

Memorandum

Date: December 1, 2017

To: Files

From: Dean Smith
Division of Safety of Dams
Department of Water Resources

Subject: Mill Pond Dam No. 2381
Mendocino County
Meeting Organized by Department of Toxic Substances Control

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Introduction

This memorandum documents our participation via telephone in the November 30, 2017 meeting organized by the Department of Toxic Substances Control (DTSC) and held in the Santa Rosa office of the Regional Water Quality Control Board (RWQCB). DTSC has completed their review of the May 19, 2017 draft Feasibility Study - Operable Unit E by Kennedy-Jenks Consultants for the Fort Bragg Mill Site, which includes Mill Pond Dam. The draft Feasibility Study recommends Alternative 2 - Institutional Controls. Alternative 2 includes a deed restriction, separation of the pond into east and west sections, and buttressing of the dam. DTSC will meet with Georgia-Pacific LLC to discuss the Feasibility Study, perhaps in January 2018.

Participants

The meeting was comprised of representatives of State and local agencies. A partial list of attendees follows:

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| Tom Lanphar, DTSC | Julie Pettijohn, DTSC |
| Cristin Kenyon, Coastal Commission | Bob Merrill, Coastal Commission |
| James Tischler, North Coast RWQCB | Craig Hunt, North Coast RWQCB |
| Daniel Harrington, Fish & Wildlife | Gordon Leppig, Fish & Wildlife |
| Angela Liebenberg, Fish & Wildlife | Jennifer Garrison, Fish & Wildlife |
| Linda Ruffing, Fort Bragg City Manager | Glen Young, City of Fort Bragg |
| Marie Jones, City of Fort Bragg | Sahrye Cohen, Corps of Engineers |
| Lakhbir Singh, DSOD | Dean Smith, DSOD |

Discussion

As an agenda topic, Linda Ruffing reported the middle portion of the Coastal Trail is 80 percent complete and is along the east side of the reservoir (as I recommended during the October 15, 2015 meeting). Public access would begin in January or early spring 2018, depending on the weather. There will be a 5-foot high fence along both sides of the asphalt walkway as a deterrence. The City is in the process of developing a site-specific development plan for this entire property that includes open space, an urban reserve area, and facilities for the Noyo Center for Marine Science.

In response to my questions, Linda Ruffing said the low-lying area between the dam and the ocean is planned to become a public park. I commented that the Division review of the dam alteration project is contingent on a property deed that would be

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recorded and which would limit public access and development of this area. I explained that the deed would reduce the downstream hazard at the dam. Coastal Commission staff stated there is a public trust easement for the California shoreline that would override any such property deed and that the Commission would not approve any project that limits public access to the beach.

As another agenda topic, I explained the proposed alterations to the dam are in the conceptual stage and therefore subject to change. There are three major elements: a rock slope protection berm at the crib wall, cement deep soil mixing along the inland portion of the dam, and a dividing wall to separate the pond into two ponds. The dividing wall would remove the dam from jurisdiction by Safety of Dams. The other alterations would stabilize the dam against earthquake shaking.

In response to questions, I explained the following.

- If the dam is not under Safety of Dams jurisdiction, then jurisdiction would transfer to the City or the County. The Division requires that any project to make a dam non-jurisdictional also correct any major dam safety deficiencies.
- The hypothetical earthquake considered in the Division review is a magnitude 8 event on the San Andreas fault with a peak acceleration of 0.45 g. Although foreshocks and aftershocks would also stress the structure, the main shock governs the analysis.
- Without a property deed limiting public access and development, the downstream hazard is higher and Division requirements would be greater. For example, the peak acceleration would be increased, perhaps to about 0.6 g.
- The rock slope protection berm would terminate above mean high tide. Coastal Commission staff said they would still have jurisdiction because it involves work on the beach—they would likely require an alternative to the rockfill. Sahrye Cohen commented that a Section 10 permit would be needed for work on the beach.
- The purpose of the alteration project is to prevent loss of reservoir contents from earthquake shaking. If there is a large earthquake after the alterations, it is likely that the dam would require repairs. Tom Lanphar commented that since the dam is a containment structure, funding for future repairs would be required for their approval and should be included in the Feasibility Study.

Other agenda topics that were discussed involved other agencies' requirements for the entire site and included the following comments related to the dam:

- Sahrye Cohen explained that there are delineated wetlands along the toe of the dam at the shoreline (e.g. Figure. 2-3 of the draft Feasibility Study). This could impact the proposed rock slope protection buttress.
- DTSC considers the dam to be a containment structure. If the contaminated sediment were removed then DTSC jurisdiction over the dam would cease. The reservoir sediment contaminant concentrations are low (e.g. parts per trillion) so the risk is low—Proposition 65 warnings along the middle portion of the Coastal Trail are not needed.
- A soil cap on the reservoir was discussed at length. The purpose of the cap would be to block access and to block transport. I explained that a cap would

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not correct the seismic stability deficiency. Sahrye Cohen said a cap has the Corps' lowest preference because it removes a wetland.

- Tom Lanphar explained that one of DTSC's seven criteria for project approval is community acceptance.
- The Fort Bragg City Council recently unanimously passed a resolution that the "pond be dismantled and thoroughly cleaned". Attendees noted that this resolution would involve wetland restoration at perhaps a 2:1 ratio, stream restoration projects for Alder Creek and for Maple Creek, and provision for treatment of storm water runoff.
- In 1990, fill was placed in the reservoir.

The Coastal Commission and the City of Fort Bragg requested copies of the drawings to alter the dam. The Coastal Commission is interested in the rock slope protection buttress. The City is interested in the dividing wall and the rock slope protection buttress.

DTSC will invite the attendees of this meeting to their meeting with Georgia-Pacific LLC to discuss the Feasibility Study.

A copy of the November 17, 2017 letter to Georgia-Pacific LLC that transmits DTSC comments on the draft Feasibility Study will be routed and filed.

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