

Notes for March 25, 2020
Southern California Dredged Material Management Team (SC-DMMT) Meeting
US Army Corps of Engineers - Los Angeles District (4 Pages)

Attendance (*phone):

Stephen Estes* (Corps Regulatory)
Vanessa Navarro* (Corps Regulatory)
Miriam Yemane* (Corps Regulatory)
Theresa Stevens* (Corps Regulatory)
Lisa Mangione* (Corps Regulatory)
Larry Smith* (Corps Planning)
Chris Chabot* (Corps Planning)
Kirk Brus* (Corps Planning)
Natalie Martinez* (Corps Planning)
Joe Ryan* (Corps Engineering)
Allan Ota* (USEPA)
Bryant Chesney* (NMFS)
Carol Roberts* (USFWS)
Peter Von Langen* (RWQCB, Region 3)
Emily Duncan* (RWQCB, Region 4)
Marc Brown* (RWQCB, Region 8)
David Woelfel* (RWQCB, Region 8)
Alan Monji* (RWQCB, Region 9)
Larry Simon* (CCC)
Loni Adams* (CDFW)
Geraldine Trivedi* (City of Redondo Beach)
Andrew Winje* (City of Redondo Beach)
Kat Prickett* (POLA)
Leanne Hirsch* (Wood Environmental)
Barry Snyder* (Wood Environmental)
Stephen Campbell* (Wood Environmental)
Kimbrie Gobbi* (Wood Environmental)
Dan McCoy* (Weston Solutions)
Shelly Anghera* (Moffatt & Nichol)
Kim Garvey* (Moffatt & Nichol)
Ron Noble* (Noble Consultants)
Brent Mardian* (Pi Environmental)
Steve Cappellino* (Anchor QEA)
Adam Gale* (Anchor QEA)

Announcements: None

King Harbor Maintenance Dredging Project

- Maintenance dredging within the harbor is needed in to maintain safe vessel access
 - Need to remove shoals that have accumulated in King Harbor
- Dredging would occur at two locations: 1) Outer Harbor, 2) Basin 3 Entrance Channel
 - The maintenance dredging depth proposed for Outer Harbor is -18 feet MLLW

- The maintenance dredging depth proposed for Basin 3 is -15 feet MLLW
- Approx. 46,300 cy to the design depth is proposed for removal from King Harbor
 - Outer Harbor: 45,500 cy
 - Basin 3: 800 cy
- Approx. 62,000 cy to the 2-foot OD depths is proposed for removal from King Harbor
 - Outer Harbor (-20 ft. MLLW): 60,000 cy
 - Basin 3 (-17 ft. MMLW): 2,000 cy
- The applicant proposed two placement sites (beneficial reuse):
 - In-Harbor – up to 29,000 cy
 - