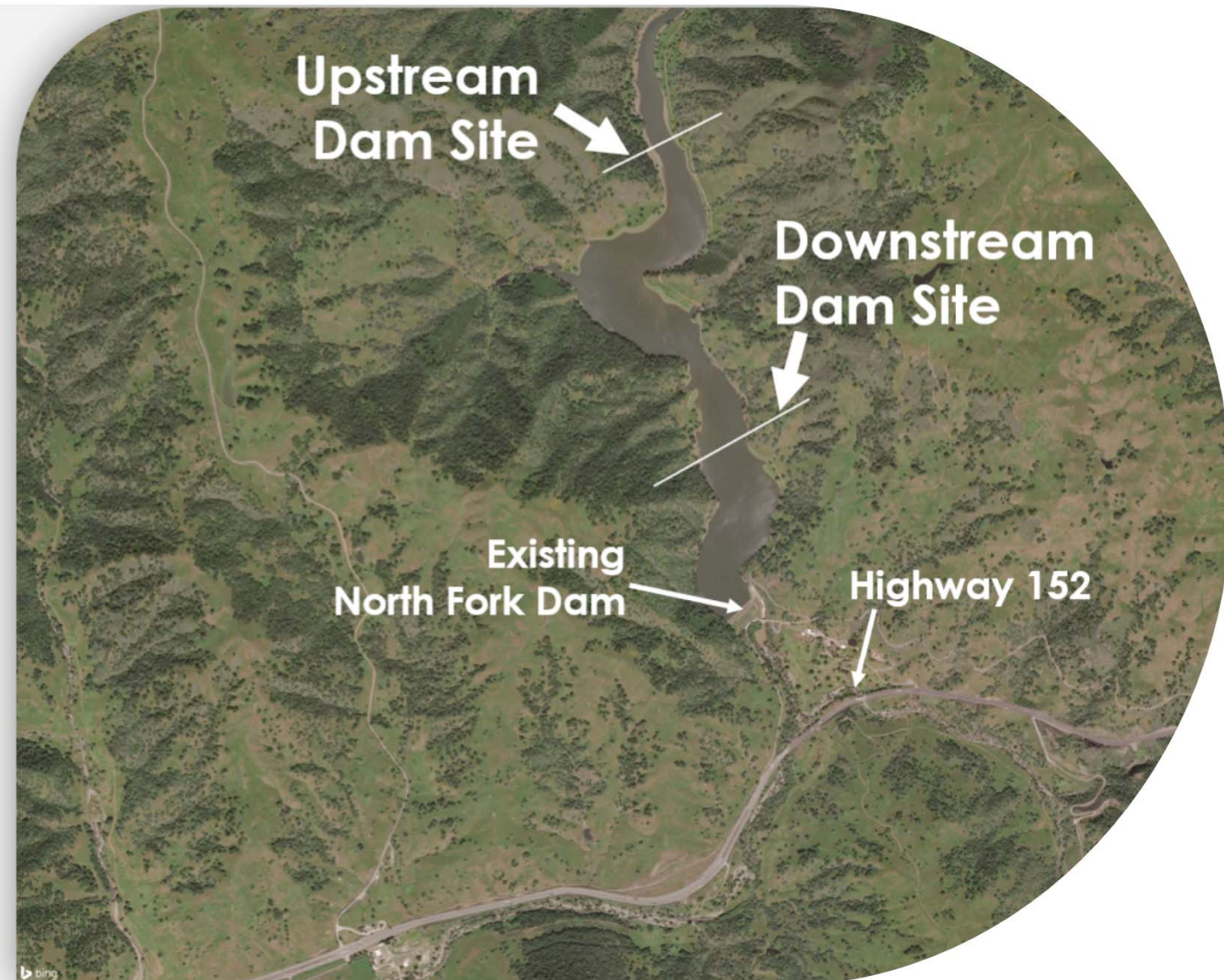
- Dam Site Location
- Reservoir Size
- Dam Type

## Long-Term Operations

- Target Flows in Pacheco Creek
- Participation by San Benito County Water District



