

RECLAMATION

Managing Water in the West

Categorical Exclusion Checklist

Geotechnical Investigations for Left Wing Dam, Right Wing Dam, Dike 7, Dike 8, and Mormon Island Auxiliary Dam – Folsom Dam Raise Project

MP-CEC-17-01

Prepared by:

Jamie LeFevre
Jamie LeFevre
Natural Resources Specialist
Mid-Pacific Regional Office

Date: 11/1/17

Concurred by:

(See Attached)
Scott Williams
Archeologist
Mid-Pacific Regional Office
Concurrence with extraordinary circumstance #8

Date: _____

Concurred by:

(See Attached)
Kevin Clancy
Native American Affairs Program Manager
Mid-Pacific Regional Office
Concurrence with extraordinary circumstance #11

Date: _____

Approved by:

Drew Lessard
Drew Lessard
Area Manager
Central California Area Office

Date: 11/3/17

Concurred by:

Brad Hubbard
Brad Hubbard
Chief, Resources Management Division

Date 11/3/17



U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region

November 2017

Action

The Bureau of Reclamation proposes to update the Rights of Entry and Land Use Agreement with the U.S. Army Corps of Engineers (Corps) to allow the Corps to conduct geotechnical investigations at Folsom Dam. The geotechnical investigations involve drilling 82 boreholes at the Left Wing Dam (LWD), Right Wing Dam (RWD), Dike 7, Dike 8, and Mormon Island Auxiliary Dam (MIAD) (Table 1). The work is anticipated to begin in November of 2017 and would continue for approximately 6 weeks.

Table 1. Location, number, and depth of geotechnical borings

Boring Locations	Number of Borings	Range in Depth of Borings (feet)
Right Wing Dam	43	10 to 157
Left Wing Dam	18	10 to 153
Dike 7	5	32 to 58
Dike 8	3	22 to 33
Mormon Island Auxiliary Dam	13	10 to 33
Total Borings	82	

Note: The boring depths are measured from the crest (top) of each embankment.

Project Location

Folsom Dam is located in Folsom, California. The Folsom Dam facility also includes MIAD and eight earthfill dikes. The borings are located on the crests and embankments of the LWD, RWD, Dike 7, Dike 8, and MIAD (Figure 1).

Exclusion Category

516 DM 14.5 D.10: Issuance of permits, licenses, easements, and crossing agreements which provide a right-of-way over Bureau lands where the action does not allow for or lead to a major public or private action.

Extraordinary Circumstances

Below is an evaluation of the extraordinary circumstances as required in 43 CFR 46.215.

- | | | | | | | |
|---|----|-------------------------------------|-----------|--------------------------|-----|--------------------------|
| 1. This action would have a significant effect on the quality of the human environment (40 CFR 1502.3). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 2. This action would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA Section 102(2)(E) and 43 CFR 46.215(c)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 3. This action would have significant impacts on public health or safety (43 CFR 46.215(a)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 4. This action would have significant impacts on such natural resources and unique geographical characteristics as historic or cultural resources; parks, recreation, and refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (43 CFR 46.215 (b)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 5. This action would have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks (43 CFR 46.215(d)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 6. This action would establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects (43 CFR 46.215 (e)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 7. This action would have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects (43 CFR 46.215 (f)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |

- | | | | | | | |
|--|----|-------------------------------------|-----------|--------------------------|-----|--------------------------|
| 8. This action would have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by Reclamation (LND 02-01) (43 CFR 46.215 (g)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 9. This action would have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated critical habitat for these species (43 CFR 46.215 (h)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 10. This action would violate a Federal, tribal, State, or local law or requirement imposed for protection of the environment (43 CFR 46.215 (i)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 11. This action would affect ITAs (512 DM 2, Policy Memorandum dated December 15, 1993). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 12. This action would have a disproportionately high and adverse effect on low income or minority populations (EO 12898) (43 CFR 46.215 (j)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 13. This action would limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007, 43 CFR 46.215 (k), and 512 DM 3)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |
| 14. This action would contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act, EO 13112, and 43 CFR 46.215 (l)). | No | <input checked="" type="checkbox"/> | Uncertain | <input type="checkbox"/> | Yes | <input type="checkbox"/> |

NEPA Action Recommended

☒ CEC – This action is covered by the exclusion category and no extraordinary circumstances exist. The action is excluded from further documentation in an EA or EIS.

☐ Further environmental review is required, and the following document should be prepared.

