



# Informational Meeting February 2025 - SSJID



**SOUTH SAN JOAQUIN  
IRRIGATION DISTRICT**  
— 115 YEARS OF SERVICE —  
**SSJID.GOV**





# Meeting Purpose

- Provide information
- Take feedback
- Answer questions



## SSJID Profile

Origins:

Established in 1909

Location:

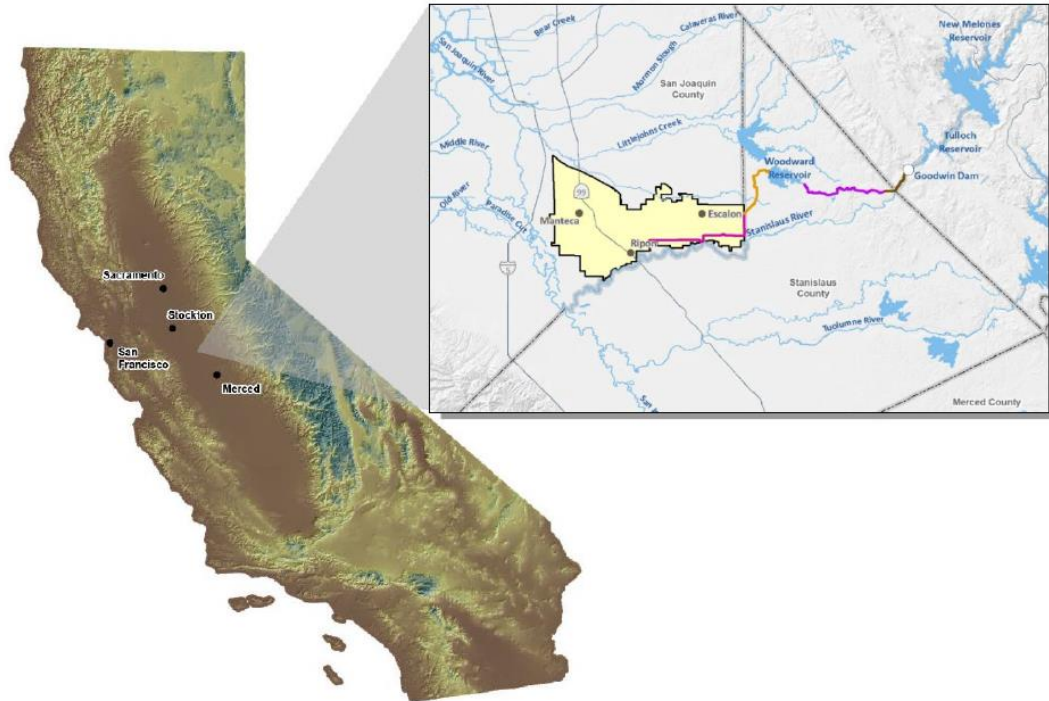
Escalon, Ripon, Manteca

Irrigated Area:

±50,000 acres

Domestic Water:

Lathrop, Tracy, Manteca



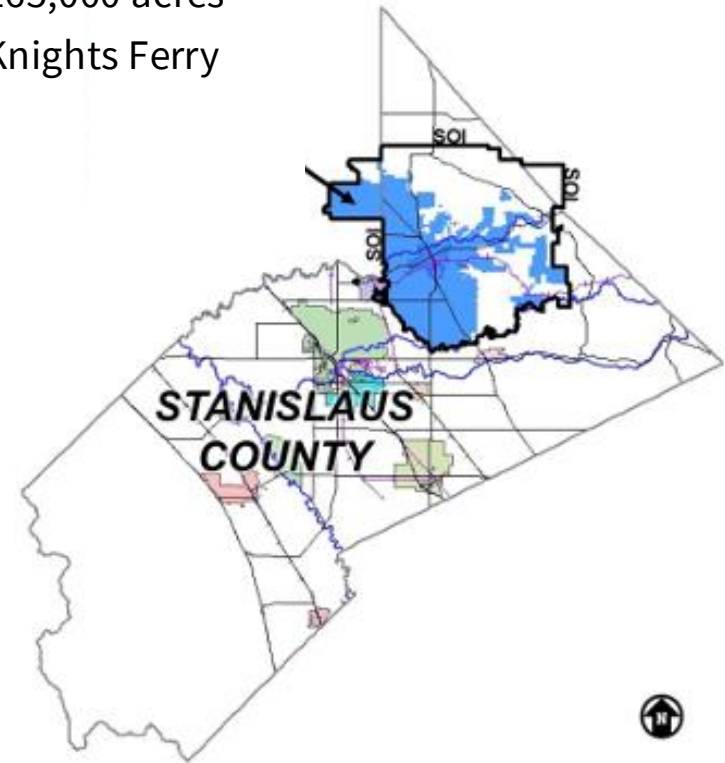
## OID Profile

Established in 1909

Oakdale and Knights Ferry

±65,000 acres

Knights Ferry





# Existing Infrastructure



1

Tulloch Dam

2

Goodwin Dam

3

Tulloch Dam Road

4

OID South Main Diversion

5

Joint Supply Canal  
Diversion

6

Joint Supply Canal  
(JSC)



The problem



# Hazardous Conditions

## Hazard Studies

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- 2005 Preliminary
- 2007 Update
- 2017 Update

