# FOLSOM DAM RAISE MODIFICATIONS PROJECT

***Draft Supplemental Environmental Impact Statement/ Environmental Impact Report***

Sacramento District
US Army Corps of Engineers

2 December 2021

U.S.ARMY

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BUREAU OF RECLAMATION

CENTRAL VALLEY FLOOD PROTECTION BOARD
PUBLIC SAFETY
WITH FLOOD PROTECTION
STATE OF CALIFORNIA

DEPARTMENT OF WATER RESOURCES
STATE OF CALIFORNIA

SAFCA
Sacramento Area Flood Control Agency

# HOW TO PROVIDE COMMENTS

Formal comments can be submitted *via mail or email* to USACE and DWR.
Comments will be responded to in the Final document.
We will be taking informal questions today.

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Project and comment information will be posted at:
https://www.spk.usace.army.mil/Missions/Civil-Works/Folsom-Dam-Raise/

# AGENDA

1) Folsom Dam Raise Project background

2) Draft Supplemental Environmental Impact Statement/ Environmental Impact Report
   - New project elements
   - Environmental analysis

3) Questions

4) How to submit formal comments on the Draft environmental document

Dike 8 construction looking south

# FOLSOM DAM RAISE PROJECT BACKGROUND

Right Wing Dam looking south

# FOLSOM DAM RAISE PROJECT

The Folsom Dam and its associated facilities impound flows on the American River, forming Folsom Lake.

The dam was constructed in 1955 as a multipurpose facility providing water supply, water quality, power, fish and wildlife habitat, recreation, navigation, and flood risk management for the greater Sacramento metro area.

The dam and its facilities are the joint responsibility of two federal agencies, the Bureau of Reclamation and the Army Corps of Engineers.

# EXISTING FOLSOM DAM FACILITIES

The Folsom Dam Raise Project includes modifications to the Main Concrete Dam, Mormon Island Auxiliary Dam, Right Wing Dam, Left Wing Dam, and Dikes 1-8. Dike 8 construction was completed in 2020.

The Project will enable more efficient use of the existing Folsom Dam water storage space and increase the reservoir's temporary storage capacity during extreme flood events.

# AUTHORIZATION

- Energy and Water Development Appropriations Act (2004): Congress first authorizes a plan to raise Folsom Dam. The initial authorization was for a 7-foot dam raise and the replacement of all 8 tainter spillway gates.

- Watershed Resources Development Act (2007): A 3.5-foot dam raise, the replacement of three emergency gates, and automating/reconfiguring the temperature control shutters were authorized, in conjunction with the Joint Federal Project auxiliary spillway.

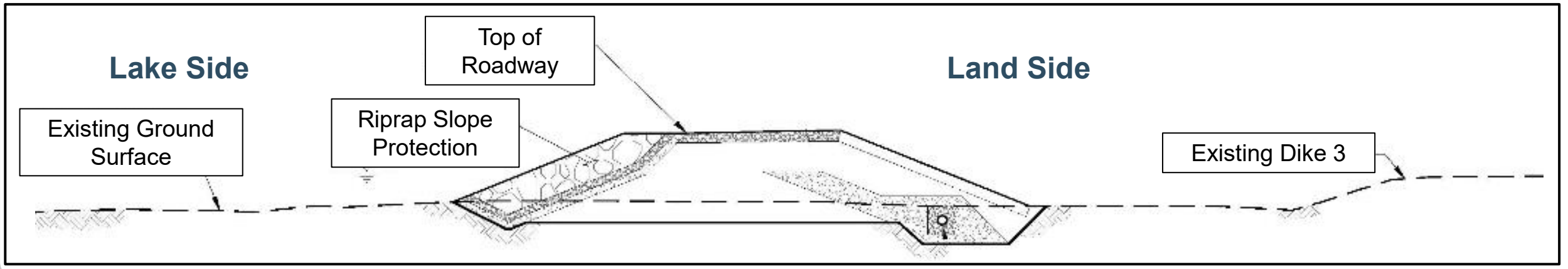
# DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT

- New Dike 3
- Modified concrete floodwall elements
- Onsite borrow and disposal at Mormon Island Auxiliary Dam West
- Rock crushing operations at Mormon Island Auxiliary Dam East
- Project mitigation plan