☐ EA

☐ EIS

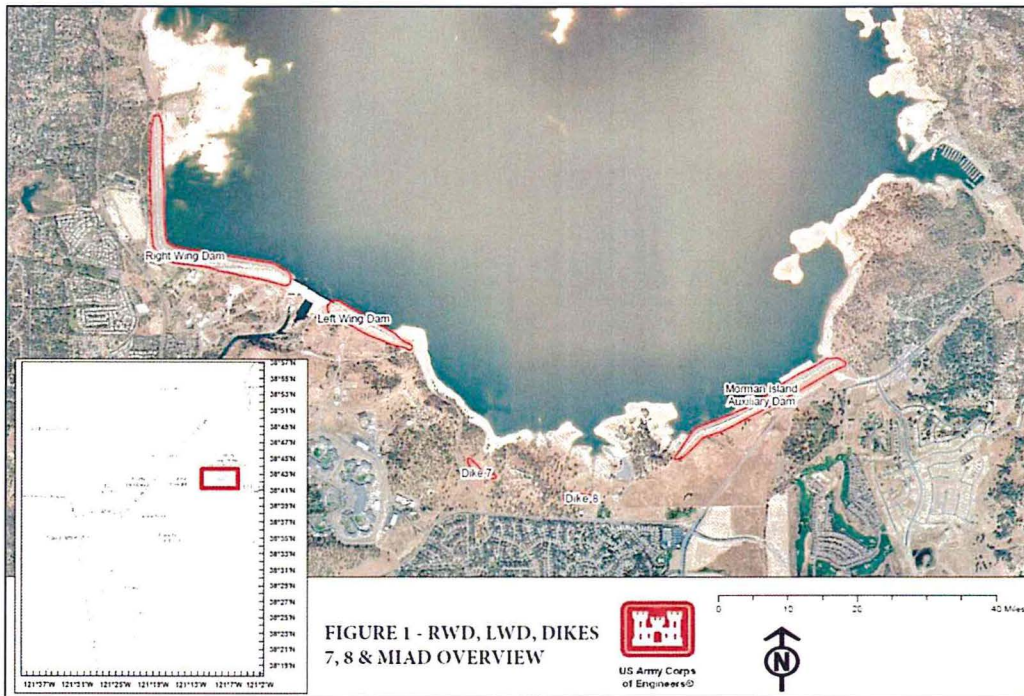
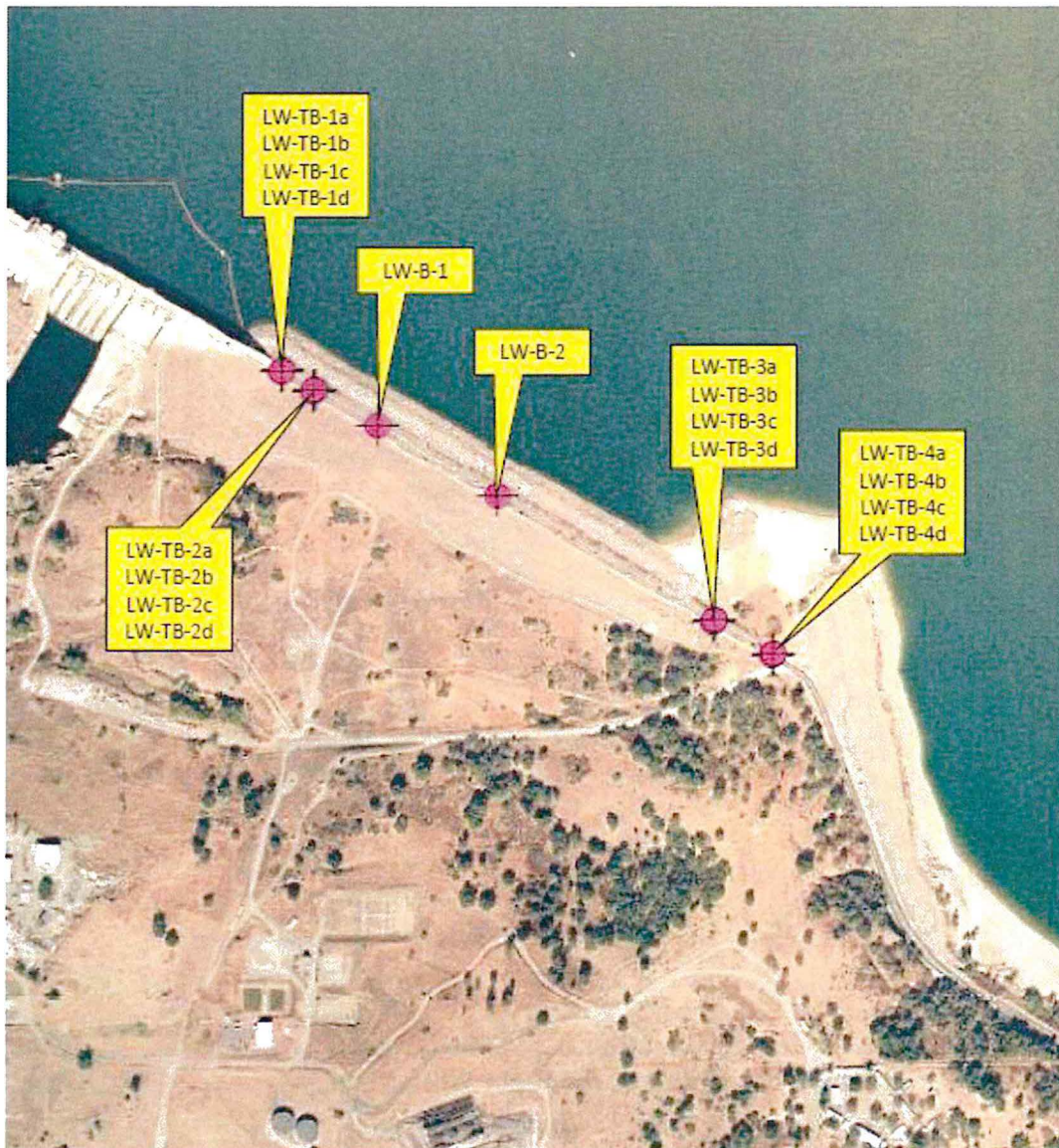