## Types of Hazards

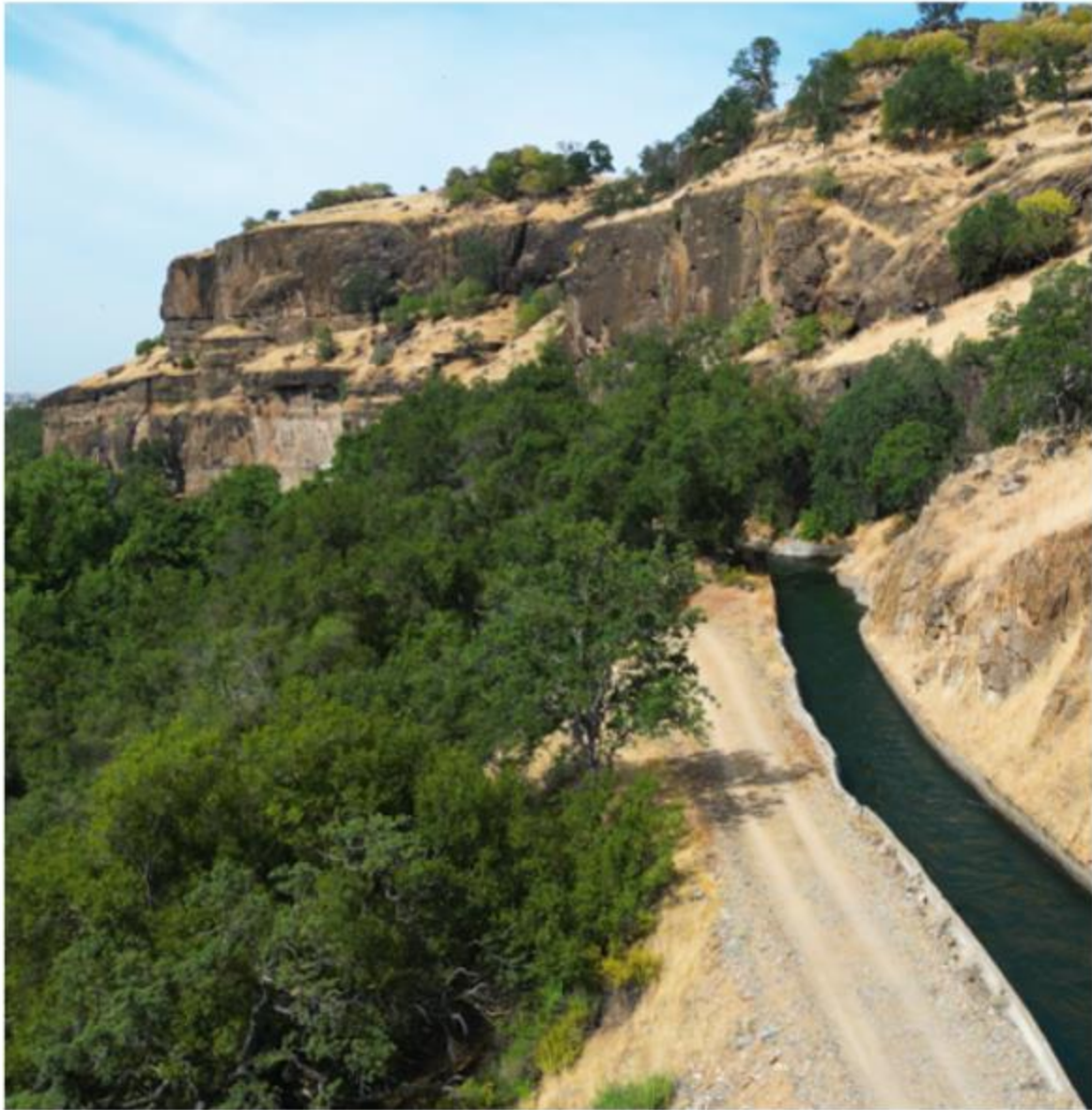
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- Rockslides
- Landslides
- Canal Embankment Failures
- Canal Liner Failures
- Tunnel Instability





# Hazardous Conditions





# Hazardous Conditions







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# Hazardous Conditions





# Hazardous Conditions







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IRRIGATION DISTRICT**



# Hazardous Conditions





# Hazardous Conditions





# Hazardous Conditions







# 2013 Rockslide



Joint Supply Canal

A'