The lake side of the Mormon Island Auxiliary Dam looking west

# DIKE 3 RELOCATION AND RAISE

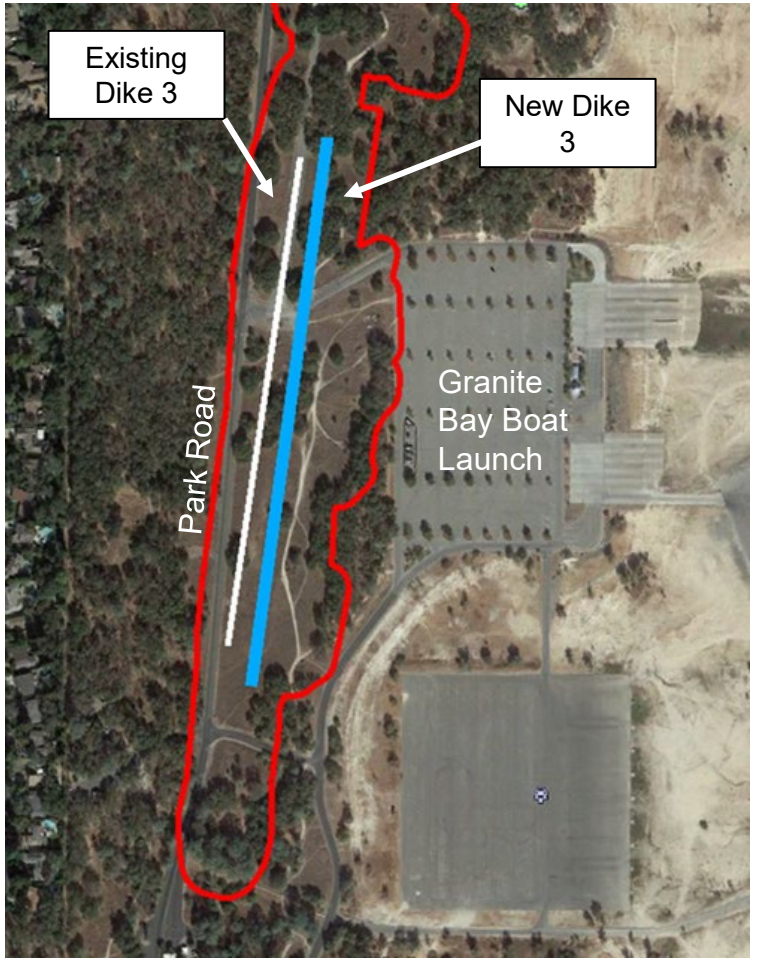
- Construction of the new dike will be 80 feet closer to the lake.
- Construction will include the use of rock, sand, fill, and gravel.
- The access from Park Road to the Granite Bay Boat Launch would be still be available following the construction of the new Dike 3.

# DIKE 3 RELOCATION AND RAISE (CONTINUED)

- The existing Dike 3 has a large amount of woody vegetation growing in it.

- Constructing a new dike will be more reliable and more cost efficient compared to constructing on the current Dike 3.

