



**COUNTY OF EL DORADO  
DEPARTMENT OF TRANSPORTATION**

# Mt. Murphy Road Bridge

At the South Fork of the American River

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## **FINAL ENVIRONMENTAL IMPACT REPORT (FEIR)**



*Board of Supervisors Meeting*

*May 17, 2022*



## AGENDA

### BACKGROUND

- Background, Alternatives,  
Proposed Project

### EIR HIGHLIGHTS

- Mitigation Measures, Public  
Comments

### CONCLUSION

- Project “Look Ahead” &  
Concluding Remarks





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## Background:

- **Sufficiency Rating (SR) = 0.00**  
**(2011), 13.5 (2014), 2.0 (2016), 20.6 (2018), one of the Lowest Rating of ALL County Maintained Bridges**
- Structurally Deficient (has Fracture Critical Members, FC inspections by Caltrans annually)
- Extensive Maintenance & Repairs (including multiple emergency closures)



*Courtesy of Vickie Longo*





## Background:

- Ongoing Maintenance
- Emergency Repair(s)
  - 2007
  - 2021



*Sept. 2007*



*July 2018*



*Fall 2021*





## Background:

### Emergency Repair (2021)

- Accident Sept. 2021
  - Structural Damage to Truss
- Immediate Closure
- Testing of Truss Members
- Unique Challenges & Unique Repair
- Reduced Load Rating Limit
- Importance of Bridge Replacement Project

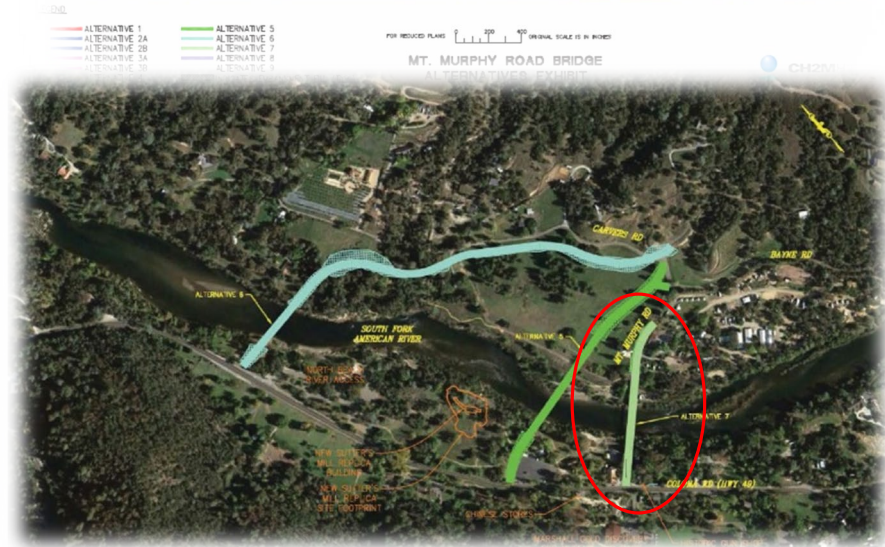
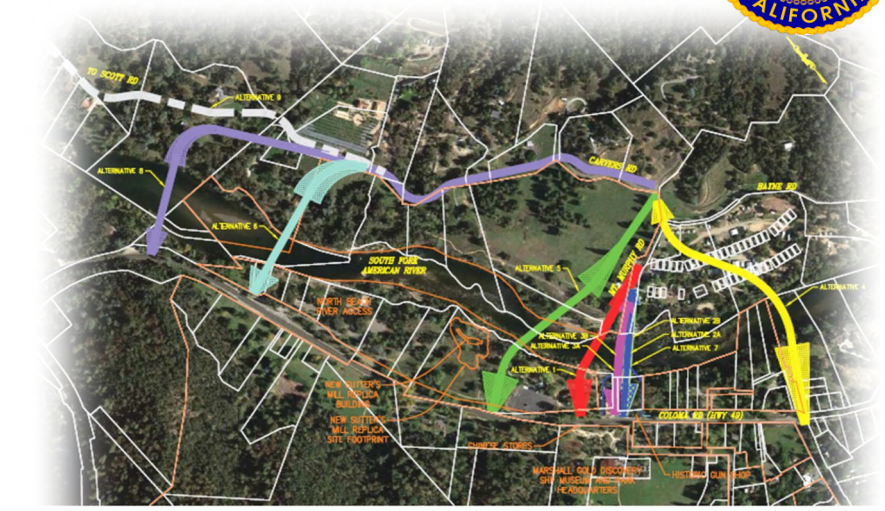