A



# 2013 Rockslide





# 2013 Rockslide





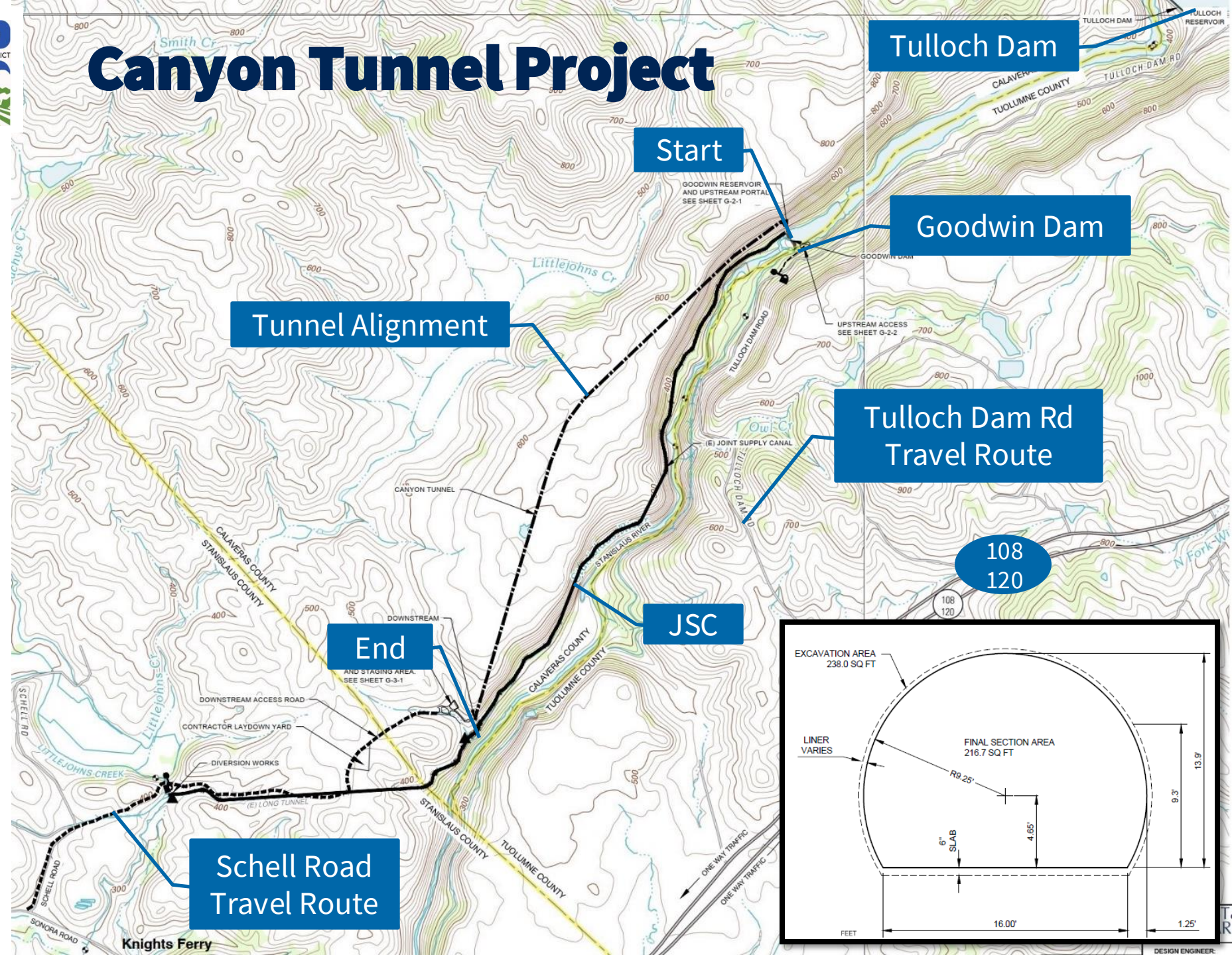
# Canyon Tunnel Project

## Design Process

- Started in 2018
- Subsurface Investigation
- Alignment Identification
- Portal Orientation
- Design Details

## Project Details

- 12,106' long
- 200' to 300' below surface
- 100% on private property
- 18'-20' in diameter, flat floor
- Concrete lined
- 1,263 cfs capacity