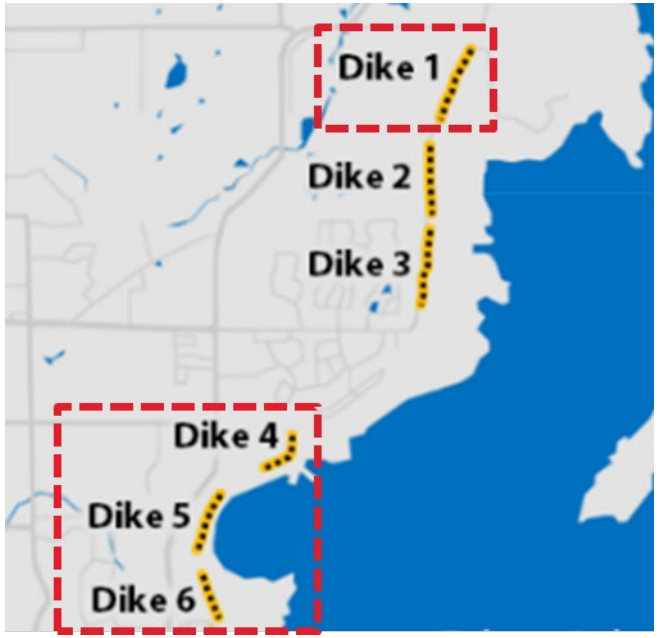


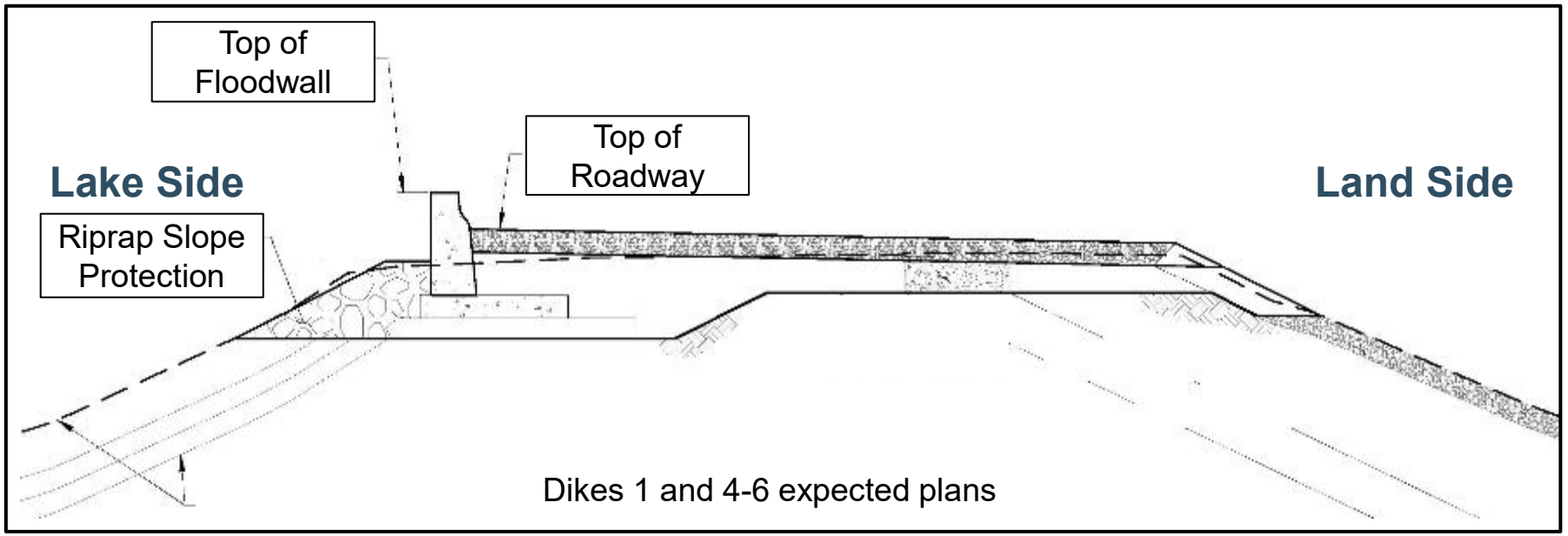

Existing Dike 3 centerline indicated in white and new Dike 3 centerline indicated in blue.

# MODIFIED CONCRETE FLOODWALL ELEMENTS

- Dike 1, Dikes 4-7, and MIAD are to be raised 3.5-foot by placing a concrete floodwall along the upstream (lake) side of the crest.

- The concrete floodwall designs have minor variations to account for varying site conditions.