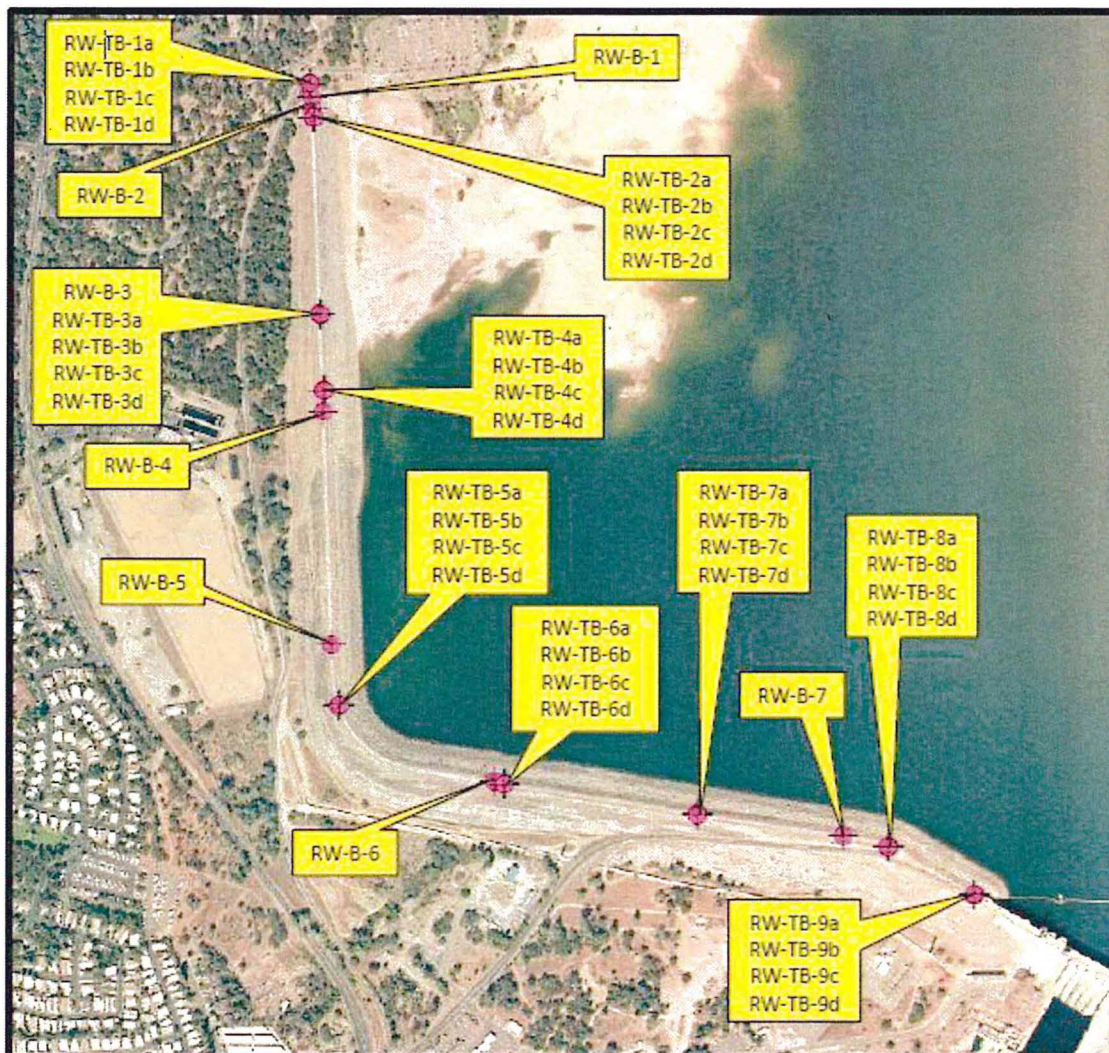
Figure 1. Overview Map

Attachment A

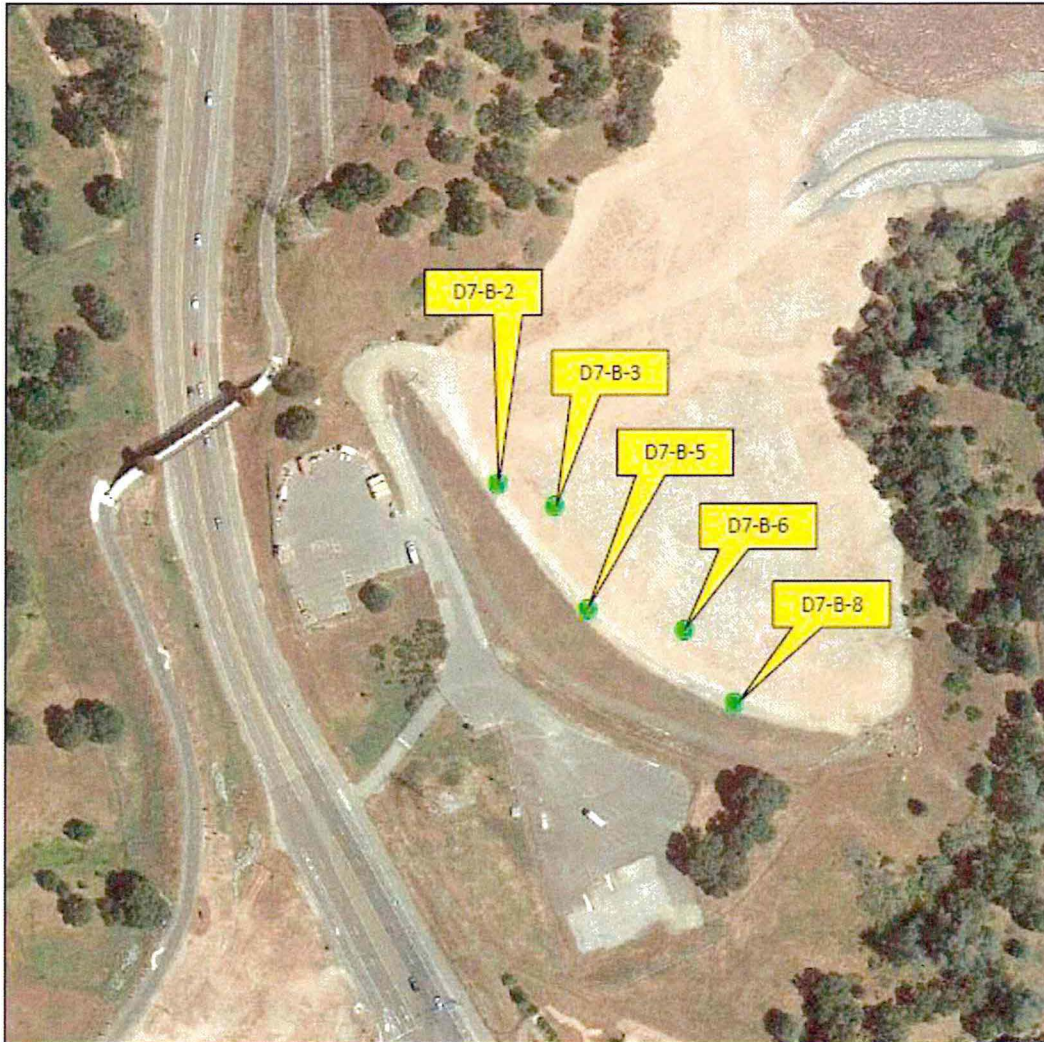
Proposed Location of the Borings



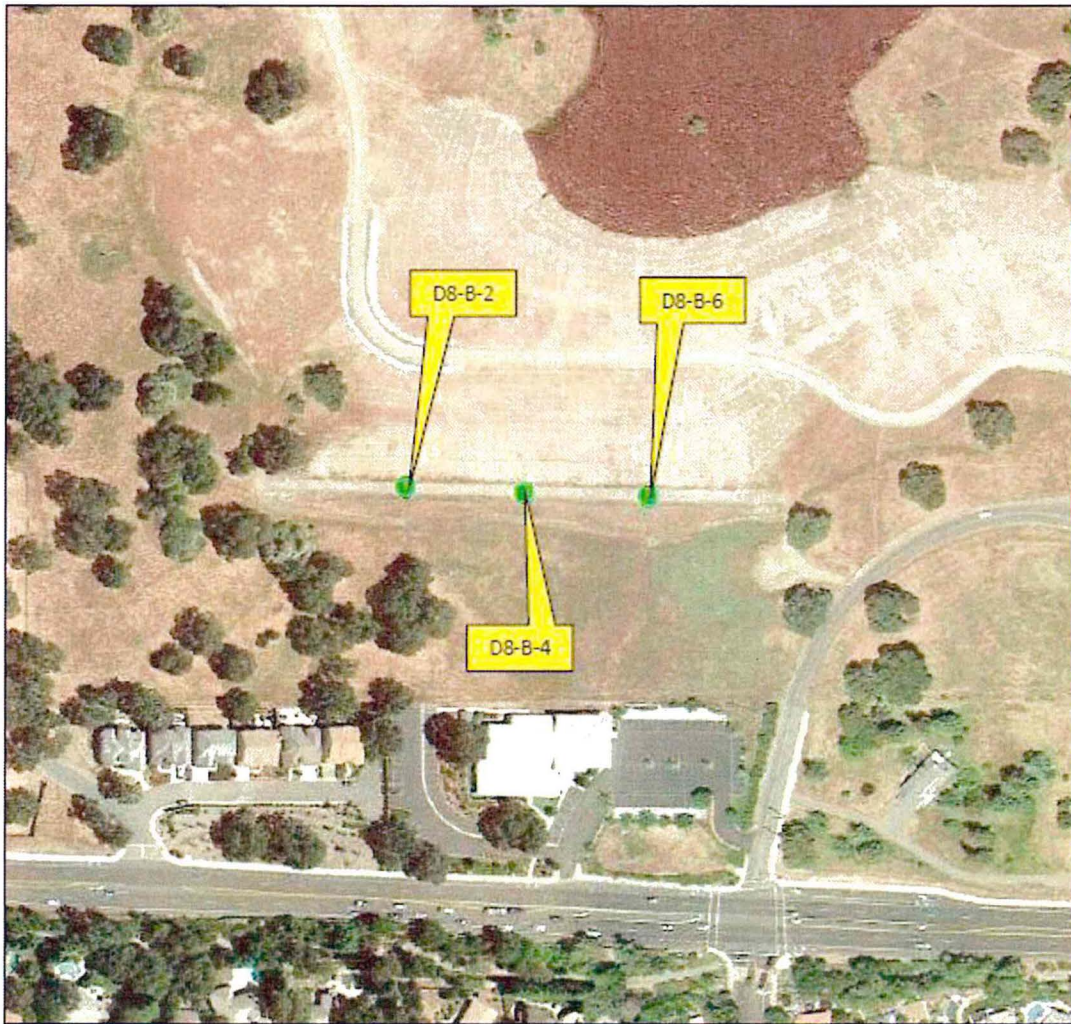
Locations of proposed borings along the Left Wing Dam.



Locations of proposed borings along the Right Wing Dam.



Locations of proposed borings along Dike 7.



Locations of proposed borings along Dike 8.



Locations of proposed borings along the Mormon Island Auxiliary Dam.

Attachment B

Cultural Resources Compliance

CULTURAL RESOURCES COMPLIANCE
Division of Environmental Affairs
Cultural Resources Branch (MP-153)

MP-153 Tracking Number: 15-CCAO-056-003

Project Name: Folsom Dam Raise Project, Army Corps of Engineers Geotechnical Investigation Project

NEPA Contact: Jamie Lefevre, Natural Resource Specialist

NEPA CEC Document: MP-CEC-17-01

MP 153 Cultural Resources Reviewer: Scott Williams, Archaeologist 

Date: October 31, 2017