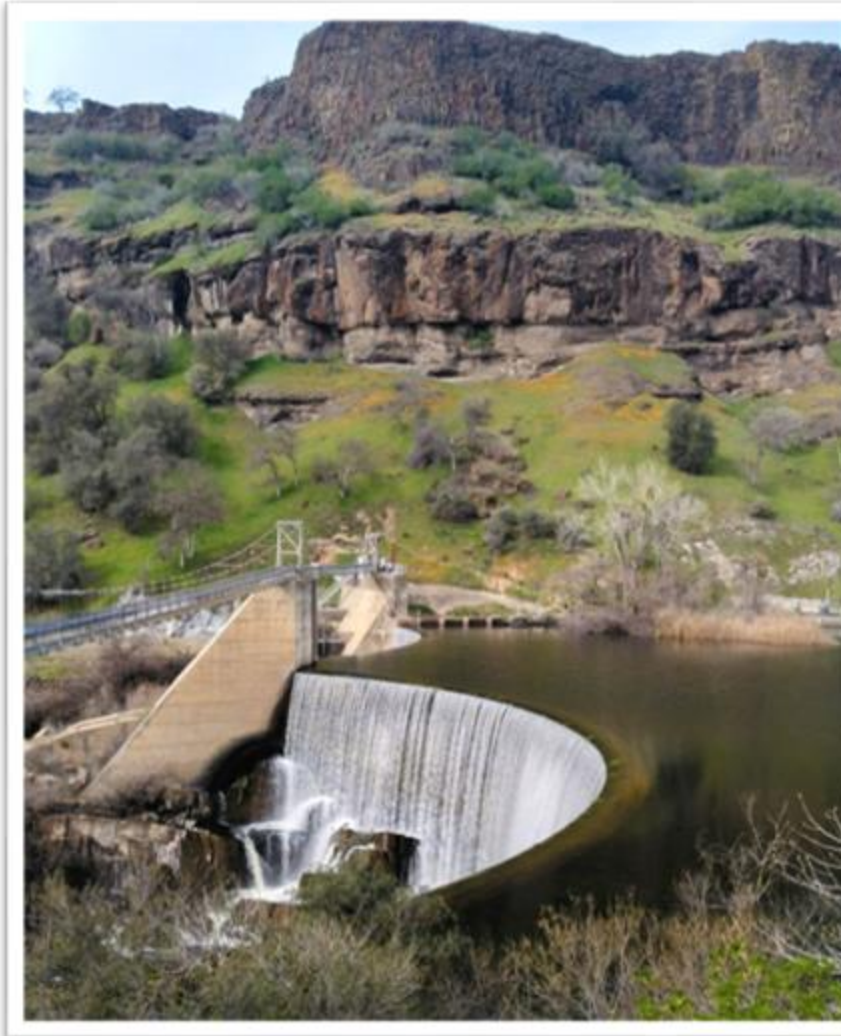


# Upstream Portal

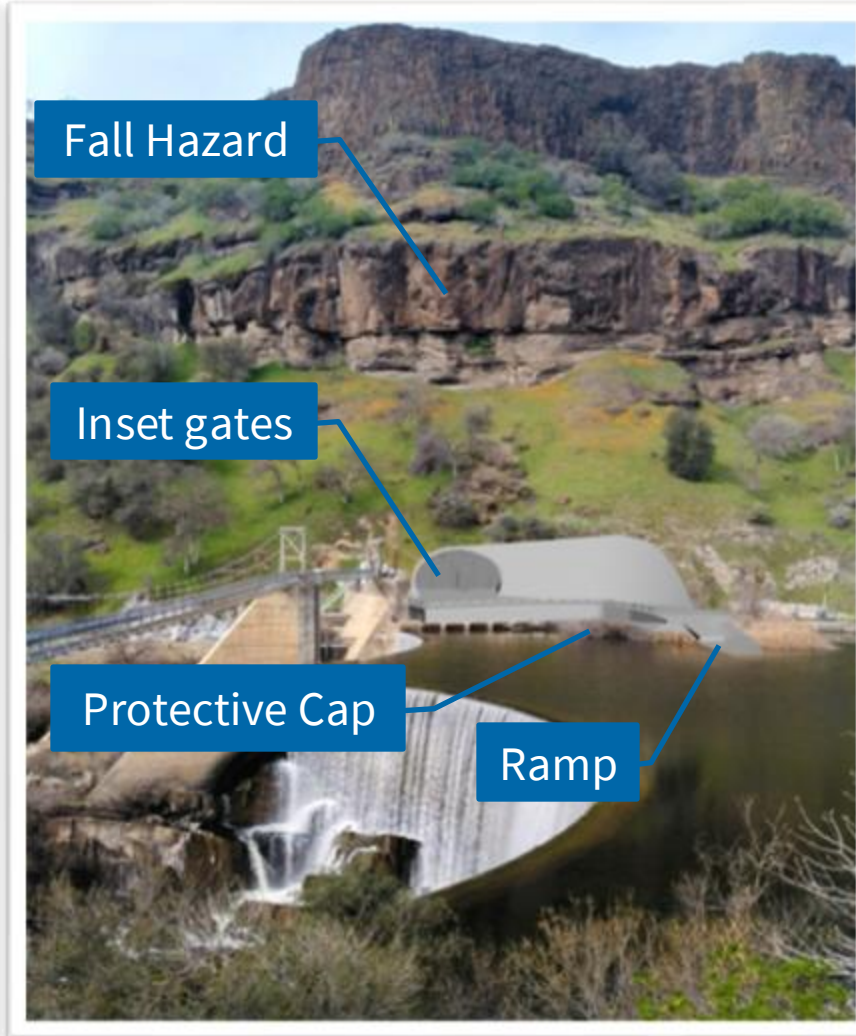
## Design Details

- Gates constructed into hillside
- Intake protection
  - 3' concrete cap covered by a 6' soil cushion
- Temporary floating bridge or ferry for construction
- Permanent boat ramps on both sides of river for future access

## Before Project



## After Project

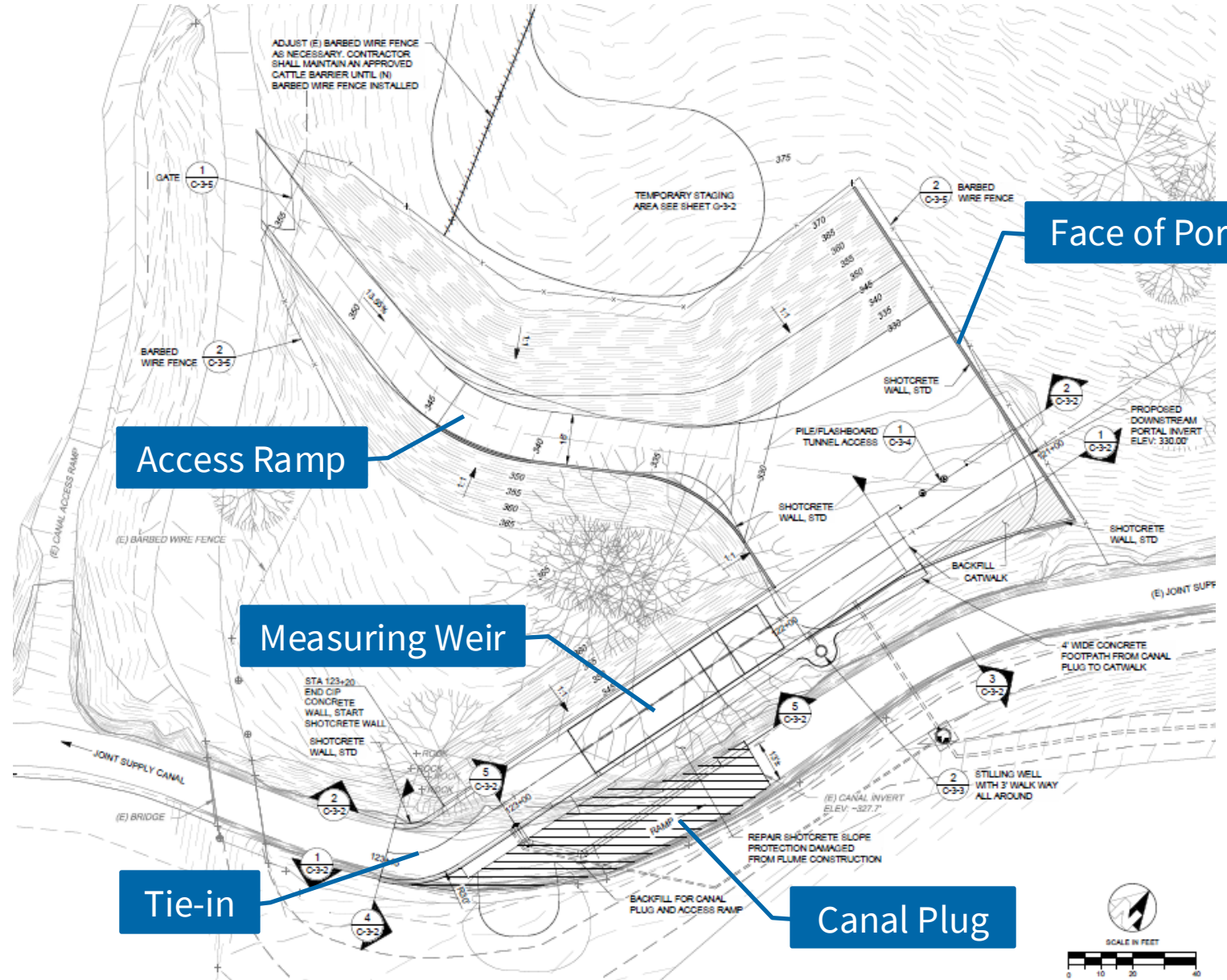




# Downstream Portal

## Design Details

- Primary construction location
- Not accessible or visible to Public
  - 1.25' from nearest resident
  - 1.5' miles from Knights Ferry
- Includes:
  - Access Ramp
  - Measuring Weir
  - JSC tie-in
  - JSC canal plug
  - Shoring walls





