



Chris Lanzafame <lanzafame711@gmail.com>

Board Meeting Today

Michael Moncrief <Moncrief@mbkengineers.com>
To: Chris Lanzafame <lanzafame711@gmail.com>

Mon, Aug 14, 2023 at 10:04 AM

Chris,

See below for our considerations related to the repair options, and justification for each. Also below is a general description of what could happen during the repair attempt. I'm available anytime today after 1030 to discuss. I can be available for the 4pm call if you want me on it. If you need me at your place I can be there.

Mike

RD 1607 District Emergency Repair Considerations: Sac River Levee Repairs Only

The two proposal options are whether to split work into two proposals or one. If both proposals are awarded together it guarantees imported fill will be delivered later this summer or early fall. If the work is split it provides the option of finding other source material which is highly unlikely. Even if the repair is not successful the contractor would not hold the District accountable for the fill component and could work with the District on any change orders.. There is no savings from lumping contract together or performing a change order as we proceed; these numbers will stay fixed based on the coordination with San Rafael Rock Quarry, Inc. These numbers are only to perform work on the Sacramento River levee. Without funding considerations, we would recommend tying up the contractor to provide fill for the breach repair at a later date. This project will also utilize available fill material from Dutra beyond the contracted amount that is sand material that will be offloaded initially with the rock placement to help seal the landside of the initial rock berm placement to stop tidal action and allow dewatering to begin.

Honker Bay Rip Rap Not Authorized as Emergency Work: Deferred Maintenance Eligible for NWP 3

The USACE regulatory would not approve the erosion on Honker Bay as part of the Emergency work. This site has been eroding for years, regardless of the current status, and the USACE would not allow it to be included in their emergency authorization. They do think it should be included in a separate filing, under their Nationwide Permitting process, which would be a standalone permitting process. The costs for these types of permit filings require biological assessments and site reviews by a District paid biologist, and submittal of an application. The District would also have a separate filing with SF BCDC for the placement of rock, if BCDC does not allow this work under the emergency application (Administrative Application) that was submitted. To repair this site the District will need to rebuild the waterside of the levee with fill material and then wrap with plastic and sandbags to temporarily armor the site until a permit for riprap can be obtained, or vegetation can be planted. There is the potential that this repair would be unsuccessful like previous repairs due to the high energy wind/wave action that can quickly deteriorate unprotected fill.

Risks of Repairs at Breach Location on Sacramento River: Potential for Blow-out and Subsequent Levee Failure

As with any project in the Suisun Marsh, on soft foundations, there is a potential for uncontrolled levee movement and foundation failure due to rapid loading due to the conventional repair alternatives available to the District. The District will be making repairs to a levee section that has been repaired numerous times since 2017, most recently in 2022. There is always the potential for these repairs to be unsuccessful. The Sheetpile wall area directly west of the location is an example of past repair/performance issues post emergency. RD 2130 tried multiple repairs in 2006 that were unsuccessful. The major difference with the particular breach site on RD 1607 is the waterside rock berm which continues to be in-tact. Utilizing this remnant levee feature to help seal the site is the critical first step before placing any material behind the berm to start sealing and rebuilding the levee.

The District has multiple options if the site cannot be repaired with conventional material and equipment. These future options will all require support and funding from other agencies, namely CA Department of Water Resources and

FEMA. We are still waiting for formal FEMA review and processing of the submitted request for public assistance to move forward. DWR does have sheetpile, piling, and emergency flood fight materials. These materials are not free, and not identified for RD 1607 use at this time. If the conventional repairs are not successful there is an ability to request this assistance through Solano County, and DWR Flood Operations, for this repair alternative. This effort would require financing that the District may consider requesting as a directed action. Our recommendation is to proceed with a request for directed actions given that FEMA timing and approval is pending, and DWR has yet to formally respond to our requests for emergency assistance.

Regardless of performance of the emergency repairs, additional resources and financing is required to support the District to fully repair the levees to pre-existing conditions. The request for direct action for DWR funds is still a good direction, and continued advocacy for repairs and financial assistance only helps describe your local emergency and needs.

Regards,

Mike