## Alternatives:

- **Purpose & Need:**
  - To provide safe and reliable passage to the traveling public across Mt. Murphy Bridge
- *Structural Analysis and Rehabilitation Feasibility Study (2014)*
  - Concluded Rehabilitation Infeasible
- *Alternatives Report (2015)*
  - Included three SAC & PDT meetings (2014)
  - Identified nine (9) Alternatives
  - Recommended three (3) Alternatives for Environmental Evaluation
- *Alternatives Feasibility Study (2016)*
  - Evaluated three (3) Alternatives
- **Recommended On-Alignment Alternative**

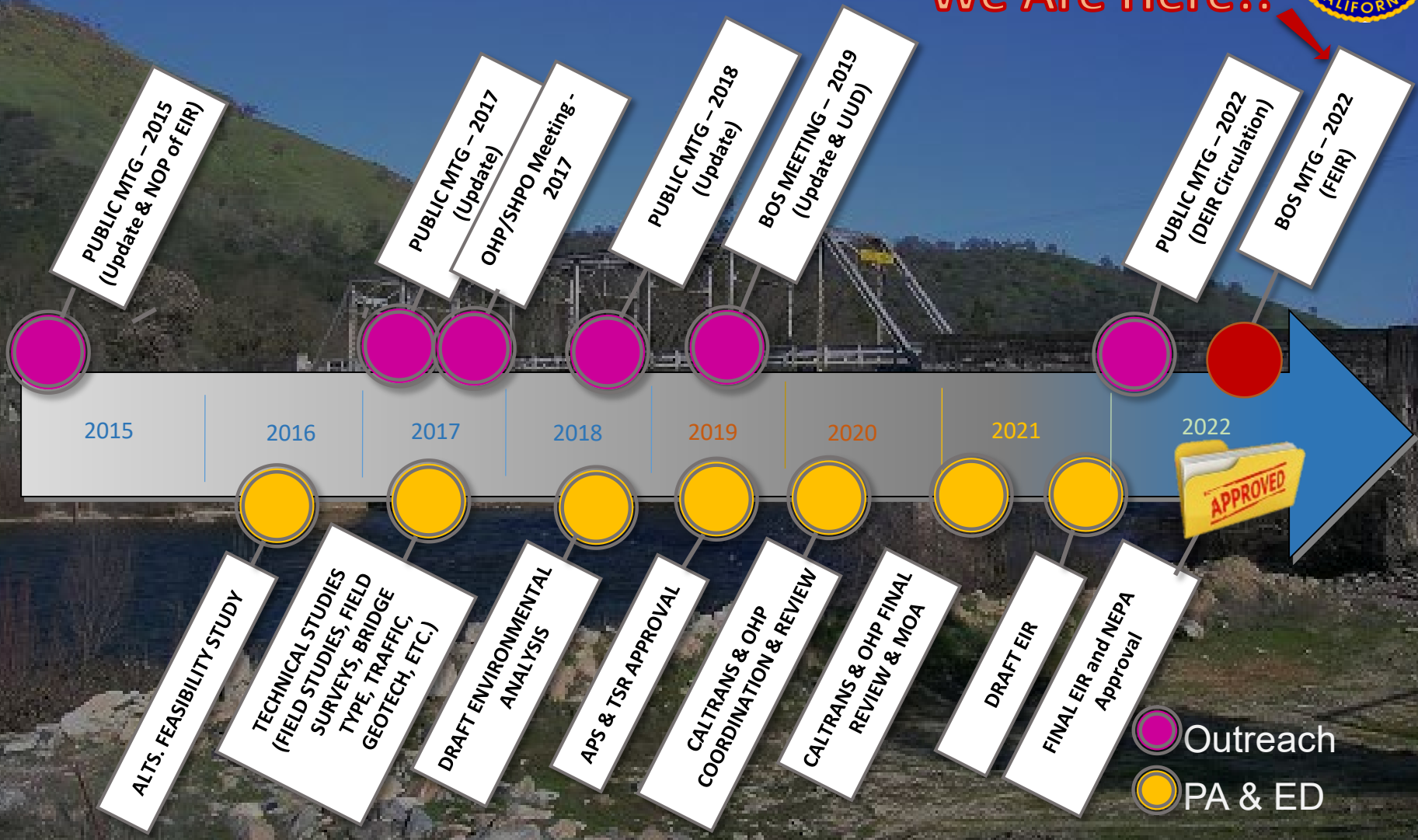




# Environmental Schedule



We Are Here!!