## California Environmental Quality Act

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- Public agencies are required to disclose and evaluate the potential environmental impacts of their project
- Three Types of CEQA Documents
  - Notice of Exemption - A document that indicates a project is exempt from CEQA review
  - Negative Declaration or **Mitigated Negative Declaration** - A document that indicates a project has less than significant impacts on the environment, or less than significant with mitigation incorporation
  - Environmental Impact Report (EIR) – A document that indicates a project has potentially significant impacts on the environment

## Canyon Tunnel CEQA Document

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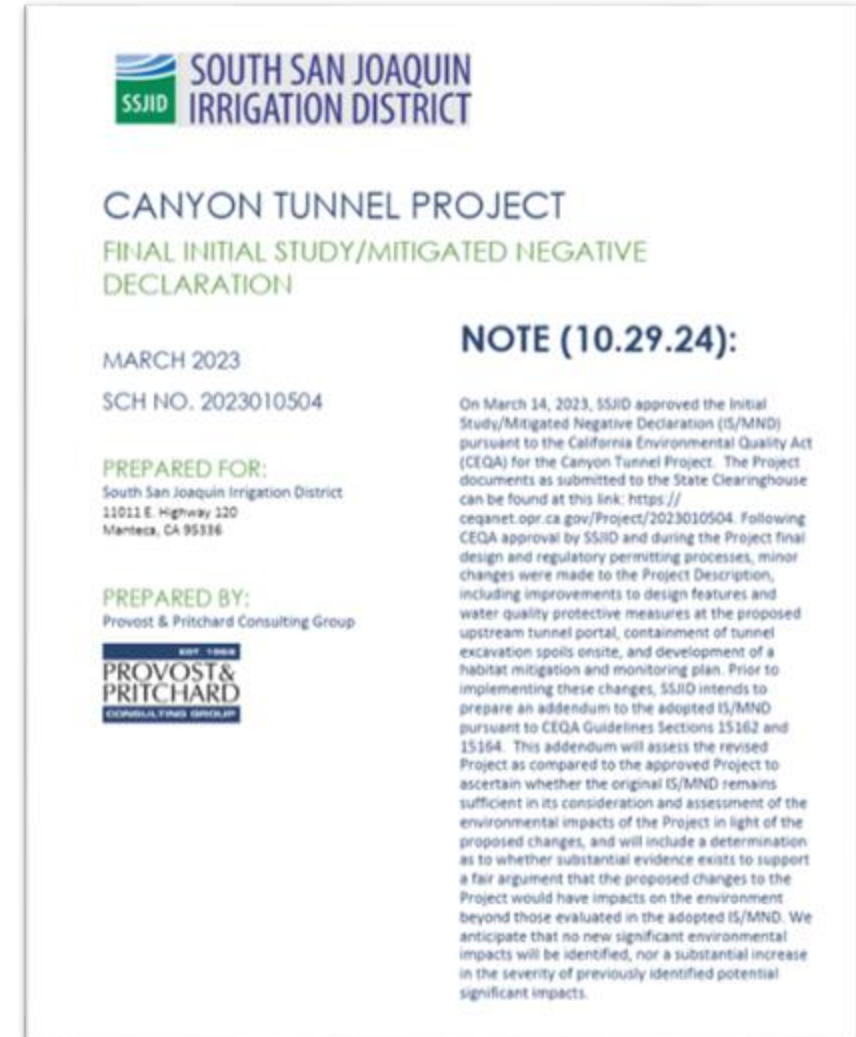
- Prepared an Initial Study to evaluate the potential Canyon Tunnel Project environment impacts
- Results of the Initial Study concluded that a Mitigated Negative Declaration is appropriate
- The CEQA compliance document was prepared and submitted to the State Clearinghouse for distribution and public comment in **January of 2023** for 30 days



# CEQA Process (Cont.)

## Canyon Tunnel CEQA Document (cont.)

- Following the public input period, the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program was **adopted on March 14, of 2023 by the SSJID Governing Board**
- The documents can be found here:  
<https://ceqanet.opr.ca.gov/Project/2023010504> or  
<https://canyontunnelproject.org/documents/>





## Summary of Design Changes Since CEQA Adoption

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- Location of spoils disposal
- Tunnel length is increasing 100 feet (from 12,000 to 12,106 lineal feet)
- Construction of new boat landing at the north shore of Goodwin Dam reservoir
- Minor intake adjustments at the upstream portal and the tunnel outlet

## CEQA Document Addendum

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SSJID is in the process of preparing an Addendum to the adopted IS/MND for **minor** changes that are necessary due to design and permitting changes that have occurred over the last two years.