Dikes 1 and 4-6 expected plans

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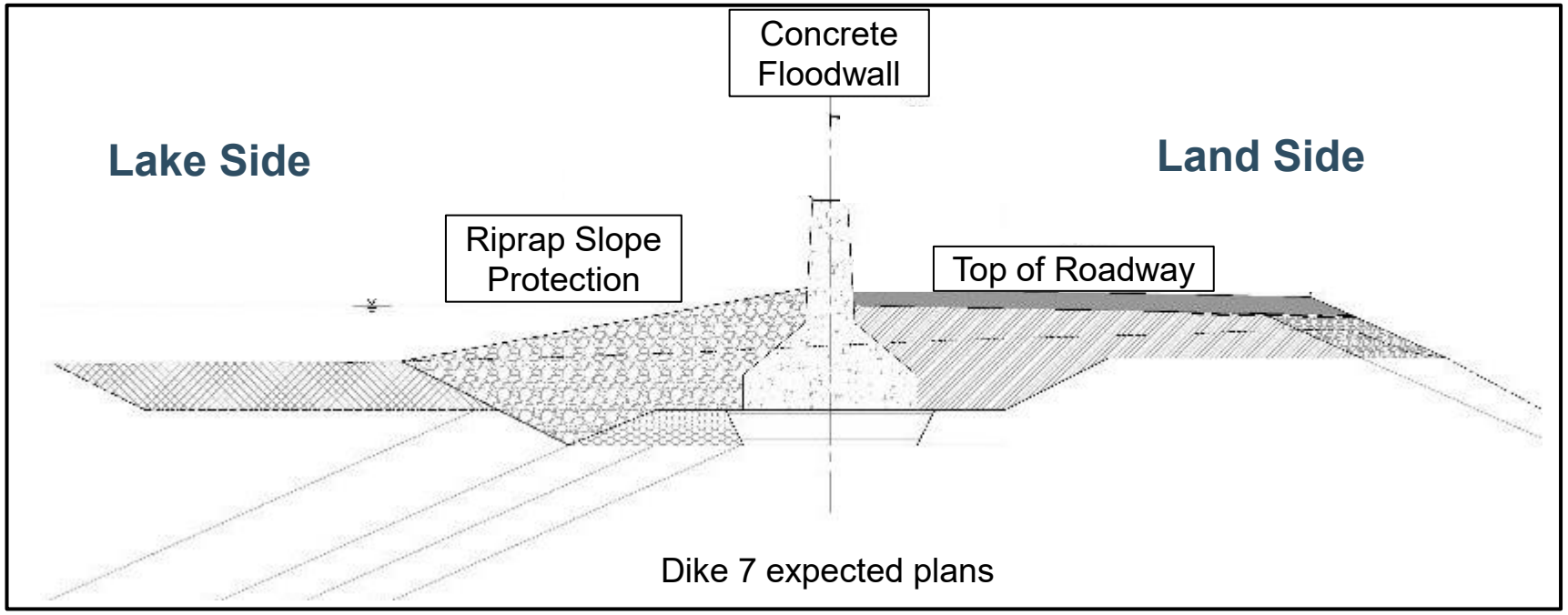
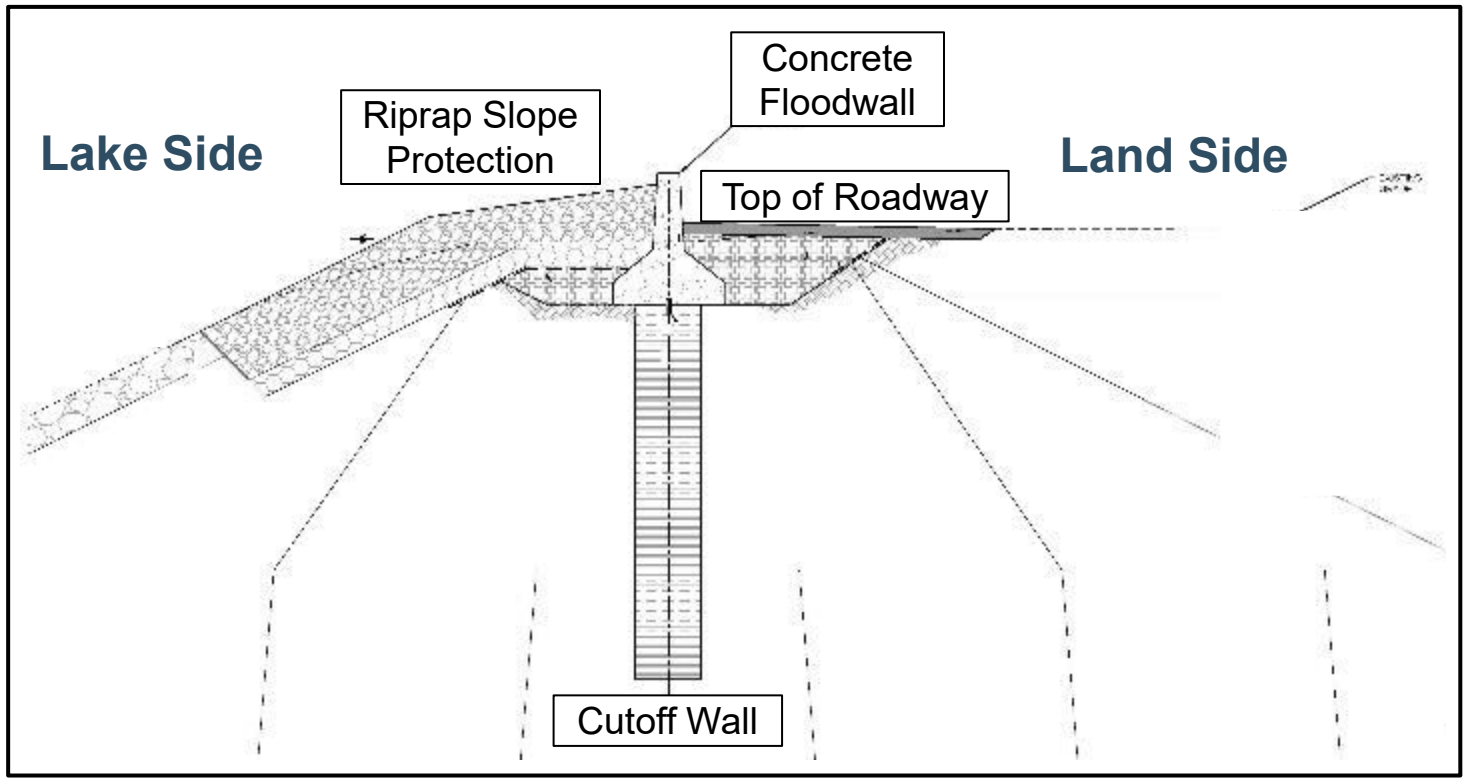