## Proposed Project

### ↳ Technical & Engineering Studies

↳ Structure Advanced Planning Study (APS)

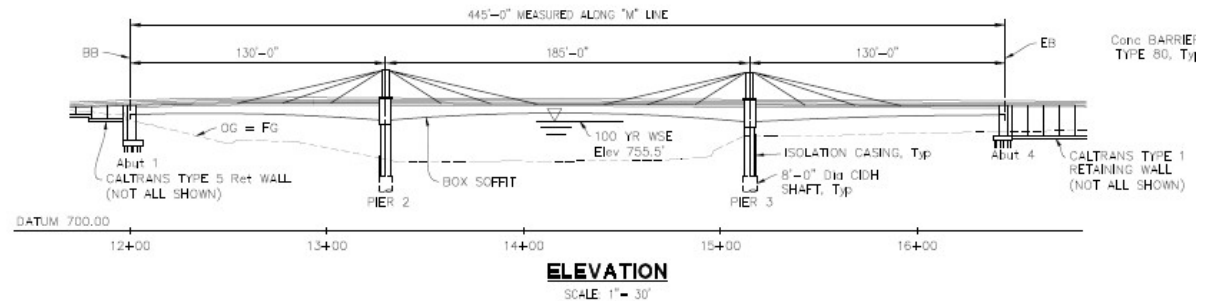
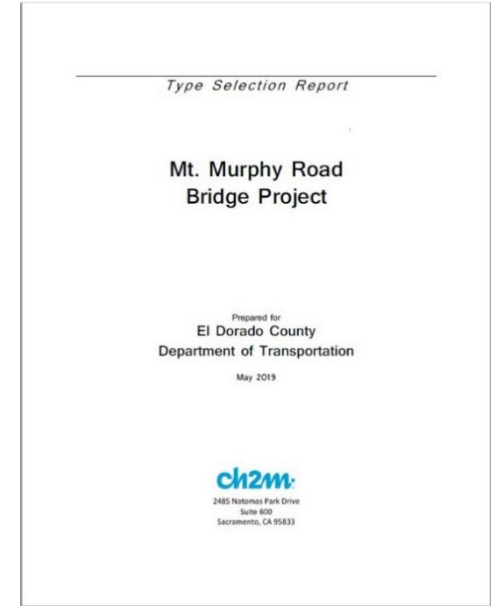
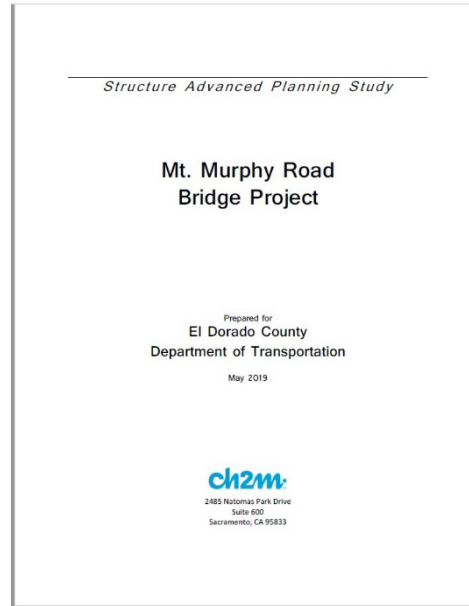
↳ Type Selection Report (TSR)

↳ Geotechnical Study

↳ Vibration Considerations

↳ Noise Study

↳ Traffic Study





## Proposed Project

### Alternative 1 (Corridor 1) – “On Alignment”

- Avoidance & Minimizing Impacts
  - Cultural & Historic Resources
  - Biological Resources
  - Visual Impacts, etc.

