

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877
WEB: WWW.COASTAL.CA.GOV



W18d

Prepared September 5, 2023, for September 6, 2023 Hearing

To: Commissioners and Interested Persons

From: Kevin Kahn, Central Coast District Manager
Breylen Ammen, Coastal Planner

**Subject: STAFF REPORT ADDENDUM for W18d
CDP Application 3-23-0176 (CDFW Habitat Resiliency and Access
Enhancement Project)**

In the time since the staff report for the above-referenced item was published (on August 18, 2023), the Commission has received correspondence from the Moss Landing Harbor District (MLHD) expressing concerns about the project and requesting modifications to the project's conditions. MLHD's concerns, which primarily focus on potential erosion-related externalities, are largely the same as those previously expressed to Commission staff in correspondence and meetings during project development, including as covered in the staff report. The Commission has also received a letter from a member of the public, Danielle Vierra, who lives near to the project site, expressing concerns relating to public access impacts, maintenance, and erosion. Although staff believes that the commentors' concerns are fully addressed in the staff report, this addendum provides some additional clarifications and explanations, as well as direct responses to the MLHD's various concerns and suggested modifications.

Moss Landing Harbor District

MLHD suggests that they have not been adequately consulted during and before the CDP application process, and that their expressed concerns have been largely ignored. Staff does not agree. First, the California Department of Fish and Wildlife (CDFW), the Applicant in this matter, has been coordinating with MLHD for many years as the project has been in development. That MLHD ultimately disagrees with certain conclusions regarding the project, particularly MLHD's core allegation that the project will result in sedimentation in the harbor, is not the same as being ignored. And, in fact, in staff's view CDFW has tried to address MLHD's concerns as much as possible, and has been a responsive neighbor to MLHD.

And second, Commission staff reached out to the MLHD early in the development of this project to hear, understand, and evaluate their concerns. And staff took these concerns seriously, and endeavored to evaluate them as thoroughly as possible, that effort included review of the project by the Commission's Staff Engineer, Jeremy Smith. Staff subsequently met and consulted multiple times with MLHD and walked through

staff's assessment of the project, including as it related to MLHD concerns. Ultimately, as explained to MLHD, staff concluded that the project should not adversely affect harbor infrastructure and its boating operations in the ways that MLHD suggests (where the staff report includes a thorough overview of MLHD's concerns and analysis of them; see discussion starting on staff report page 21). In other words, staff's recommendation of approval with conditions for the project is based on substantive review of MLHD's concerns and does the opposite of ignoring them. Furthermore, despite MLHD's claims suggesting a lack of engagement, staff took the extraordinary step of also meeting with the MLHD Board of Harbor Commissioners at a noticed public meeting, where staff engaged directly with the Board, discussed their concerns, answered questions, and explained the staff analysis. Ultimately, MLHD was well coordinated with, and a difference of opinion on the issues raised is not equivalent to the MLHD being ignored or left out of the process.

And to be clear substantively, MLHD's letter raises many of the same issues discussed in the staff report (again, beginning on page 21). In particular, MLHD alleges that the project's potential off-site impacts, including the potential to exacerbate erosion or otherwise adversely affect Elkhorn Slough hydrology, are unknown because MLHD was not allowed access to the project's hydraulic modeling. However, a few things to note. According to the Commission's Staff Engineer it is common practice for hydraulic/hydrodynamic studies to lay out in a report the data used for model inputs and the assumptions and decisions made about how to run the model, along with the type of model used. What is uncommon is to provide the actual modeling software and disseminate it to others for their own use, including because it can require the use of supercomputers and other specialized software and hardware. In other words, the data inputs and assumptions, as well as real world empirical observations, are what's most critical when evaluating the competency of a model's ability to capture hydrodynamics for its intended use. In this case, Commission staff and MLHD were both provided all of the same input data and assumptions that went into the hydraulic modeling, which is standard practice for making informed analysis, and Commission staff used that information to reasonably conclude the project should overall benefit erosion issues both on- and off-site. That the MLHD did not have the ability to run the model themselves—which Commission staff similarly did not have the ability to do so either—is not reason to conclude the project lacks engineering/scientific rigor or support.