- **No new significant environmental effects** or a substantial increase in the severity of previously identified significant effects have occurred
- All mitigation measures incorporated into the original CEQA document will remain
- The Addendum will be uploaded to the State Clearinghouse with a new Notice of Determination



# Tentative Construction Schedule

## Schedule

- 6 Contractors were pre-qualified in November
- Out to bid February 2025
- Bids Due April 2025
- Notice of Award May 2025
- Notice to Proceed June 2025
- Start Construction July 2025
- Complete Construction April 2028

## Construction Notes:

- Two years of tunnel excavation
- Mobilization at downstream portal starts right away
- Timing of upstream portal work dependent on Contractor's schedule (will know in May/June)
  - High activity in winter 2028 to make tie-ins
- JSC remains in operation during construction
- Engineer's Estimate: \$70 to \$80 Million







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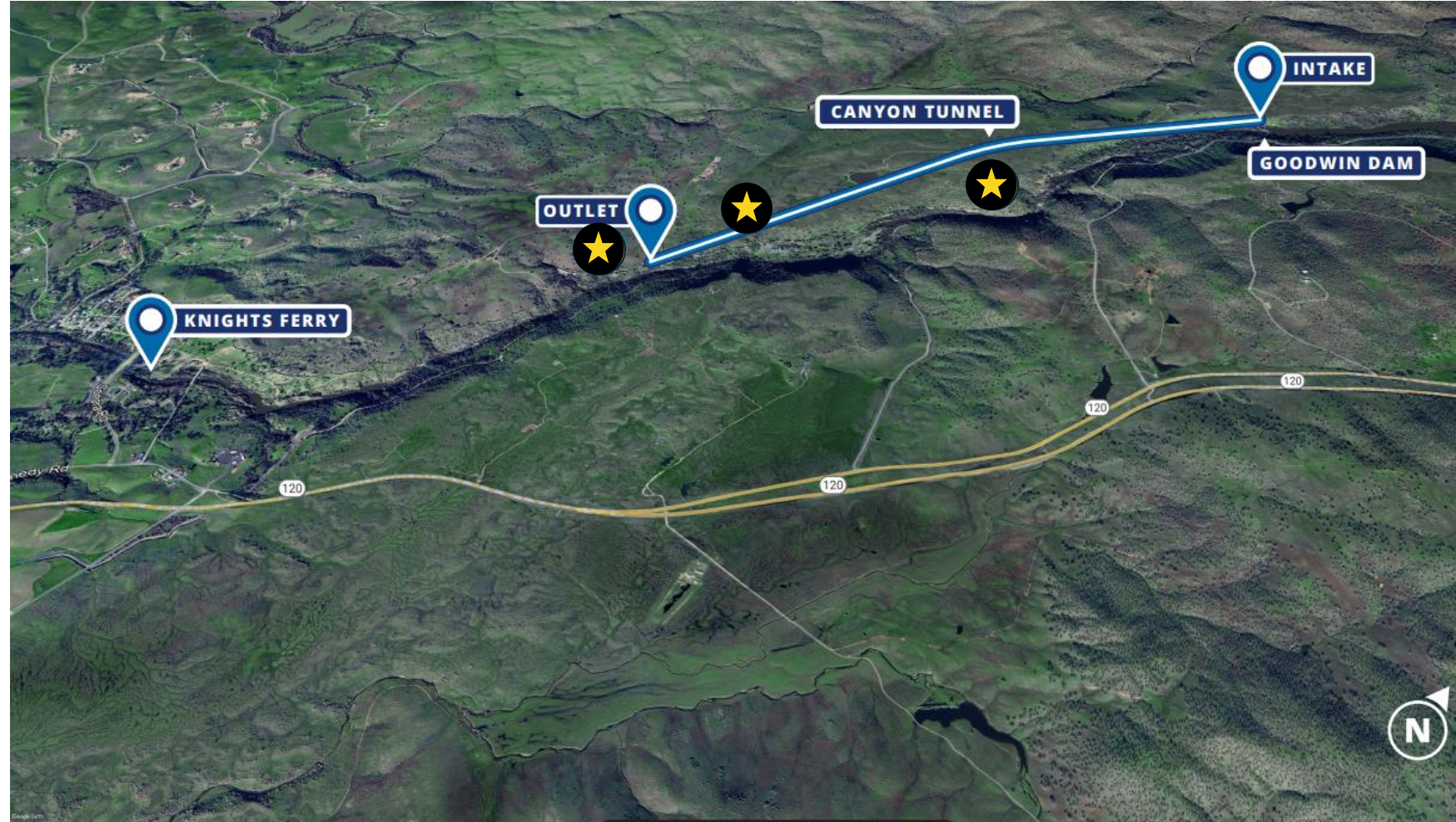


# Project Elements



## Tunnel Spoils

- 165,000 Loose Cubic Yards
- Spoils will be deposited on one, or all, of the three sites shown
- Primary reason for CEQA Addendum