The Bureau of Reclamation is proposing to authorize the USACE to access Reclamation lands in order to conduct internal geometry/lithology investigations in association with the aforementioned Folsom Dam Raise Project. The USACE is planning to conduct additional geotechnical investigations along the left wing dam, the right wing dam, Dikes 7 and 8, and the Mormon Island Axillary Dam of Folsom Dam.

The USACE conducted a cultural resources inventory for the Folsom Dam Raise Project that included the area of potential effects for the current undertaking. Tribal consultations for the dam raise are ongoing and USACE contacted Indian tribes for this undertaking. On January 30, 2017, USACE submitted a finding of no adverse effect to historic properties to the California State Historic Preservation Officer and received concurrence on the finding, dated March 2, 2017. On October 13, 2017 the USACE, the USACE notified SHPO of a slight modification to the project scope, all within the original APE, retaining a no adverse effect to Historic properties finding. The primary modification is that the bore holes will be drilled deeper than originally anticipated. The USACE requested that the SHPO provide comments or concerns within 15 days of receiving the October 13, 2017 notification. The 15 day comment period has elapsed, the USACE has assumed SHPO does not object with the finding and will be moving forward. All consultation correspondence between USACE and the SHPO has been provided with this cultural resources compliance document for inclusion in the administrative record for this action.

I concur with Item #8 of MP-CEC-17-01 that there will be no significant impacts from this action on historic properties.

This document serves as notification that Section 106 compliance has been completed for this undertaking. Please note that if project activities subsequently change, additional NHPA Section 106 review, including further consultation with the SHPO, may be required.