Dike 7 expected plans

# MODIFIED CONCRETE FLOODWALL ELEMENTS (CONTINUED)

- 17 feet of excavation for the cutoff wall (below the concrete floodwall) would be needed, totaling approximately 20 feet of excavation.

- Surfacing of the maintenance road would consist of 6 inches of aggregate base for vehicle access.




MIAD expected plans

# ONSITE BORROW AND DISPOSAL AT MIAD WEST

- Mormon Island Auxiliary Dam (MIAD) West is a previously disturbed area that consists primarily of materials deposited from construction of the auxiliary spillway.

- Borrow material from this location would be used for construction other portions of the Folsom Dam Raise.

- Disposal of uncontaminated materials would restore the site to the similar topography.

- Restoration would consist of regrading to blend in with the surrounding area and planting with a mixture of native grasses and flowering plants.



Borrow site limits indicated in red.

# ROCK PROCESSING LOCATION AT MORMON ISLAND AUXILIARY DAM (MIAD) EAST

- The 2017 SEIS/EIR stated that the stockpile would be used in the project.

- The current size of the rock too large for construction, so processing is required to make the rock smaller and usable.

- Using onsite materials will reduce air quality impacts compared to hauling from a quarry and to dispose of this material offsite.


The rock stockpile as seen from Folsom Point Road, looking southeast.


Work limits for the rock processing indicated in red.

# SMALLER SCALE ACTIONS

Smaller scale actions include:

- Pumping water from Folsom Lake for construction activities
- Updates for projected air quality impact calculations due to changes in project design and scheduling
- Changes to recreational access during construction
- The replacement of a culvert under an access road north of Dike 1
- The construction of a temporary access along Auburn Folsom Road for access to Dike 5
- Modification of the Area of Potential Effects (APE) and staging areas for the dikes and dams under construction compared to the 2017 SEIS/EIR
- Field changes as required based on changing onsite conditions

# PLAN FOR MITIGATION

- Elderberry shrubs, which are habitat for the Federally listed valley elderberry longhorn beetle, are to be avoided and remain in place so mitigation is not needed.

- Oak plantings at different sites around Folsom Lake would mitigate for impacts due to tree removal.