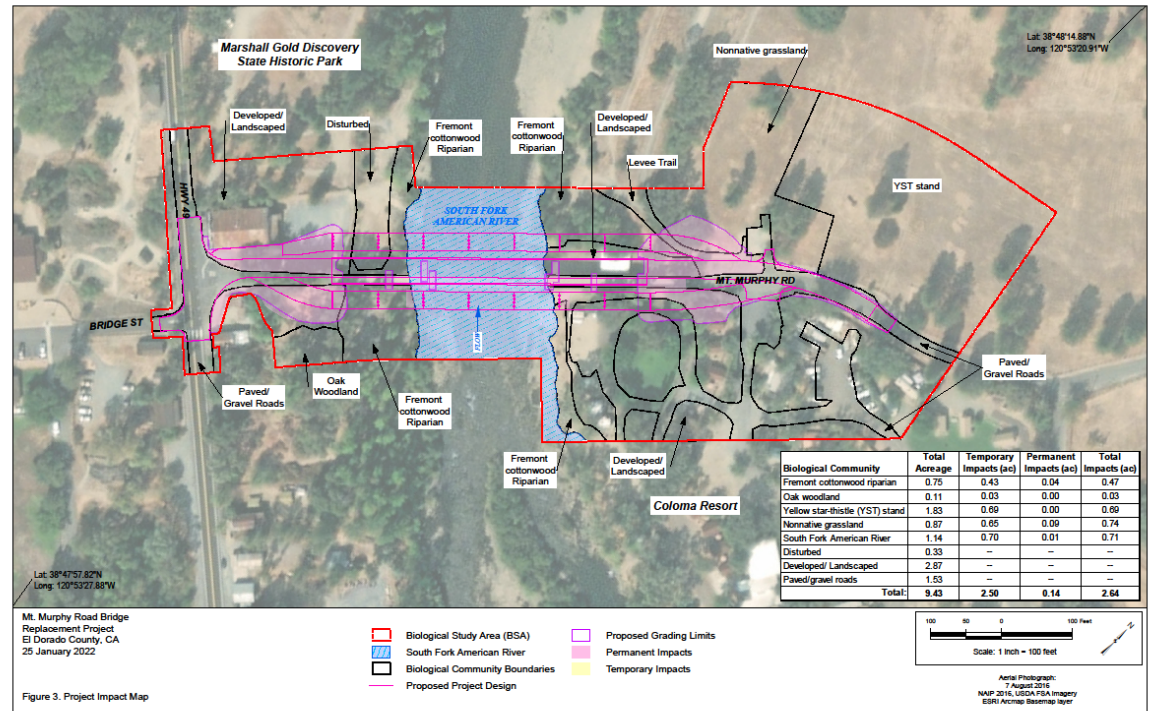


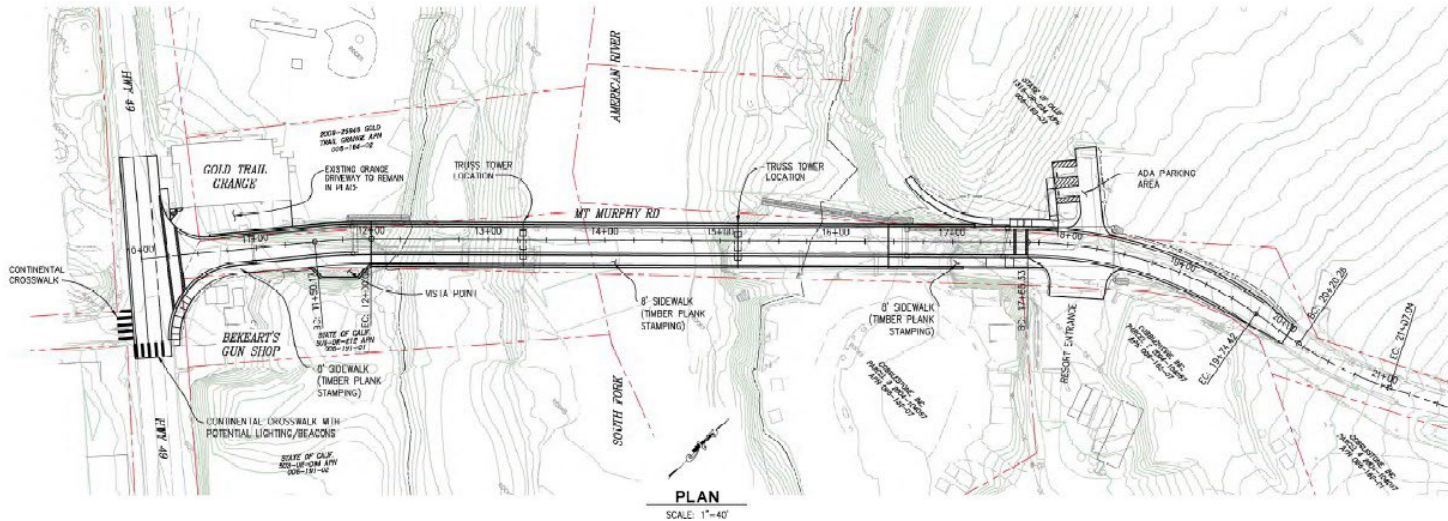
Figure 3. Project Impact Map





## Proposed Project

### Alternative 1 (Corridor 1) – “On Alignment”



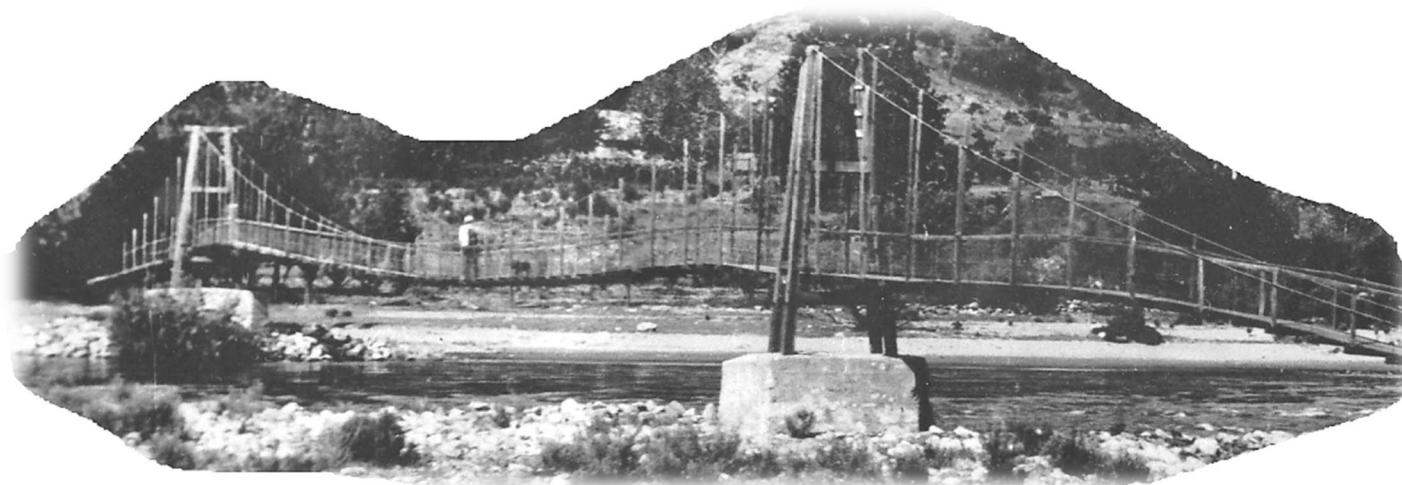
**PRELIMINARY CONCEPT**





## Proposed Project

- Integrating the Past
- Continuity
- Minimize Impacts



**PRELIMINARY CONCEPT**

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## Proposed Project

### ↳ “Truss Tower Portals” with Cables



**PRELIMINARY CONCEPT**

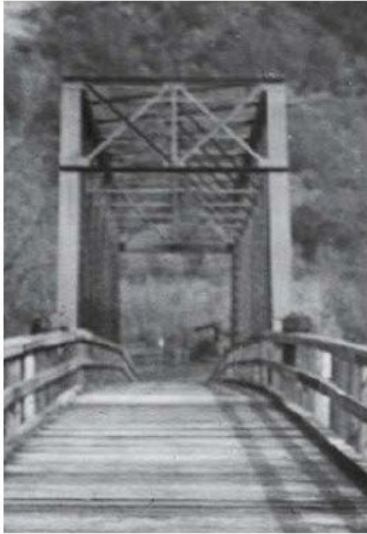