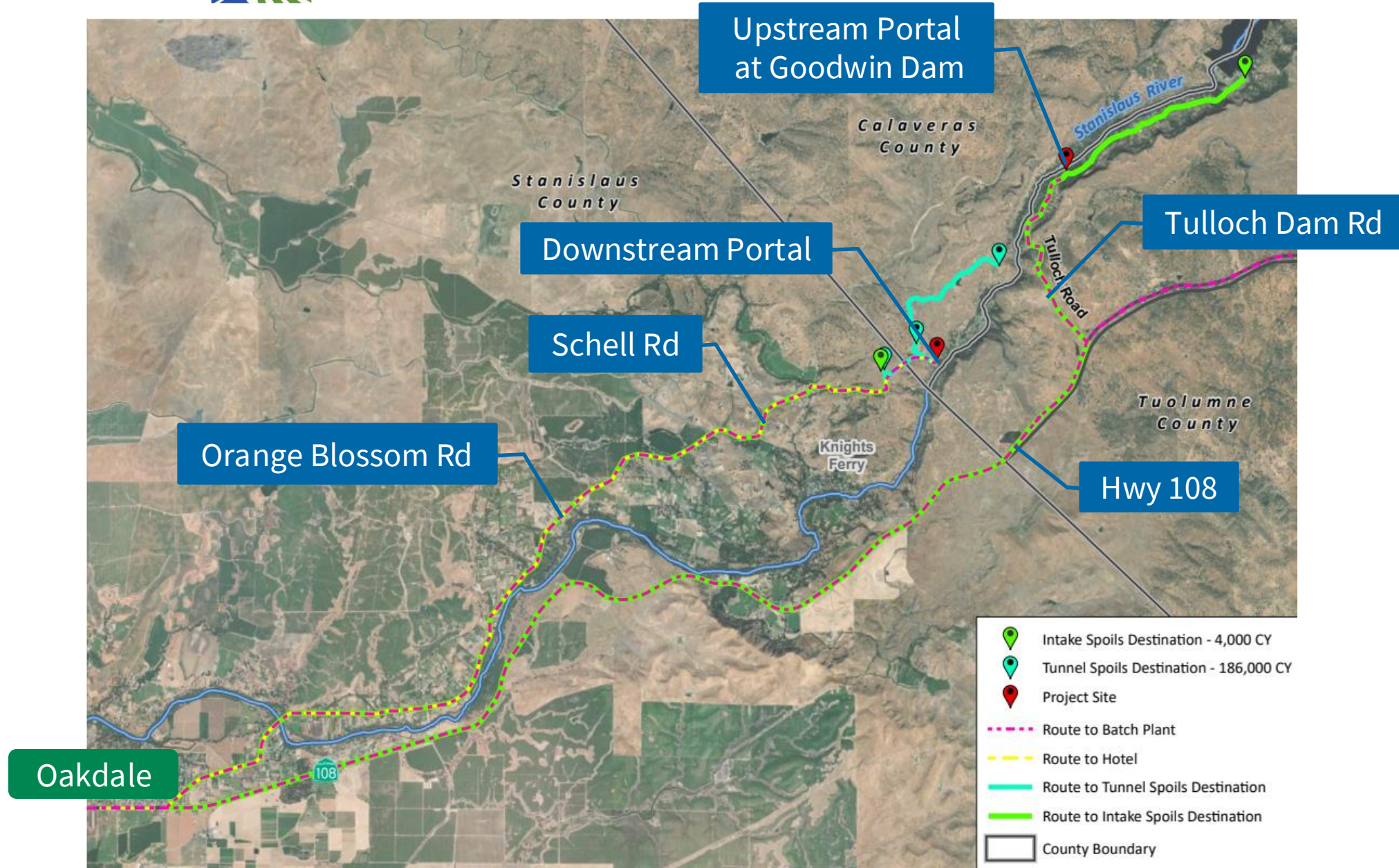


Spoils Disposal Site Options





# Construction Traffic





# Construction Noise & Dust



## Blasting Noise

- Common tunneling technique, only required at, or near portals where we have hard rock
- For portal construction, 1 blast per week for a few weeks
- For tunneling, 1 to 2 blasts per day, inside tunnel, for a 6 to 8 weeks
- Unlikely to be heard, potential thud (not like Hollywood)



## Drilling Noise

- Will occur over a mile from residential communities, primarily 300' below ground, will not be audible to the public or residents



## Dust

- There will be minimal dust on the private access roads that the contractor will be required to manage
- Contractor will manage dust during tunnel and portal construction with water trucks, pumps, and misters





# Other Project Elements



## Fire Hazards

- Contractor required to coordinate with Cal Fire to develop a Fire Safety Plan
- Water trucks required on-site at all times
- Several other preventative measures required



## Water Quality

- 401 Water Quality Certification – ensures compliance with State water quality standards (acquired)
- 404 Clean Water Act Permit – ensures compliance with water quality standards for Waters of the US through the Army Corp of Engineers (acquired)
- Lake or Streambed Alteration (LSA) Agreement with CDFW (acquired)



## Wildlife and Plant Species

- Mitigation measures have been adopted through CEQA to adequately survey and identify listed species that may be encountered, to ensure they are adequately protected





# Other Project Elements



## Native American Tribes

- Coordination with Chicken Ranch Rancheria of Mi-Wuk Indians to provide monitoring during surface level excavation



## Construction Work Schedule

- Decided by contractor
- Anticipate 5 to 6 days per week
- 24-hour shifts during tunneling
  - Alternating between drilling and shotcrete application
  - Shift changes generally occur around 6am and 6pm
- Will coordinate with the contractor to be aware of periods of high-volume residential traffic (i.e., school and commute periods)





