



Meeting: **Authority Board Agenda Item 3.1**

February 22, 2022

Subject: **2022-2024 Sites Reservoir Geotechnical Investigations (Priority 1A & 1B) Draft Environmental Assessment/Initial Study and Permit Application Release**

Requested Action:

Consider authorization of the following activities related to the 2022-2024 Sites Reservoir Geotechnical Investigations: (1) the release of the Draft Environmental Assessment/Initial Study (EA/IS) pursuant to California Environmental Quality Act (CEQA) including authorizing the Executive Director to file a Notice of Completion with the State Clearinghouse and complete other noticing requirements to initiate the public review process; and (2) the Executive Director to sign and submit the necessary permit applications including associated application fees, if any.

Detailed Description/Background:

Additional geotechnical investigations in Glenn, Colusa, and Yolo counties are being proposed to achieve 30% design of the proposed Sites Reservoir and its associated facilities. Geotechnical investigations would be implemented in various locations north, east, and south of Funks Reservoir in Colusa and Glenn Counties, within, and in the vicinity of the proposed Sites Reservoir inundation area, and south of Dunnigan in Yolo County along the proposed Dunnigan Pipeline. There are also two locations on county roads north of Hamilton City near the Glenn-Colusa Irrigation District Main Canal. The focus of the investigations would be areas for the proposed Sites Reservoir saddle dams, roads, bridges, pumping and generating plants, borrow areas, tunnels, pipelines, and transmission corridors. Geotechnical investigations would be located in areas where additional or updated data is needed to inform engineering cost estimate, design, and permitting requirements for the Sites Reservoir Project.

The three types of studies proposed include: geologic mapping, geotechnical investigations, and surface geophysical surveys. These are described below.

Geologic Mapping – Geologic mapping surveys would include mapping the existing geology of the proposed inundation area, proposed conveyance facilities, and roads. This effort is performed on foot within areas immediately surrounding Funks Reservoir and lands between the existing reservoir and the proposed Sites Reservoir inundation area including lands south of Hunters Creek, east and south of Funks Creek, adjacent to

Maxwell Sites Road and Sites Lodoga Road, and throughout the Dunnigan Pipeline corridor.

- **Geotechnical Investigations** – The geotechnical investigations would include up to 70 pavement cores, 258 augers and borings, and 33 cone penetration test (CPT) probes throughout the proposed Sites Reservoir inundation area and associated conveyance facilities in Colusa, Glenn and Yolo Counties. In addition, approximately 70 piezometers/wells are proposed at selected auger or boring locations. This effort is conducted through exploratory pavement borings, auger and rotary wash borings with downhole testing and rock coring, and CPT probes to collect subsurface data and samples and examine material processing requirements.
- **Surface Geophysical Surveys** – The geophysical surveys would be comprised of up to 100 transect lines throughout the investigation area. Up to 16 geologic pedestrian surveys are also proposed. Geophysical investigations typically involve various noninvasive or minimally invasive physical methods to determine the properties of the subsurface.

Field activities are planned to start this summer and be implemented through 2024. The Authority anticipates undertaking all field activities, including all drilling and investigation activities and biological, cultural and Tribal monitoring. All activities would be performed on willing landowner parcels and public right of way.

California Environmental Quality Act

The Draft EA/IS has been prepared consistent with the State CEQA Guidelines and in coordination with Reclamation per the Council on Environmental Quality guidance for implementing the National Environmental Policy Act (NEPA). Reclamation is the NEPA lead agency and the Authority is the CEQA lead agency. The Draft EA/IS will be used to determine whether the Authority adopts a mitigated negative declaration under CEQA¹ and whether Reclamation adopts a finding of no significant impact under NEPA.

Locations for the proposed geotechnical investigations have been coordinated with the engineering team with the intent to avoid and minimize impacts to environmental, biological and cultural resources to the extent possible, as well as current landowner operations. Similar to the 2019/2020 and 2020/2021

¹ The currently proposed geotechnical investigations constitute a set of preparatory actions to obtain requisite data to inform project design, engineering cost estimates, and permit requirements for the proposed future Sites Reservoir Project; these initial pre-project investigatory actions would not in any way commit the Authority or any other party to any definite course of action or decision regarding the proposed future Sites Reservoir Project, which currently is undergoing a comprehensive CEQA and NEPA review in an Environmental Impact Report/Environmental Impact Statement.

geotechnical investigation efforts, the Authority will implement standard geotechnical protocols and procedures to avoid and minimize potential environmental effects. Mitigation measures have also been incorporated into the Draft EA/IS to offset and reduce potential impacts for biological resources, cultural resources, tribal cultural resources, and paleontological resources. Table 1 provides a summary of the preliminary mitigation measures, which may change as the Draft EA/IS is finalized. Many of the measures included as mitigation in the Draft EA/IS for the purposes of CEQA and NEPA are developed from geotechnical standard protocols and procedures that the Authority has implemented in past efforts as best management practices.