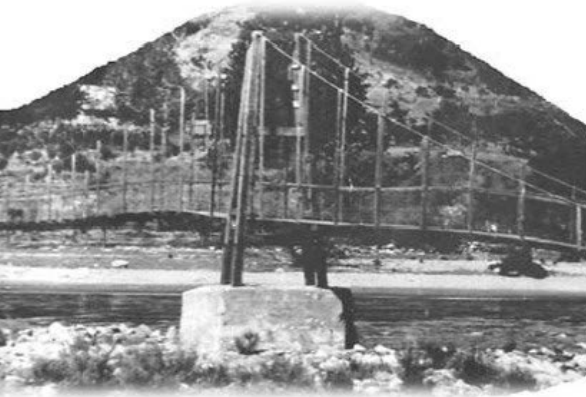

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## Proposed Project

→ **Alternative 1**  
**(Corridor 1)** – “On  
 Alignment”

Table 3-1. Bridge Design Elements Compared Against Historic Bridge Elements

Feature	Historic Bridge Reference Image	Proposed Bridge Detail Simulation
Truss crossbars		
Cables		

**PRELIMINARY CONCEPT**




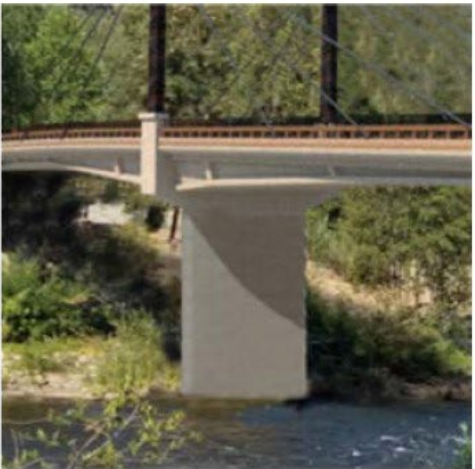




## Proposed Project

→ **Alternative 1**  
**(Corridor 1)** – “On  
 Alignment”

Table 3-1. Bridge Design Elements Compared Against Historic Bridge Elements