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

Environmental Resources Branch

OCT 13 2017

Ms. Julianne Polanco
State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Ms. Polanco:

This letter is to inform you of further geotechnical investigations to take place as part of the design phase of the Folsom Dam Raise (Dam Raise) Project. The U.S. Army Corps of Engineers (Corps) is planning to conduct additional geotechnical investigations along the left wing dam (LWD), the right wing dam (RWD), Dikes 7 and 8, and the Mormon Island Auxiliary Dam (MIAD) of Folsom Dam.

The Corps is authorized to reduce flood risk to the City of Sacramento and areas along the north and south banks of the American River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999 and the Water Resources Reform and Development Act of 2014. The State of California Central Valley Flood Protection Board (CVFPB) and SAFCA are the non-Federal sponsors for the Project. The Corps previously consulted with your office and Native American tribes regarding findings and determinations for the Dam Raise Project from 2014 to 2017 (Enclosure 1). In a letter dated March 2, 2017, your office concurred with the Corps' determination that the Dam Raise Project would have "No Adverse Effects" on historic properties.

During this next phase of design and construction the Corps is undertaking geotechnical investigations on the LWD, RWD, Dikes 7 and 8, and MIAD, between November 2017 and January 2018. Proposed locations, as well as a 50 foot buffer around each location to allow for the movement of equipment and people, are shown in the attached maps (Enclosure 2). Also shown in Enclosure 2 is the APE included in previous Section 106 consultation efforts for the Dam Raise Project. The locations of the proposed geotechnical investigations (borings) and buffer areas are entirely within the APE for the Dam Raise Project.

At MIAD there will be 5 borings, all 35 feet deep and 4 to 6 inches in diameter. At LWD there will be 18 borings, with depths ranging from 10 to 155 feet. At RWD there will be 43 borings with depths ranging from 10 to 160 feet. Exploratory drilling is proposed at Dikes 7 and 8 to characterize embankment material, with 8 borings, with depths ranging from 22 to 60 feet. For each of the geotechnical investigations samples will be taken every 2.5 feet

and retained for geotechnical analysis. Equipment at each location will consist of drill rig, water truck, support truck, government vehicle, and portable outhouse.

The locations for the geotechnical investigations fall within the identified APE of the project, which was previously surveyed for cultural resources. The geotechnical investigations are occurring within the manmade structures of Folsom Dam and Dikes and will intrude into areas below these structures that are known from original construction records to have been scraped of surface material removed at the time of construction in the 1950s. These new geotechnical investigations will be deeper than previously considered though they are expected to only go into the manmade material of the LWD, RWD, Dikes 7 and 8, and MIAD or bedrock below these structures. As a result, the Corps has determined additional cultural resources investigation is not required and that the previous determination of "No Adverse Effects" on historic properties is still applicable and we are informing you of these determinations.

If you have comments on the Dam Raise Project geotechnical investigations we request that you provide that information to us within 15 days. We would be pleased to answer any questions you might have.

Comments and questions may be sent to Ms. Melissa Montag, Historian, U.S. Army Corps of Engineers, Sacramento District, 1325 J St. Sacramento CA, 95814-2922, or by phone at (916) 557-7907 and by email at melissa.l.montag@usace.army.mil. Please contact Ms. Teresa Beckham, Project Manager at (916) 557-6703 with specific project questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mark T. Ziminske", followed by a long horizontal line.

Mark T. Ziminske
Chief, Environmental Resources Branch

Enclosures

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



March 2, 2017

In reply refer to: COE_2015_0305_001

Alicia E. Kirchner
Chief, Planning Division
U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Re: Section 106 Consultation for the Folsom Dam Raise Flood Risk Management (Dam Raise FRM) Project in El Dorado, Placer and, Sacramento Counties, California

Dear Ms. Kirchner:

The California Office of Historic Preservation (OHP) is in receipt of your letter, received on January 30, 2017, continuing consultation to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 300101), as amended, and its implementing regulation found at 36 CFR § 800. Along with your consultation letter, you also provided the following document:

- *Folsom Dam and Reservoir Project, American River in El Dorado, Placer and Sacramento Counties, California Cultural Resources Inventory, Evaluation, and Determination of Effects for Folsom Dam Raise Project Construction, Including Haul Routes, Recreation Trails, Staging Areas and Proposed Geotechnical Explorations Final Report (COE 2017)*

The undertaking includes strengthening of the Tainter gates; a new "top seal" bulkhead and hydraulic structure to prevent overtopping of the spillway gates; retrofit elements on the Tainter gates; a concrete extension of the pier; a 3.5-foot rise of the earthen embankments of Dikes 1-8 and the Mormon Island Auxiliary Dam (MIAD); a reinforced 3.5-foot concrete flood wall on the left wing and right wing dams; and a reinforced concrete retaining wall embedded in the earth-fill of the embankment. The COE previously consulted with my office and Native American groups regarding the establishment of the undertaking in March, 2015. At that time, the SHPO requested that the COE submit complete documentation of the identification effort and results for the undertaking. The January 30, 2017 submission provided documentation of the Area of Potential Effects (APE) and documentation of the identification efforts and results. The COE has defined the APE as including the footprint for the Dam Raise FRM Project located at the Folsom Dam, the Left Wing Dam and Right Wing Dam embankments, Dikes 1-8, and the MIAD with buffers of 50 feet on all sides. Additionally, the APE includes staging areas, haul routes, and a new recreation trail.

