

**CENTRAL VALLEY FLOOD PROTECTION BOARD**

3310 El Camino Ave., Ste. 170  
SACRAMENTO, CA 95821  
(916) 574-0609 FAX: (916) 574-0682



January 15, 2020

Governor's Office of Planning & Research

California Department of Water Resources  
Delta Conveyance Office  
c/o Katherine Marquez  
1416 Ninth Street  
Sacramento, CA 95814

JAN 21 2020

STATE CLEARINGHOUSE

Subject: Comments on the Soil Investigations for Data Collection in the Delta Initial Study/Mitigated Negative Declaration (SCH No. 2019119073)

Dear Ms. Marquez,

Thank you for the opportunity to comment on the Soil Investigations for Data Collection Initial Study/Mitigated Negative Declaration (IS/MND). The IS/MND was prepared to determine the composition, location, and geotechnical properties of soil materials commonly found in the Delta to inform the design, analysis, and development of alternatives for the Delta Conveyance Project. The proposed project involves 275 on-land soil investigations and 57 on-water borings (332 sites total) that appear to include sites within the Central Valley Flood Control Board's (Board) permitting authority, thereby requiring Board approval.<sup>1</sup>

The Board, as a Responsible Agency under the California Environmental Quality Act (CEQA), will review and consider the environmental effects of the proposed project identified in the IS/MND, and reach its own conclusions on whether and how to approve the project involved (14 CCR 15096, subd. (a)). Accordingly, the comments herein are intended to assist in the development of a robust CEQA document capable of supporting the Board's permitting process.

## 1.0 PROJECT DESCRIPTION

The proposed project is described as a plan to conduct soil investigations to inform and evaluate alternatives, consistent with Executive Order N-10-19, for a proposed single tunnel Delta conveyance. The study area spans a portion of the Sacramento-San

---

<sup>1</sup> Under authorities granted by California Water Code and Public Resources Code statutes, the Board enforces its Title 23, California Code of Regulations (Title 23) for the construction, maintenance, encroachment or works of any kind, and protection of adopted plans of flood control, including the federal-State facilities of the State Plan of Flood Control, regulated streams, and designated floodways.

Joaquin River Delta over six counties. The locations of the 332 soil investigation sites are noted to be approximate. The IS/MND does not disclose the precise location of the sites, the types of tests to be conducted at each individual site (soil borings, cone penetration tests, or noninvasive geophysical survey investigations), the intended depth below ground surface for each site, the staging locations, or the number and type of equipment for each site. Figures 2a through 2c illustrate the study area and the approximate locations and types of tests at each site; however, the figures are small and hard to discern the details.

At a minimum, the project description should be sufficiently detailed to allow fact-based explanations of the environmental findings included in the IS/MND. As written, the project description does not provide sufficient information; therefore, the environmental analysis is not substantiated. The Board recommends including the details discussed above in the project description and additional figures depicting the precise soil investigation site locations. It is further recommended to include logical groupings and names of sites/groupings to reference throughout the document when discussing impacts.<sup>2</sup> In order for the Board to consider the environmental effects of the proposed project, the types of tests, the depth of the drilling for each site, the staging locations, and the type/number of vehicles and equipment for each site located within the Board's jurisdiction should be disclosed. To view federal and private levees, designated floodways, and regulated streams under the Board's jurisdiction, please visit <http://gis.bam.water.ca.gov/bam/>. If you need assistance with determining the Board's jurisdiction, please contact the staff person identified below.

## **2.0 DEFERRAL OF IMPACT STUDIES AND MITIGATION**

The IS/MND notes that reconnaissance level site visits by engineers, geologists, environmental scientists, and the cultural resource team will not be conducted until several days to several weeks prior to implementation of the proposed project. The reconnaissance level surveys are required by mitigation measures throughout the IS/MND, and include additional requirements to adjust the location of the sites if the survey results indicate that potential impacts may occur (e.g. mitigation measures BIO-1, BIO-18, CUL-1). This approach appears to be deferring impact studies that are necessary to determine whether adverse effects would occur, and if so, what the mitigation might be. Deferring essential environmental studies, such as biological and cultural resources, undermines the intent of CEQA's goals of full disclosure and informed decision making and is impermissible when preparing an IS/MND.

---

<sup>2</sup> As currently written, it is unclear what impacts are occurring at what drilling sites. Further detail is necessary to provide context within an environmental impact analysis for each section.

(*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92.)