# Capital Improvement Planning

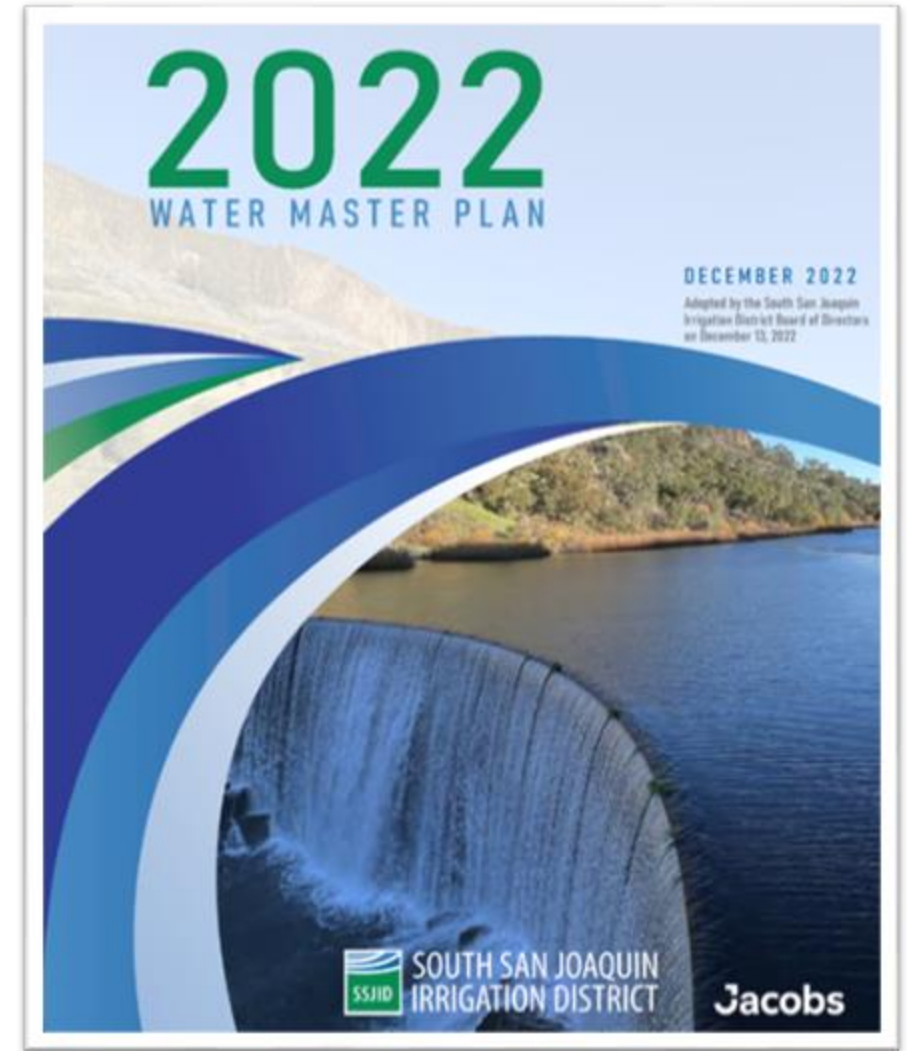


## SSJID Water Master Plan

- Adopted December 2022
- Resulted in a 30-year Capital Improvement Program
- Included the Canyon Tunnel Project
- Suggested rate increases to support plan implementation

Water Master Plan Link:

<https://www.ssjid.gov/water-master-plan/>





# Proposition 218 Process

## Prop 218 Rate Increases

- Public Hearing in July 2023
- Proposed stepped rate increases from \$31/ac to \$98/ac by 2028
- 332 protest from 3,257 eligible parcels (10%)
- Rate Schedule adopted by SSJID Governing Board on July 25, 2023

Charge Category	Existing	New Rates				
	2023	2024	2025	2026	2027	2028
Fixed - per acre	\$ 24.00	\$ 38.00	\$ 52.00	\$ 60.00	\$ 65.00	\$ 70.00
Volumetric - Tier 1 (<= 48") - per AF	\$ 3.00	\$ 5.00	\$ 7.50	\$ 10.00	\$ 10.75	\$ 11.75
Volumetric - Tier 2 (> 48") - per AF	\$ 10.00	\$ 12.50	\$ 15.00	\$ 17.50	\$ 18.25	\$ 20.00
Minimum Charge	\$ 50.00	\$ 50.00	\$ 52.00	\$ 60.00	\$ 65.00	\$ 70.00
Blended Charge per Acre	\$ 31.30	\$ 50.17	\$ 70.13	\$ 84.17	\$ 90.98	\$ 98.40

Note: table above assumes an average annual irrigation delivery of approximately 2.42 ac-ft per acre per year



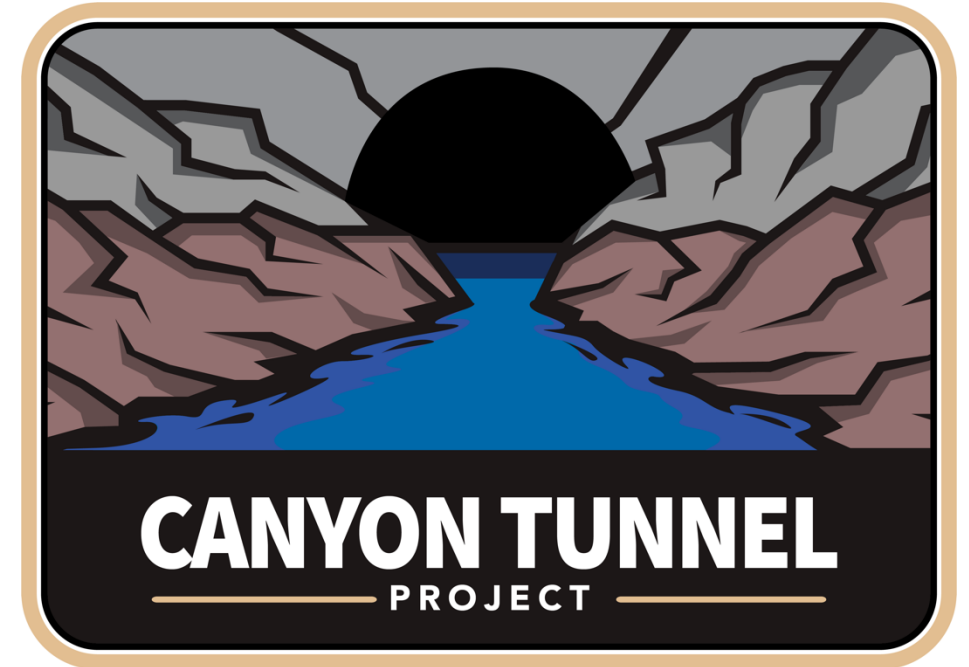
## Construction Costs

- \$70-80 Million
- Split between SSJID/OID with 72%/28% Cost Share

## Funding Options

- Reserves
- State Revolving Fund (SRF) Loans
- California Infrastructure and Economic Development Bank funding (I-Bank)
- Federal funding (WIFIA)
- Private market (banks, equity)
- Public market (revenue bonds)

SSJID is working with PFM Financial Advisors to determine best funding strategy for the Canyon Tunnel Project





# Community Outreach

Sign up for updates via the  
QR Code or the website at:  
[www.canyontunnelproject.org](http://www.canyontunnelproject.org)



 Email: [Katie.Patterson@SSJID.GOV](mailto:Katie.Patterson@SSJID.GOV)

 Phone: (209) 249-2624







# Engagement Stations



Technical  
Design and  
Construction



Community  
Outreach



Project  
Purpose



# Engagement Stations



**CANYON TUNNEL  
PROJECT**



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