The COE conducted an inventory of the APE segments that required updated or initial survey coverage between fall, 2015 and winter, 2016. Previous identification efforts documented four cultural resources within the APE, including the Folsom Dam (CA-SAC-937H), Folsom Lakes Dikes (CA-SAC-1103H), a historic trash scatter and concrete box (CA-SAC-944H), and a historic water conveyance system (CA-SAC-945H). The updated inventory initially recorded a new site, 08-FDR-01 as a sparse lithic scatter at the base of the embankment on the south side of Dike 8. However, upon further inspection it was determined that the "artifacts" observed were

likely the result of mechanical breakage and deposition associated with heavy equipment operations in this location during the construction of Dike 8, rather than an indication of prehistoric occupation. The site was found to not be a cultural resource and will no longer be considered for this undertaking. The remaining four sites were evaluated for previous undertakings and consulted on with OHP in 2007. As a result, the Folsom Dam (CA-SAC-937H), and Folsom Lakes Dikes (CA-SAC-1103H) have been determined as eligible for listing on the National Register of Historic Places (NRHP) under Criterion A, and have received SHPO concurrence. Finally, CA-SAC-944H, and CA-SAC-945H have been determined no eligible for listing on the NRHP and received SHPO concurrence.

The COE has consulted with the Wilton Rancheria, the Tsi-Akim Maidu of the Taylorsville Rancheria, the Shingle Springs Band of Miwok Indians, and the United Auburn Indian Community (UAIC) throughout the section 106 process for this undertaking and has not resulted in the identification of any cultural resources within the APE for the Folsom Dam Raise Project.

The COE has determined that the undertaking will cause changes to the Folsom Dam and Folsom Lake Dikes, but that the changes would not adversely affect the qualities that contribute to the eligibility of the properties. The integrity of the Folsom Dam and Folsom lake Dikes would remain unchanged, and therefore, the COE has determined that the undertaking would have no adverse effect on historic properties. The COE is requesting my comments on their definition of the APE and their identification of historic properties, as well as my concurrence on their finding of *no adverse effect* pursuant to 36 CFR 800.5(b). After reviewing your submission I have the following comments:

- I agree that the Area of Potential Effect (APE) as represented in the attachments noted above is appropriate.
- The historic property identification efforts appear to be sufficient for this undertaking pursuant to 36 CFR § 800.4(b).
- Pursuant to 36 CFR 800.5(d)(1), I do not object to the COE's finding of *no adverse effect* to historic properties affected for this undertaking.
- Please be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, you may have future responsibilities for this undertaking under 36 CFR § 800.

If you have any questions, please contact Jessica Tudor of my staff at (916) 445-7016 or Jessica.Tudor@parks.ca.gov or Kathleen Forrest of my staff at (916) 445-7022 or Kathleen.Forrest@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer

Attachment C

Indian Trust Assets Concurrence Memo

Indian Trust Assets Request Form

****Please send your request to: Kevin Clancy, kclancy@usbr.gov**

Date:

Requested by	Jamie LeFevre, x 5035																					
Fund	XXXR0680R1																					
WBS	RR17529652MP70011																					
Cost Center	2015200																					
Region # (if other than MP)	(NA)																					
Project Name	Geotechnical Investigations for Right Wing Dam, Left Wing Dam, Dike 7, Dike 8, and Mormon Island Auxiliary Dam – Folsom Dam Raise Project																					
CEC or EA Number																						
Project Description	<p>Reclamation proposed to issue the U.S. Army Corps of Engineers a permit to work at Folsom Dam to conduct geotechnical investigations of the Left Wing Dam (LWD), Right Wing Dam (RWD), Dike 7, Dike 8, and Mormon Island Auxiliary Dam (MIAD). The geotechnical investigations would involve drilling 82 boreholes. The work is anticipated to begin in early to mid-November of 2017 and would continue for approximately 6 weeks thereafter.</p> <table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 40%;">Boring Locations</th><th style="width: 20%;">Number of Borings</th><th style="width: 40%;">Range in Depth of Borings (feet)</th></tr> </thead> <tbody> <tr> <td>Right Wing Dam</td><td>43</td><td>10 to 157</td></tr> <tr> <td>Left Wing Dam</td><td>18</td><td>10 to 153</td></tr> <tr> <td>Dike 7</td><td>5</td><td>32 to 58</td></tr> <tr> <td>Dike 8</td><td>3</td><td>22 to 33</td></tr> <tr> <td>Mormon Island Auxiliary Dam</td><td>13</td><td>10 to 33</td></tr> <tr> <td>Total Borings</td><td>82</td><td></td></tr> </tbody> </table> <p style="font-size: small;">Note: The boring depths are measured from the crest (top) of each embankment.</p>	Boring Locations	Number of Borings	Range in Depth of Borings (feet)	Right Wing Dam	43	10 to 157	Left Wing Dam	18	10 to 153	Dike 7	5	32 to 58	Dike 8	3	22 to 33	Mormon Island Auxiliary Dam	13	10 to 33	Total Borings	82	
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*Project Location (Township, Range, Section, e.g., T12 R5E S10, or XY cords)	The geotech work will be done at Folsom Dam in Folsom, California.
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*Please include map with request, if available.