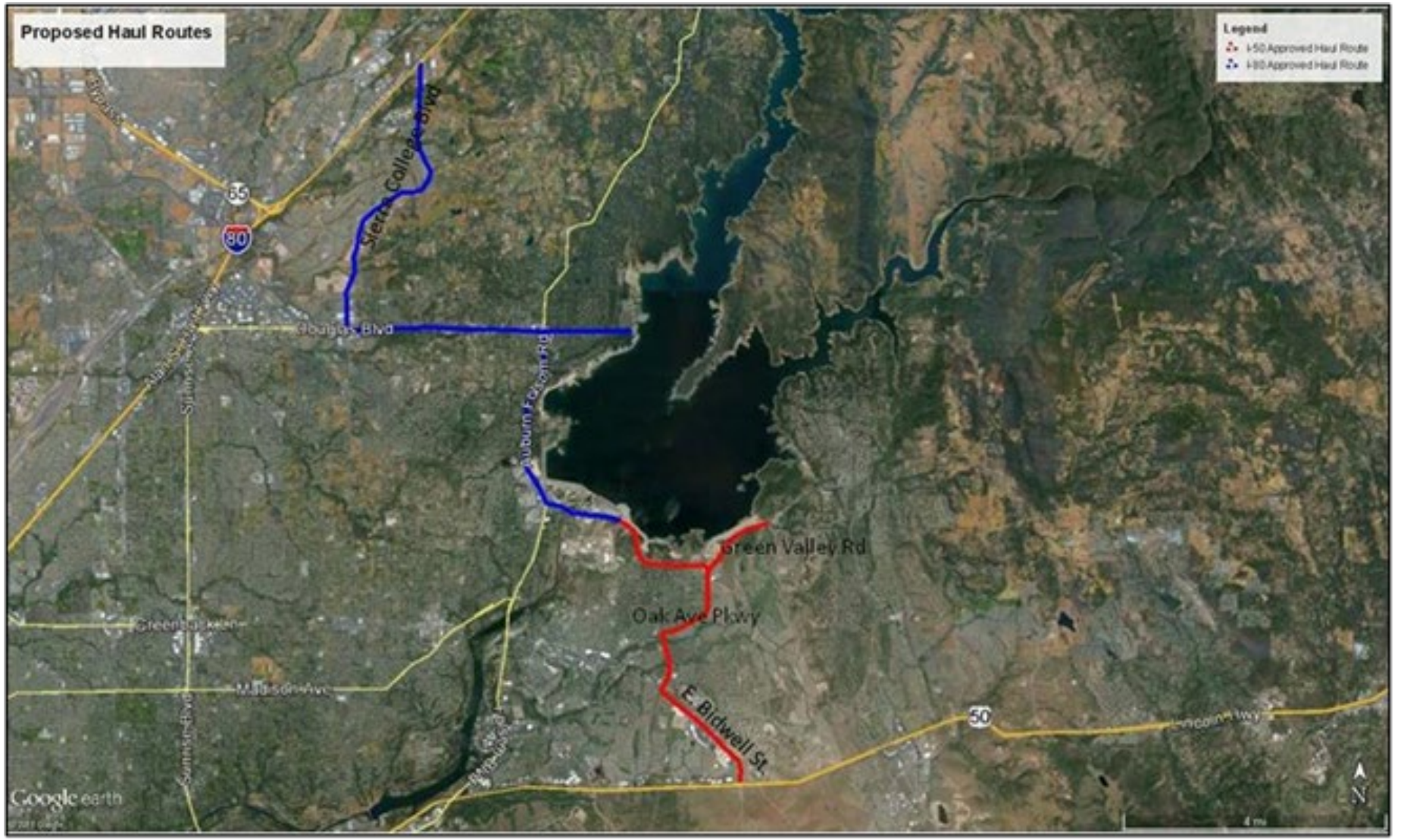
- Any wetland impacts would be mitigated with purchase of conservation bank credits.

Oak planting site, next to Dike 8, to restore the haul route for the Auxiliary Spillway construction.

Adult valley elderberry longhorn beetle.