*Pictured above: Existing Pacheco Reservoir near Downstream Dam Site*



## Facilities: Dam Site Location

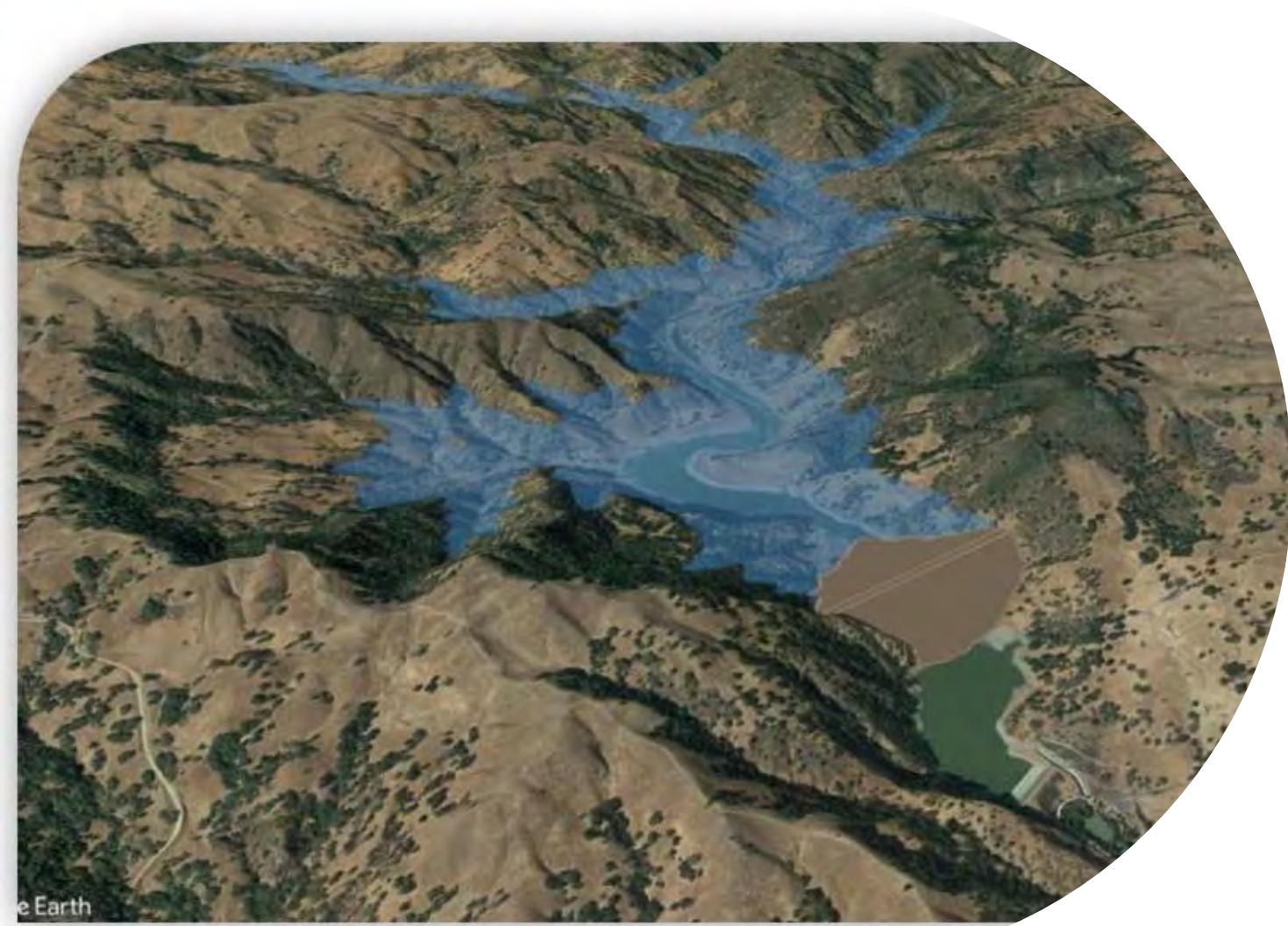
### Two Dam Site Locations

- Upstream Dam Site
  - 1.7 miles upstream from Highway 152
- Downstream Dam Site
  - 0.8 miles upstream from Highway 152

## Facilities: Reservoir Size

### Two Reservoir Sizes

- 140,000 acre-feet
  - Upstream dam site
  - Downstream dam site
- 96,000 acre-feet
  - Upstream dam site



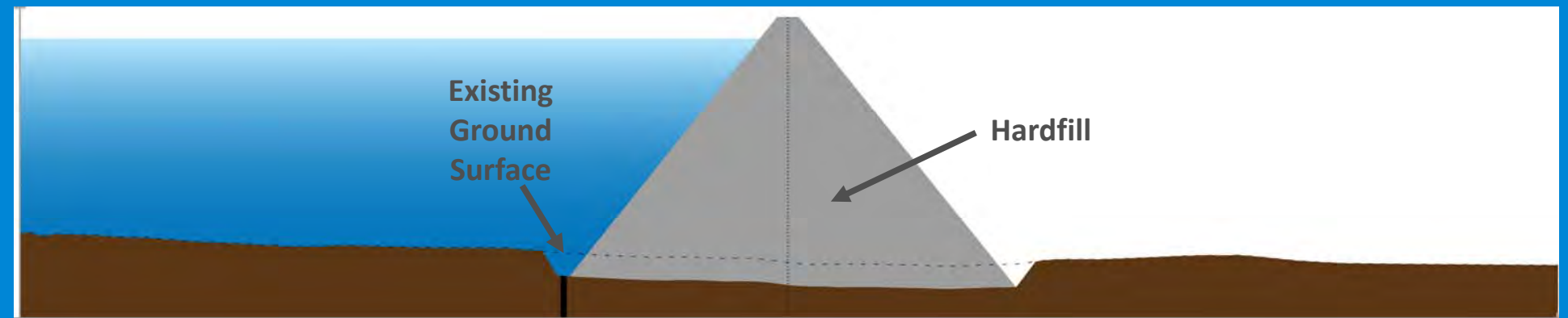
*Pictured above: Earthfill Dam at Downstream Dam Site with 140,000 acre-feet Expanded Reservoir*

# Facilities: Dam Types

## Two Dam Types

- Hardfill Dam
  - Dam, spillway, and inlet/outlet integrated
- Earthfill Dam
  - Dam, spillway, and inlet/outlet separate