Next, MLHD requests certain changes to special conditions regarding required monitoring and maintenance. First, the letter requests that CDFW be required to retrieve any non-native soils and transplanted eelgrass that leave the project site. Staff does not believe that such a modification is appropriate in this case. Rather, Special Condition 3 requires CDFW to keep the project site in a state of good repair, including necessary maintenance and upkeep of site infrastructure and restoration for plover habitat improvement. It is not intended to cover the issues raised by MLHD, especially because it would be essentially impossible to differentiate sediment or eelgrass that may have been from the project site versus what is from other areas of the Slough. Additionally, the project site only makes up a very small fraction of all the eroding shoreline in Elkhorn Slough, meaning that it would not be expected to be a large contributor in any case, and even smaller given an objective of the project is to reduce erosion at the site.

In addition, it would be difficult to impossible to quantify and/or pinpoint with any accuracy any potential sedimentary contributions from the site relative to the Slough as a whole, which, again, would not be expected to be large in relation to overall Slough dynamics. Finally, requiring retrieval of sediment in the manner suggested would likely need to be accomplished by dredging, which would have its own ecological impacts in areas of the Slough outside of the harbor. Indeed, this MLHD suggestion functionally appears to be a request that CDFW be required to take responsibility to dredge the harbor/Slough, which staff does not believe is warranted, including as a primary purpose and objective of the project is to actually slow erosion at the site, and staff's analysis is that such erosion reduction is to be expected with project implementation.

MLHD also requests that the required maintenance and monitoring term specified in Special Condition 3 be extended from the current 10 years to the life of the project, which is estimated at between 65-80 years. The Commission typically provides for monitoring and maintenance in 5 to 10 year increments, with allowances for extensions of that term for successive similar intervals, in order to provide for flexibility and adaptive management based on lessons learned over time. The maintenance needs 25 years from now may be quite different than today, and thus it would be premature to 'lock in' protocols today that may need modification in the future. Special Condition 3 is consistent with this approach, including providing for extensions to required monitoring and maintenance beyond the initial 10 year allowance, provided the project, including as informed by monitoring reports and adaptations, continues to be effective in meeting project objectives, including in terms of maintaining plover habitat values, public coastal access, and coastal resource protection.

MLHD also alleges that the staff report contains factual inaccuracies, particularly relating to causes of erosion at the site. MLHD contends that intentional breaching of levees in other areas of the Slough is the primary driver of the erosion issues in many areas of the Slough, including at the project site. Page 20 of the staff report discusses some of the drivers of erosion in the Slough, including construction of the harbor mouth itself modifying area hydrology, subsidence and sediment dynamics, and sea level rise. Staff continues to believe that these are the primary drivers of erosion in this complex and dynamic Slough environment.

That said, staff also believes that MLHD's statement regarding area levee breaches has validity to it as well. Starting in the early 1980s, CDFW conducted salt marsh restoration projects that included levee breaching at Parsons Slough, and over the years old levees have also failed naturally (as would happen in this case without intervention), increasing the tidal prism and therefore erosion in the Slough, including at the project site. However, a few things to note. First, such breaching did not occur by Commission staff (as alleged in the letter), as the Commission is a regulatory agency and not authorized in any way to actually carry out development. Second, CDFW has also not ignored this problem either. In fact, in 2010, CDFW constructed a submerged tidal barrier and oyster reef in Parsons Slough to help mitigate tidal prism and erosion associated with the breach of the levee at that location.¹ And third, it is inaccurate to ascribe the majority of

¹ Pursuant to pursuant to Commission CDP waiver 3-10-027-W, authorized in August 2010.