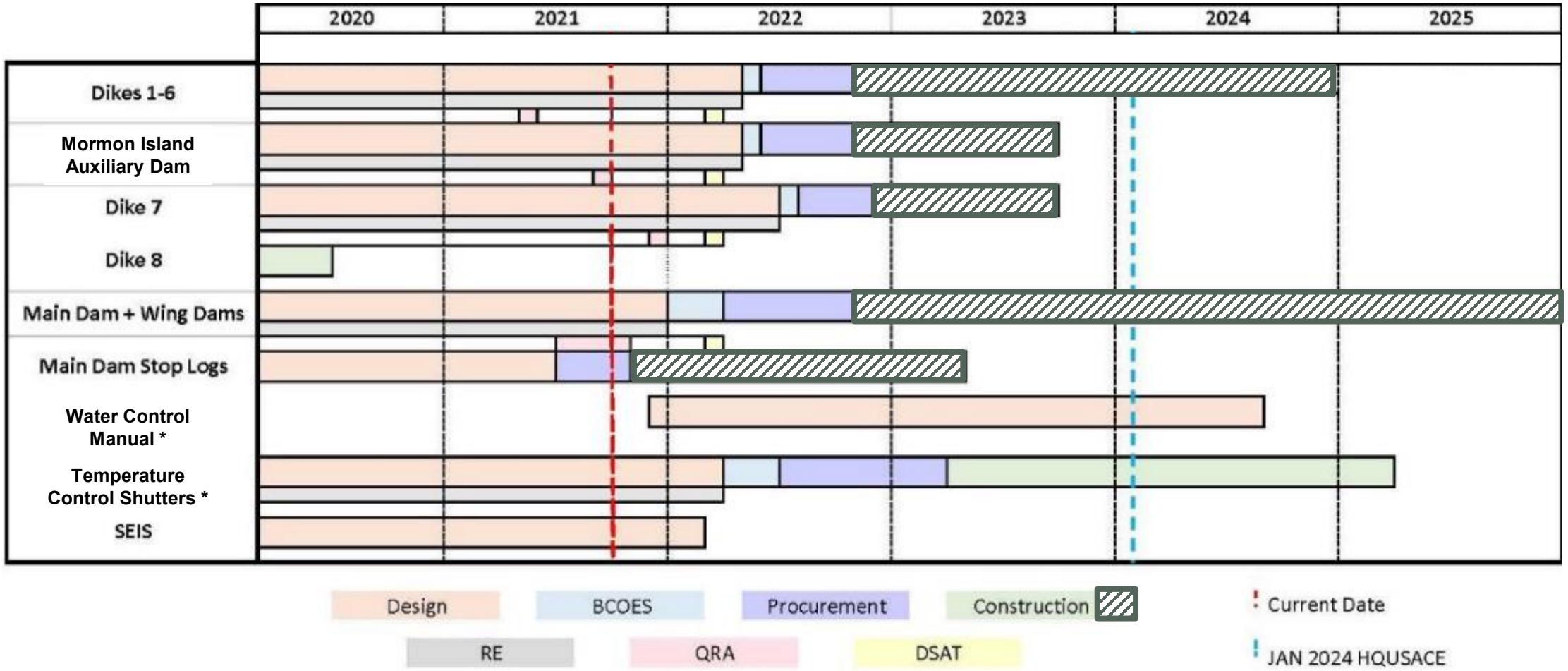
A field of purple lupine and oak woodland.

# ACCESS AND HAUL ROUTES



# CONSTRUCTION SCHEDULE

## Anticipated construction schedule for the Folsom Dam Raise Project




* The Water Control Manual and Temperature Control Shutters are not covered in this environmental document. They will be covered in separate environmental documents.

# SUPPLEMENTAL EIS/EIR

- This document includes additional project elements or design changes that are needed to construct the Folsom Dam Raise Project.

- This Supplemental Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) analyzes the effects of construction elements on various resource areas.

Resource Areas Analyzed:

- Recreation
- Vegetation and Wildlife
- Special Status Species
- Air Quality
- Climate Change
- Aesthetics and Visual Resources
- Noise
- Water Quality and Waters of the US
- Cultural Resources

North end of the Right Wing Dam, looking south.

# ENVIRONMENTAL COMMITMENTS AND REGULATORY COMPLIANCE

Environmental commitments from the following documents would be followed in compliance with Federal and State laws:

- 2007 EIS/EIR (Bureau of Reclamation)

- 2017 Supplemental EIS/EIR (USACE)

- Biological Opinions and Coordination with USFWS

Applicable Federal and State Laws include the National Environmental Policy Act, Clean Water Act, Clean Air Act, National Historic Preservation Act, California Environmental Quality Act, etc.

  - These laws are covered in the Draft document.

Red-shouldered Hawk by the Pioneer Express Trail

# TRAIL WIDENING IN BEALS POINT AREA

- To comply with a recreational mitigation measure that was included in the 2017 SEIS/EIR (and included in the current Draft), USACE is widening two trails in the Beals Point area.

  *"R-3 A temporary recreational detour trail would be established by the construction contractor to help mitigate the temporary loss of the existing trail/roadway that runs along the crests of Dikes 4 through 6 and along the roadway/trail connecting these dikes."*

- This work will enable the trails to support increased multi-use traffic during the construction of Dikes 4, 5, and 6 which will be closed to public use.