Typical Hardfill Dam Cross Section



Typical Earthfill Dam Cross Section



# Long Term Operations: Target Flows in Pacheco Creek

## Two Target Flow Scenarios

- Target flows identified in CEQA Initial Study and Water Storage Investment Program application
- Refined target flows based on ongoing agency coordination, including consideration of water year type



*Pictured above: Pacheco Creek below Existing North Fork Dam*

# Long Term Operations: San Benito County Water District Participation

## Two SBCWD Participation Scenarios

- No Participation (0%)
- 10% Participation

# Preliminary Range of Alternatives

Preliminary Alternative #	Facilities			Long-Term Operations	
	Dam Site Location	Expanded Reservoir Size	Dam Type	Pacheco Creek Target Flows	SBCWD Participation
1	Downstream	140,000 AF	Earthfill	CEQA Initial Study/WSIP	0%
2	Downstream	140,000 AF	Hardfill	Refined Operations in Consideration of Agency Input	10%
3	Upstream	140,000 AF	Earthfill	CEQA Initial Study/WSIP	0%
4	Upstream	140,000 AF	Hardfill	Refined Operations in Consideration of Agency Input	10%
5	Upstream	96,000 AF	Earthfill	CEQA Initial Study/WSIP	0%

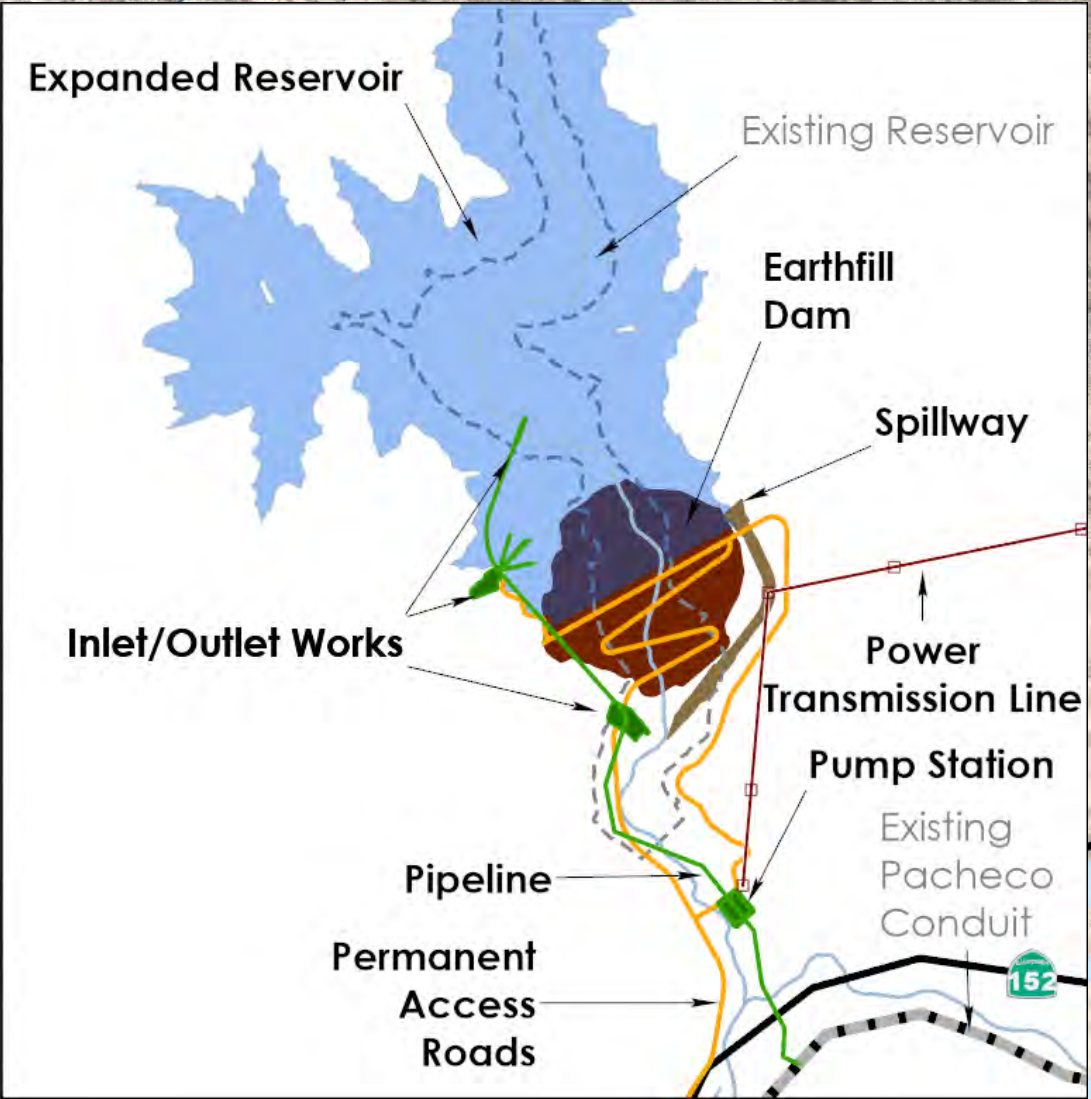
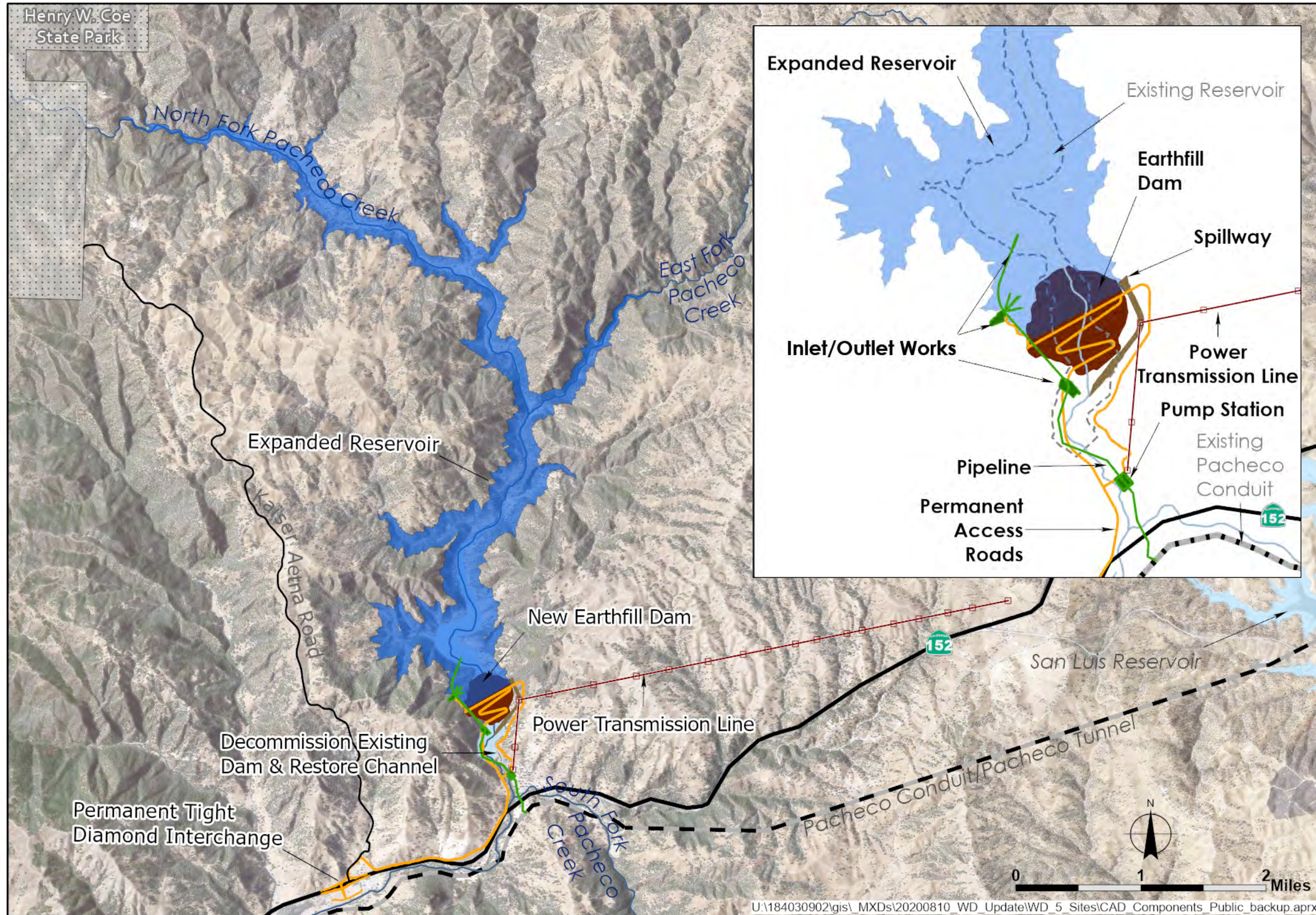
Key:

AF = acre-feet

CEQA = California Environmental Quality Act

SBCWD = San Benito County Water District

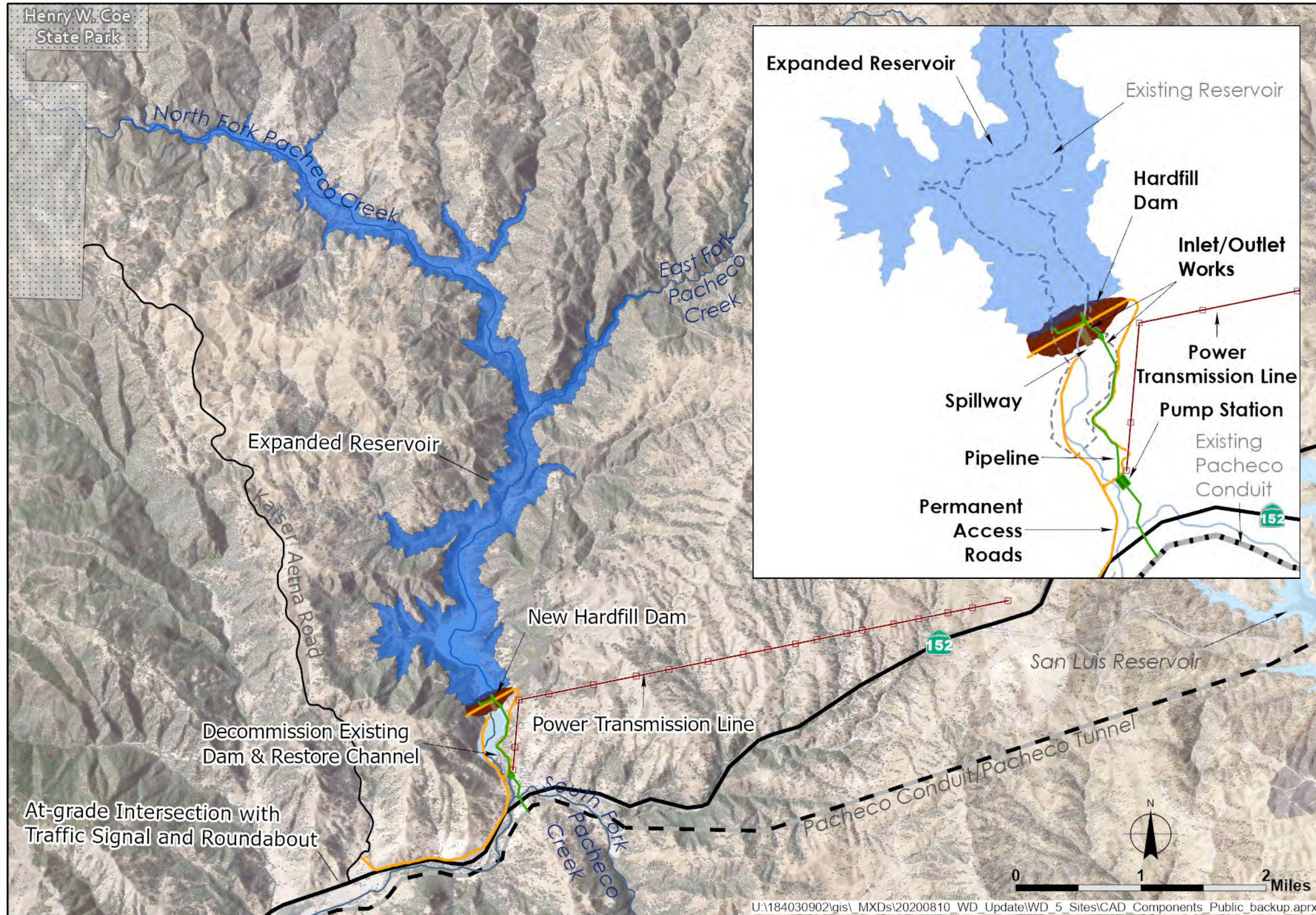
WSIP = Water Storage Investment Program



**Preliminary  
Alternative  
# 1**

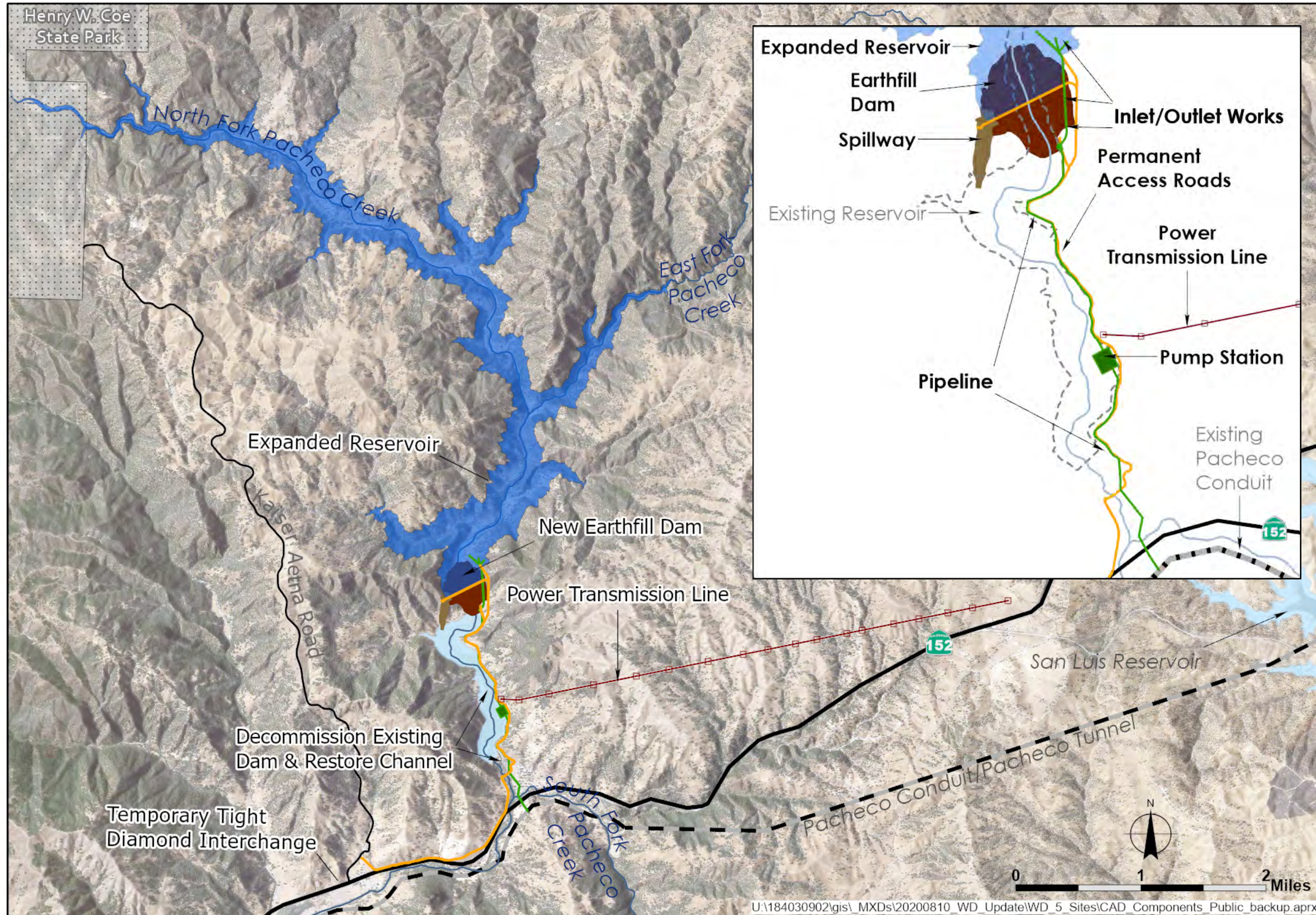
**Downstream  
Earthfill Dam  
&  
140,000  
acre-foot  
Reservoir**