The Board recommends that the CEQA Lead Agency conduct the appropriate reconnaissance level site visits prior to adopting the environmental document to ensure that proper environmental analysis and mitigation has been considered. A robust CEQA document that properly analyzes potential impacts is necessary for the Board to make findings as a Responsible Agency, if needed for a discretionary action.

### **3.0 ENVIRONMENTAL SETTING**

Because the reconnaissance level surveys have been deferred, the environmental setting provided within each subsequent section of the IS/MND are general and lack site specific information. For example, the environmental setting provided in the biological resources section does not disclose the type of vegetation or habitat types that are present at each drilling site and/or grouping. Rather, the environmental setting includes information obtained from a desktop search. The environmental setting should be capable of supporting an analysis of the environmental effects of the proposed project (14 CCR 15125).

The Board recommends including information obtained from the reconnaissance level surveys into the environmental setting for each section. This would provide the context for the related impact analysis.

### **4.0 GEOLOGY AND SOILS (SECTION 3.7 IN THE IS/MND)**

#### **4.1 Reconnaissance Site Visit**

Section 3.7.2(c) in the IS/MND states that a reconnaissance site visit will determine if the soil is unstable. Further, if the results of the reconnaissance site visit are not favorable and the soil is deemed unstable, the site will be relocated to decrease potential of on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. This appears to be deferring impact studies and potential resulting mitigation (see Section 2.0, above).

The Board recommends conducting the reconnaissance surveys prior to finalizing the IS/MND to evaluate and disclose the potential environmental impacts.

#### **4.2 Findings Discussion**

When evaluating the potential environmental impacts, the IS/MND concludes that there is either no impact or the impacts are less than significant. However, within each evaluation the IS/MND notes that implementation of mitigation measures would further avoid, minimize and/or reduce the potential for impacts. It is not clear whether the

findings would still be no impact or less than significant absent the recommended mitigation.

The Board recommends clarifying whether the mitigation measures recommended are necessary for each impact analysis and updating the findings where appropriate. It is further recommended that the CEQA Lead Agency review the document in its entirety as this same issue was noted throughout and in some cases, mitigation was introduced for the first time with a no impact/less than significant finding.

#### **5.0 HYDROLOGY AND WATER QUALITY (SECTION 3.10 IN THE IS/MND)**

The IS/MND includes findings of no impact for flood impacts (Sections 3.10.2(c)(b) and 3.10.2(d)). Based on the lack of information provided in the project description, it is not clear how this conclusion is supported. It is currently unknown which soil investigation sites are located on the levee, the type of drilling on the levee, the equipment and staging areas that will be present on the levees, and if any vegetation will be removed as a result of the proposed project. This level of detail is likely necessary in order to determine whether or not the proposed project may result in on- or off-site flooding and/or a flood hazard.

The Board recommends updating the project description as described under Section 1.0, above, and revising the discussion and conclusions within the hydrology and water quality section where appropriate. This level of detail is necessary for the Board to complete its permitting process and to make findings related to potential flood impacts as a Responsible Agency, if required.

#### **6.0 TRANSPORTATION (SECTION 3.17 IN THE IS/MND)**

According to Section 3.17 in the IS/MND, implementation of the proposed project may result in traffic delays or congestion due to the drilling equipment. Impacts to levees from excessive load, dynamic impacts, or traffic can include deformation and crest depression due to non-uniform settlement, and damage to levee slopes due to use of levee hinge points for vehicle turn-outs. These impacts could result in the loss of levee integrity, leading to levee failures.

As previously noted, the IS/MND should disclose which sites are located on or near a levee. The Board recommends implementing mitigation measures whenever haul routes or construction zones include travel on and/or over levee roads (including pre-project inspections and levee geometry surveys) with the elevations of levee crests and waterside and landside hinge points, and continuous monitoring during construction for evidence of levee deformation. Traffic control measures should include reducing truck speed limits and limiting the number of trucks on the levee during flood seasons. Levee deformation (either vertical or lateral) should be mitigated and be restored in

accordance with project levee designs pursuant to the Board and the United States Army Corps of Engineers.

If you have any questions regarding these comments, please contact Jennifer Calles at (916) 480-5413, or via email at [Jennifer.Calles@CVFlood.ca.gov](mailto:Jennifer.Calles@CVFlood.ca.gov).

Sincerely,



Andrea Buckley, Chief  
Environmental Services and Land Management Branch

cc: Office of Planning and Research  
P.O. Box 3044, Room 113  
Sacramento, CA 95812-3044

ec: Katherine Marquez  
[Delta\\_Soil\\_ISMND@water.ca.gov](mailto:Delta_Soil_ISMND@water.ca.gov)