ITA Determination:

The closest ITA to the proposed Geotechnical Investigations for Right Wing Dam, Left Wing Dam, Dike 7, Dike 8, and Mormon Island Auxiliary Dam – Folsom Dam Raise Project is the Shingle Springs Band of Miwok Indians which is approximately 12 miles east of the project site. (See attached image).

Based on the nature of the planned work it does not appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian lands. It is reasonable to assume that the proposed action will not have any impacts on ITAs.

K. Clancy

Signature

Kevin Clancy

Printed name of approver

11/01/2017

Date

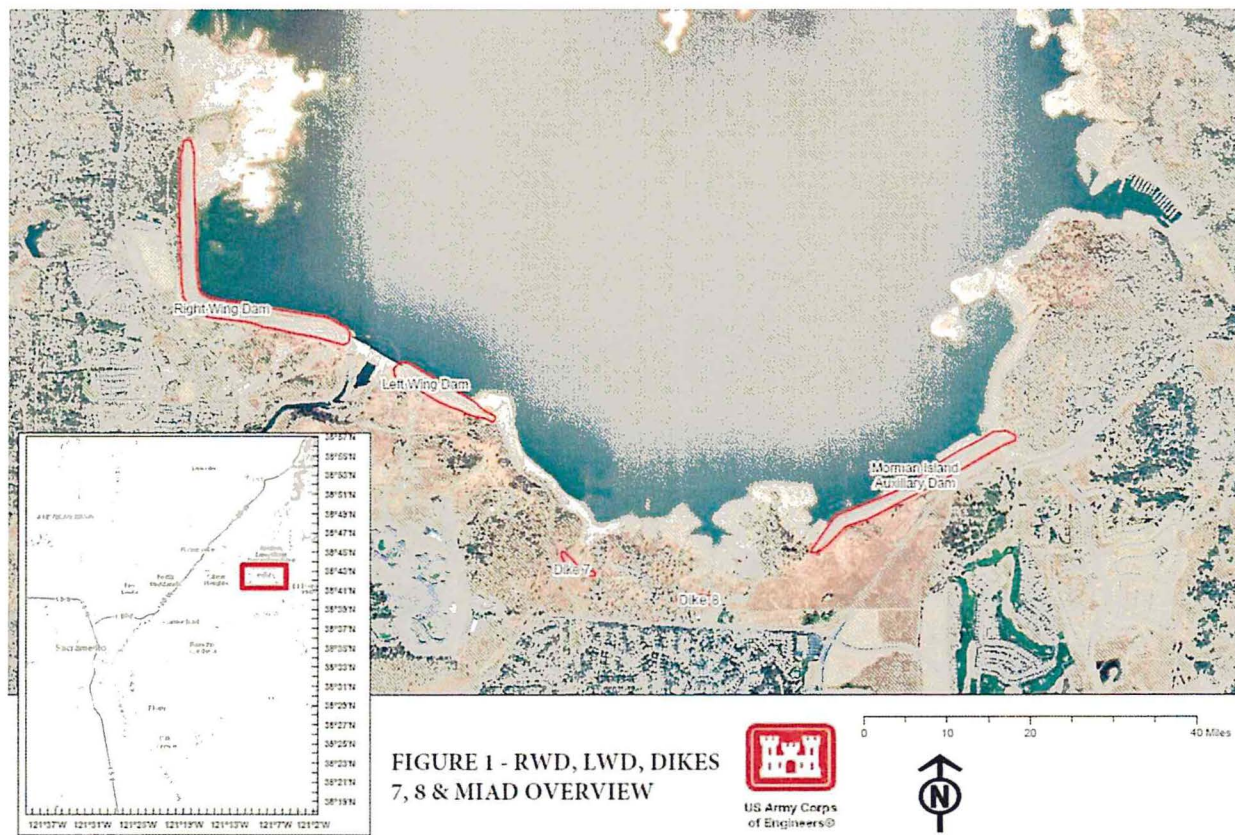


FIGURE 1 - RWD, LWD, DIKES
7, 8 & MIAD OVERVIEW

Figure 1. Project Location