the erosion problems in Elkhorn Slough to past breaching of levees. Indeed, it is well understood within the scientific community that the construction of the harbor mouth in the 1940s that exposed the Slough to significantly more tidal action is the primary factor leading to widespread erosional patterns.²

But, perhaps most notably on this issue, MLHD appears to object to this project because it is essentially a 'band-aid' that doesn't address the overarching causes of erosion in the entire Slough ecosystem. Ultimately, in a highly complex and dynamic system like Elkhorn Slough, contributing factors to erosion at any given site are numerous, and due to that complexity and dynamism, it is challenging to quantify the extent to which any individual driver of erosion contributes to the outcome. Regardless of these contributing factors, the proposed project seeks to address on-site drivers of erosion (i.e., the unstable scarp and damage to stabilizing marsh vegetation) and improve the resiliency of the shoreline to reduce the on-site impacts of off-site drivers of erosion (regardless of the exact history and source of those drivers). It is beyond the scope of the project to address all causes of erosion everywhere in Elkhorn Slough. This project is meant to address it at a particular site, including to protect critical habitat for western snowy plovers.

Lastly, the MLHD letter questions whether part of the project is within its jurisdictional boundary. As part of the CDP application materials, CDFW included the 1962 State Lands Commission boundary line agreement that provides for a fixed (in perpetuity) boundary along the north bank of the Slough main channel between parcels now owned by CDFW and lands granted to the MLHD. All proposed work is located outside of the MLHD's jurisdiction as indicated in that boundary line agreement and within the area entrusted to CDFW through the agreement. In sum, including as confirmed by the California State Lands Commission, it appears that the proposed project is located outside of the MLHD's boundary and Commission staff has seen no evidence to suggest otherwise.

Comments Submitted by Danielle Vierra

Danielle Vierra's comments primarily focus on existing impacts of inadequately regulated public access, and the project's potential repercussions on such impacts. These concerns are indeed pertinent to the project; as discussed in the staff report, public access outside of dedicated public access areas at the site is currently one of the factors contributing to erosion along the bank of the Slough at this location. As proposed, and codified by Special Condition 2, the proposed project includes multilingual directional and informational signage, as well as various barriers to direct users, and new public access amenities (such as fishing pole holders to obviate the practice of 'digging' fishing poles into the slopes, creating additional erosional spots), all intended to protect habitats adjacent to public access facilities, protect the public from any hazards presented by the abandoned building and boatyard, and inform the public of the allowable types of activities at the site. Public access facilities will only be open during daylight hours. As proposed and conditioned, the project will reduce existing

² Malzone, Christopher. "Tidal Scour and its Relation to Erosion and Sediment Transport in Elkhorn Slough" (1999). *Master's Thesis*. 1826. DOI: <https://doi.org/10.31979/etd.zz9e-ww37>

3-23-0176 (CDFW Habitat Resiliency and Access Enhancement Project)
Addendum

externalities and environmental impacts associated with public access at the site, improve public safety, and allow for a greater number and greater diversity of public users at the site. Regarding this commentor's concerns about erosion, as discussed in greater length above and in the staff report, the potential impacts of the project on erosion in the surrounding area have been thoroughly studied and evaluated and the project is not expected to have any such impacts. And regarding this commentor's concerns about the 10-year maintenance and monitoring period, as the discussed above, the 10-year maintenance and monitoring period is structured to be extended beyond 10 years; the initial 10-year period (and subsequent such periods) simply allows for greater flexibility for adaptive management needs.

In conclusion, the assertions and claims made by MLHD and members of the public do not change staff's recommendation, which continues to be approval with conditions. As described above and more fully detailed in the staff report for this CDP application, staff continues to recommend approval of the CDP as conditioned. Staff believes that this is an exciting opportunity to recognize many Coastal Act objectives at this site, including enhanced public coastal access and coastal habitat resiliency, and that the project as conditioned should lead to achieving such objectives while also appropriately protecting coastal resources.