Feature	Historic Bridge Reference Image	Proposed Bridge Detail Simulation
Box relief and arched curves in concrete girders		
Mono slab pier walls with flared pedestals and trim accents		





# Proposed Project

→ **Alternative 1**  
**(Corridor 1)** – “On  
Alignment”

Table 3-1. Bridge Design Elements Compared Against Historic Bridge Elements

<p>Wood texture and color tones</p>		
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**PRELIMINARY CONCEPT**



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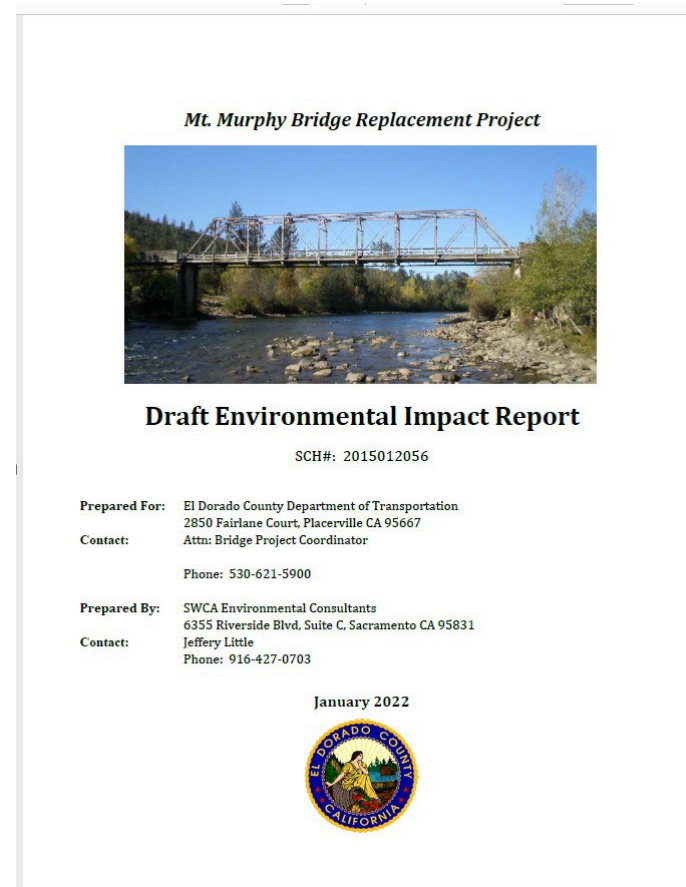