# Preliminary Alternative # 2

Downstream Hardfill Dam & 140,000 acre-foot Reservoir

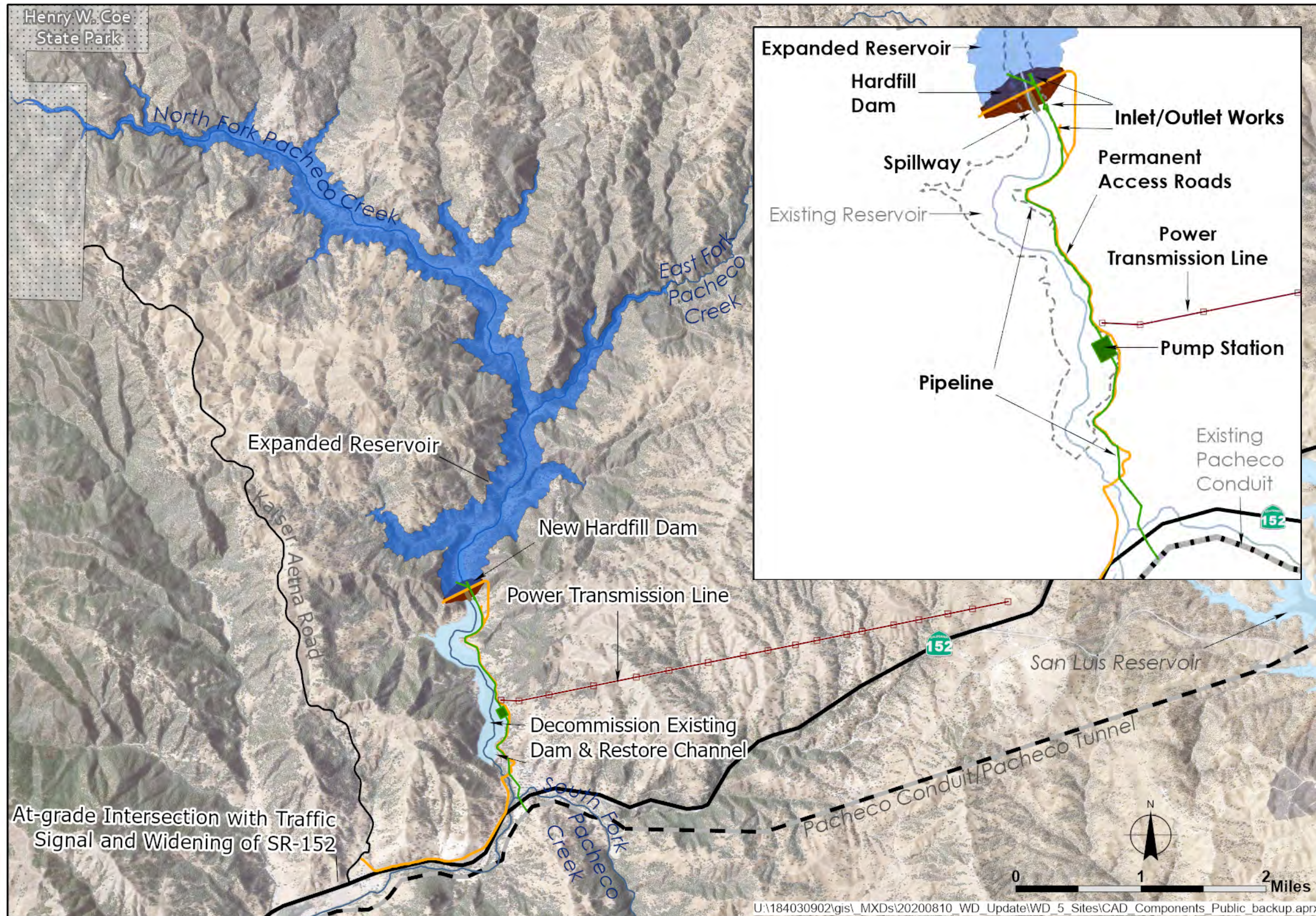


**Preliminary  
Alternative  
# 3**

**Upstream  
Earthfill Dam  
&  
140,000  
acre-foot  
Reservoir**

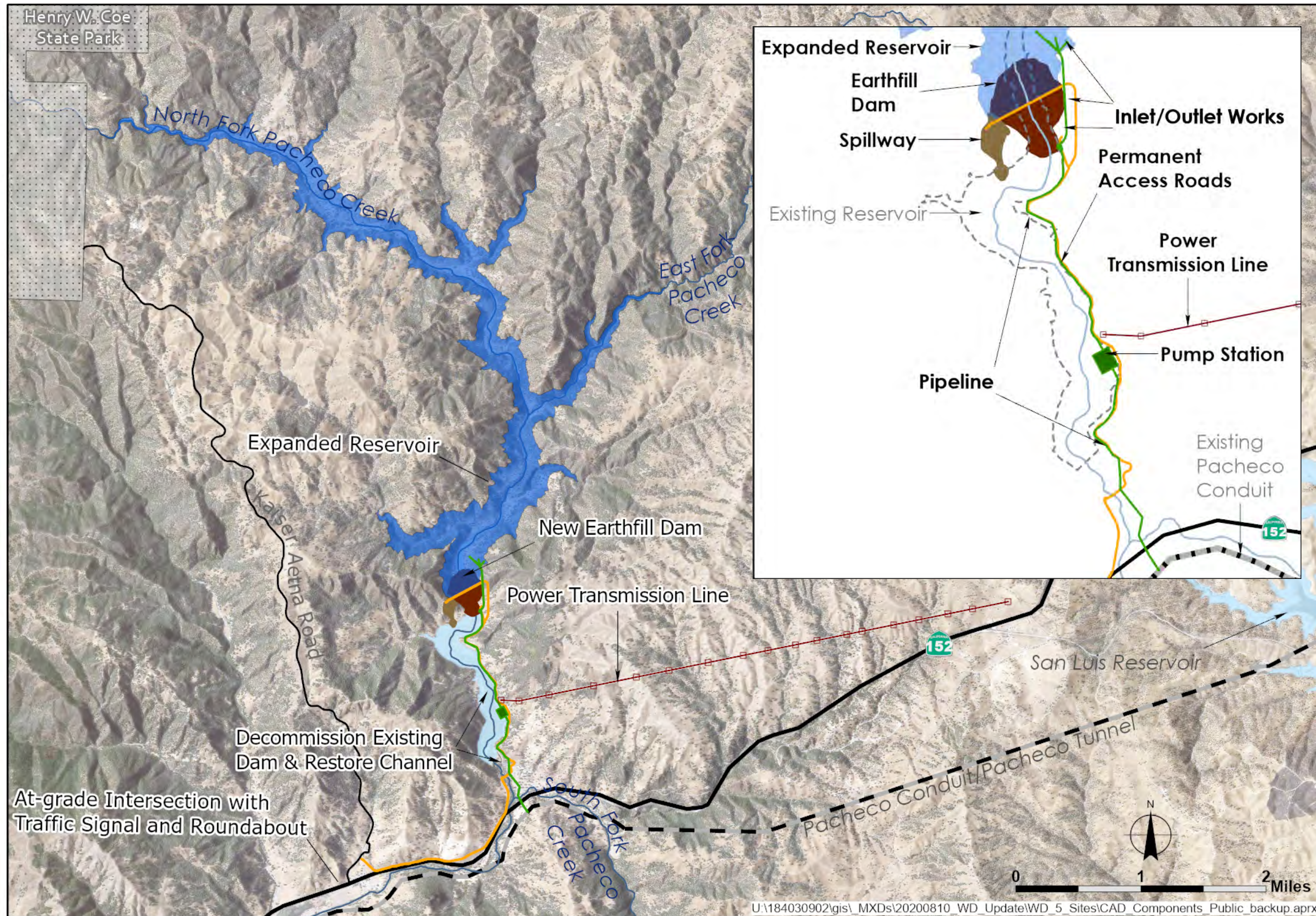
# Preliminary Alternative # 4

## Upstream Hardfill Dam & 140,000 acre-foot Reservoir



# Preliminary Alternative # 5

## Upstream Earthfill Dam & 96,000 acre-foot Reservoir





# Project Impacts to be Assessed in the Environmental Impact Report (EIR)

# Project Activities Causing Effects

## Reservoir Area

- Temporary:
  - Construction related activities
- Permanent:
  - Facility footprints
  - Inundation of additional areas

## Downstream Areas

- Short-term and Long-term:
  - Reservoir/water operations

## Water Service Areas

- Long-term:
  - Reservoir/water operations



*Pictured above: Earthfill Dam Construction in Bay Area*

# Physical Environment

- *Aesthetics*
- *Agricultural and Forestry Resources*
- *Air Quality*
- *Energy*
- *Geology and Soils*
- *Greenhouse Gas Emissions*
- *Hazards and Hazardous Materials*
- *Hydrology and Water Quality*
- *Mineral Resources*
- *Wildfire*