- Schedule:

  - South Pioneer Express Trail: Nov 4 – Nov 26, 2021
  - North Pioneer Express Trail: Nov 27, 2021 – March 1, 2022

# NEPA/CEQA NEXT STEPS

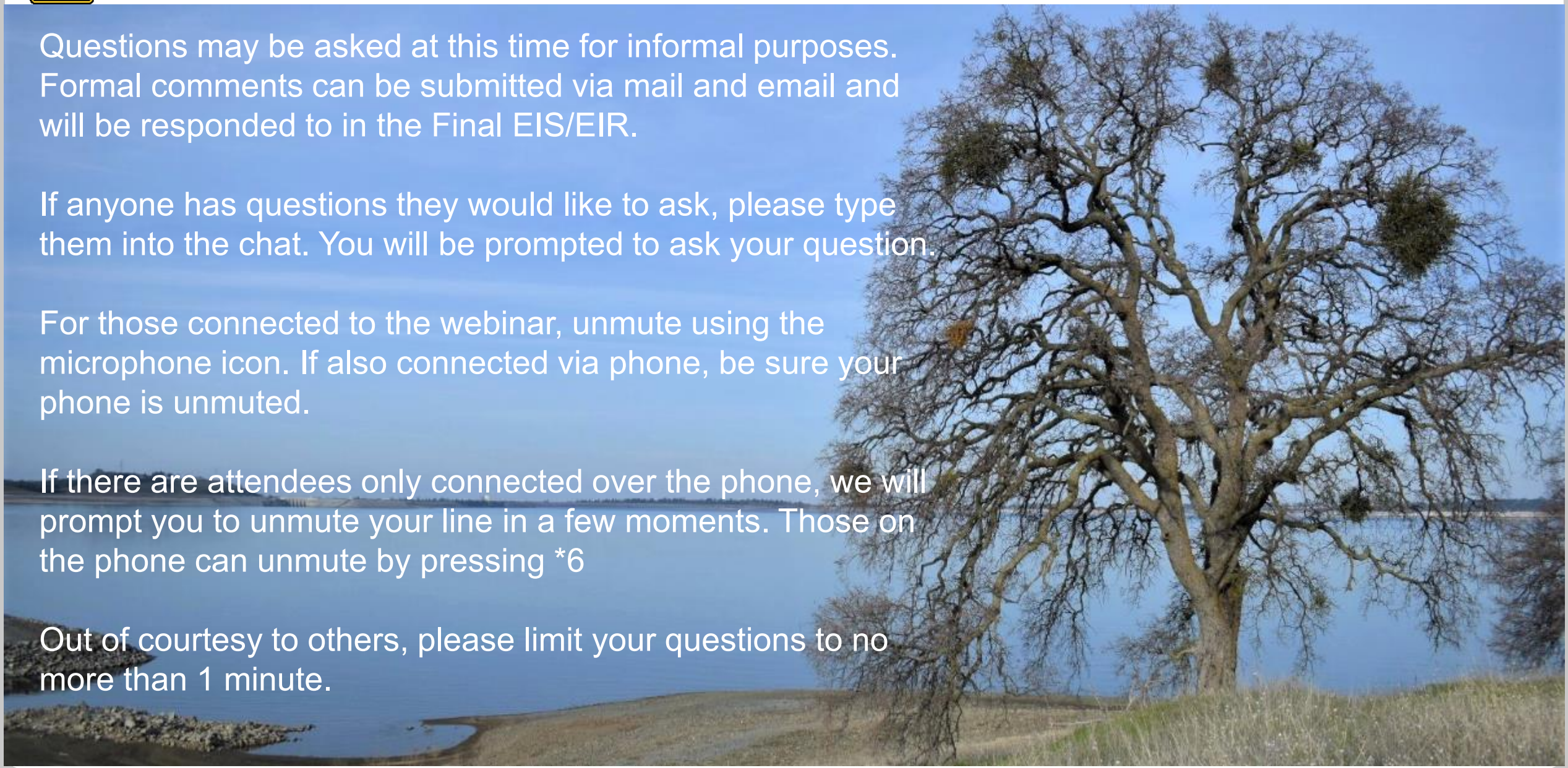
The Draft Supplemental EIS/EIR is available at: https://www.spk.usace.army.mil/Missions/Civil-Works/Folsom-Dam-Raise/

Public comment period: November 12, 2021 through December 27, 2021

Final document is anticipated to be finalized in Summer 2022.

Equestrians on Dike 5.

# QUESTIONS



Questions may be asked at this time for informal purposes. Formal comments can be submitted via mail and email and will be responded to in the Final EIS/EIR.

If anyone has questions they would like to ask, please type them into the chat. You will be prompted to ask your question.

For those connected to the webinar, unmute using the microphone icon. If also connected via phone, be sure your phone is unmuted.

If there are attendees only connected over the phone, we will prompt you to unmute your line in a few moments. Those on the phone can unmute by pressing *6

Out of courtesy to others, please limit your questions to no more than 1 minute.

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