## EIR Highlights:

- ↳ Comments on Draft EIR
  - ↳ Notice of Availability (NOA) & Public Meeting (1/26/22)
  - ↳ Public Review Period: 1/10/22 – 2/25/22
  
- ↳ Draft EIR Highlights
  - ↳ Summary of Mitigation Measures





**EIR Highlights:**

**Table 5-1: Summary of Significant Impacts and Mitigation Measures**

<u>Impact:</u>	<u>Mitigation Measures:</u>
➔ Aesthetics:	BIO-5 (Riparian), BIO-6 (Oak Trees), BIO-7 (SF American River)
➔ Air Quality:	HAZ-2 (Lead)
➔ Biological Resources:	BIO-1 (FYLF), BIO-2 (Migratory Birds), BIO-3 (Bats), BIO-4 (Balsamroot, Sedge), BIO-5 (Riparian), BIO-6 (Oak Trees), BIO-7 (SF American River)
➔ Geology & Soils:	NOI-1 (Vibration)
➔ Hazardous Materials:	HAZ-1 (Arsenic), HAZ-2 (Lead), HAZ-3 (Treated Wood), WILD-1 (Fire Protection)
➔ WQ & Water Resources:	Bio-1 (FYLF), Bio-7 (SF American River)
➔ Noise:	NOI-1 (Vibration)
➔ Recreation:	REC-1 (Relocate Park Uses), REC-2 (Whitewater Boaters), REC-3 (SR-49 & Mt Murphy Park Character), REC-4 (Traffic Delays)
➔ Wildfire:	WILD-1 (Fire Protection)





## EIR Highlights:

### Table 5-1: Summary of Significant Impacts and Mitigation Measures

#### Impact:

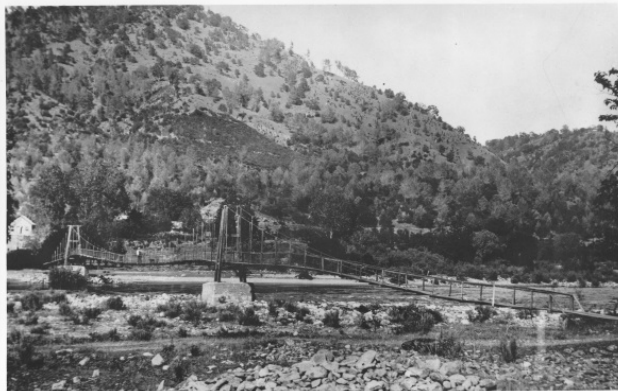
→ \*Cultural Resources:

→ Tribal Cultural Resources:

#### Mitigation Measures:

CULT-1 (Design Features), CULT-2 (HAER), CULT-3 (Interpretive Exhibits), CULT-4 (Revised National Register Nomination), CULT-5 (Reporting), CULT-6 (Post Review Plan), CULT-7 (ESA Action Plan)

CULT-8 (Native American Monitoring)



Completed April 29 1899 3 ft wide with melting  
built by Fred Smeder of Georgetown