*Pictured above: Pacheco Creek at Cedar Creek Confluence*

# Biological Resources

- *Botanical Resources*
- *Fisheries/Aquatic Resources*
- *Terrestrial/Wildlife Resources*



*Pictured above: Existing Pacheco Reservoir*





*Pictured above: Agricultural Fields/Vineyards Adjacent to Pacheco Creek*

## Human Environment

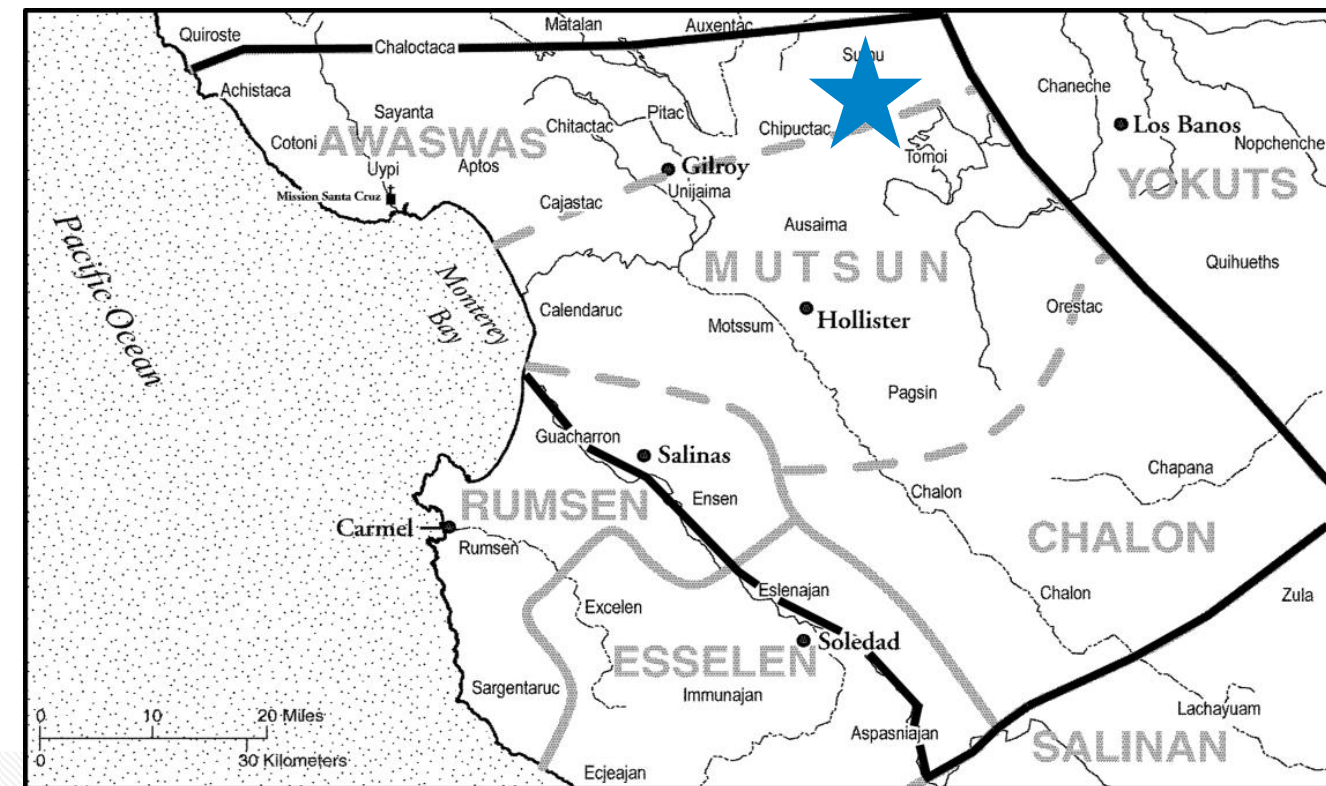
- *Land Use and Planning*
- *Noise*
- *Population and Housing*
- *Transportation and Traffic*
- *Public Services*
- *Utilities and Service Systems*
- *Recreation*



Pictured above: Existing North Fork Dam constructed in 1939

# Cultural and Tribal Resources

- *Cultural Resources*
- *Tribal Cultural Resources*



# Additional Scoping Comment Process



# Additional Scoping Comments

*Identification of information to be included in EIR:*

- Range of alternatives
- Environmental impacts
- Mitigation measures



*Pictured above: San Felipe Lake*

# Scoping Comment Process

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## Additional Scoping Comment Period:

Comments due by:

**March 12, 2021**



## Written Scoping Comments:

- Email:

[PachecoExpansion@valleywater.org](mailto:PachecoExpansion@valleywater.org)

- Letters:

Santa Clara Valley Water District  
Attn: Todd Sexauer  
5750 Almaden Expressway  
San Jose, CA 95118



# Additional Information

<https://www.valleywater.org/pachecoexpansion>

Questions?

Email: [PachecoExpansion@valleywater.org](mailto:PachecoExpansion@valleywater.org)





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