Table 1. Summary of Draft EA/IS Mitigation Measures¹

Resource Area	Summary of Mitigation Measures
Biological Resources	Conduct mandatory biological resources awareness training; general measures to avoid and minimize effects on sensitive biological resources; measures to avoid and minimize effects on waters of the U.S./State; species-specific measures for state and federally listed plant and animal species along with migratory birds and eagles; and decontamination of equipment for aquatic invasive species
Paleontological Resources	Consult with qualified paleontologist if paleontological resources are discovered
Cultural Resources	Avoid impacts on cultural resources; conduct pre-activity pedestrian survey; prepare a post-review Discovery Plan; conduct archeological sensitivity training; conduct archeological monitoring, and immediately halt ground-disturbing activities if cultural resources or human remains are found and implement appropriate plans
Tribal Cultural Resources	Avoid or preserve in place; treat resources with culturally appropriate dignity, and implement permanent conservation easements for any resources found

1. Preliminary mitigation measures. These measures may change as staff, Legal and Reclamation continue review of the EA/IS.

Permitting Activities

Similar to prior efforts, Reclamation participation through funding for this effort will also trigger the need for compliance with the Federal Endangered Species Act and the National Historic Preservation Act (Section 106). The Authority has drafted an amendment to the prior geotechnical Biological Assessment and associated prior Biological Opinion which Reclamation is currently reviewing in preparation for submission to the U.S. Fish and Wildlife Service. Reclamation is

also preparing to initiate Section 106 efforts with the State Historic Preservation Officer.

Only a few proposed geotechnical locations trigger the need to obtain additional approvals from state resource agencies, including the Central Valley Regional Water Quality Control Board (Regional Board) and Central Valley Flood Protection Board (Flood Board). These approvals are described below.

- Regional Board – Four investigation locations would be conducted within the Central Valley Regional Board jurisdiction: three within Funks Reservoir and one “apparent” seasonal wetland on private property. Staff is proposing to file a Clean Water Act, Section 401 Permit application for these four locations.
- Flood Board – Four investigations would be implemented within the Flood Board jurisdiction: two located in Glenn County adjacent to the Glenn-Colusa Irrigation District Main Canal within 300 feet of the designated floodway of the Sacramento River; and two located in Yolo County just west of the Colusa Basin Drain within 300 feet of its designated floodway.

Staff has also discussed the geotechnical efforts with the California Department of Fish and Wildlife and is awaiting their input on the need for a State Incidental Take Permit or consistency determination with the Federal Biological Opinion.

Request for Authorization to Release

Staff is completing the final revisions to the Draft EA/IS and expects to have Reclamation approval for public distribution of the Draft EA/IS in late February/early March. Staff is recommending that the Reservoir Committee and Authority Board authorize release of the Draft EA/IS as soon as the document is ready for release, including authorizing the Executive Director to file a Notice of Completion with the State Clearinghouse and complete other noticing requirements to initiate the public review process. There is a 30 day public review period.

Staff is also recommending that the Reservoir Committee and Authority Board authorize the Executive Director to submit associated permit applications and pay associated fees for the 2022-2024 Sites Reservoir Geotechnical Investigations at the same time as the Draft EA/IS is released for public review. Submitting the permit applications at this time will keep the proposed geotechnical investigations on schedule and allow data to be obtained starting this Summer.

Prior Action:

None

Fiscal Impact/Funding Source:

Actual costs to prepare the Draft EA/IS, permit applications, along with the Authority's components of the 2022-2024 Geotechnical Investigations are within the amounts budgeted in both the previous Amendment 2 Work Plan (Budget) and Amendment 3 Work Plan. At this time, no additional costs are anticipated beyond those budgeted for Amendment 3 to implement the proposed mitigation measures. Reclamation will be a funding partner for this effort as these geotechnical efforts are included in the new Financial Assistance Agreement previously authorized by the Reservoir Committee and Authority Board and are in the process of being executed.

Staff Contact:

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Attachments:

None