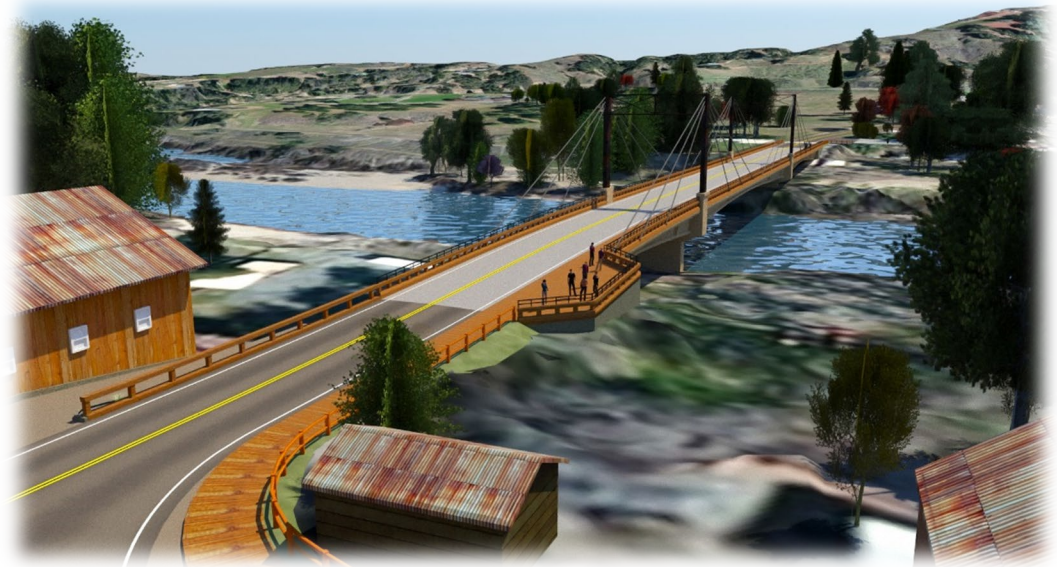




## EIR Highlights

### Coordinated Efforts

- ➔ **Extensive Coordination Efforts**
  - ➔ County Of El Dorado, State Parks, Caltrans, FHWA, Tribes, OHP, Public, etc.
  
- ➔ **Design Features**
  - ➔ Evolution of Proposed Project
  
- ➔ **Interpretive Exhibits**
  - ➔ Integrating Efforts & Uses



**PRELIMINARY CONCEPT**

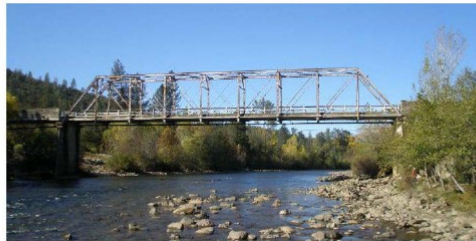




## Public Comments

- Need for Road Improvements
- Impacts associated with neighboring activities
- Proposed Bridge Design Features

*Mt. Murphy Bridge Replacement Project*

A photograph of a steel truss bridge spanning a river with rocky banks and trees in the background.

**Draft Environmental Impact Report**

SCH#: 2015012056


**Prepared For:** El Dorado County Department of Transportation  
2850 Fairlane Court, Placerville CA 95667

**Contact:** Attn: Bridge Project Coordinator  
Phone: 530-621-5900

**Prepared By:** SWCA Environmental Consultants  
6355 Riverside Blvd, Suite C, Sacramento CA 95831

**Contact:** Jeffery Little  
Phone: 916-427-0703

January 2022

A smaller version of the El Dorado County seal, identical to the one in the top right corner.



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## Project “Look Ahead”

↳ Anticipated Schedule & Development Process



- Draft EIR
- Final EIR
- NEPA Approval by Caltrans FHWA



**PRELIMINARY**

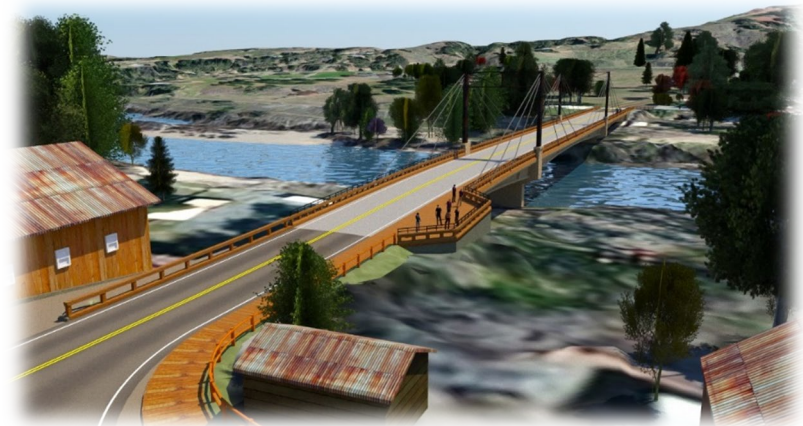
\*Opportunities for Overlap (ROW, Design, PS&E)





## Concluding Remarks

- ↳ Project best meets all Project Objectives
- ↳ Extensive collaboration & coordination efforts
- ↳ DOT recommends BOS to:
  - ↳ 1) Certify EIR
  - ↳ 2) Adopt Findings of Fact and MMRP
  - ↳ 3) Approve Mt Murphy Bridge Project



**PRELIMINARY CONCEPT**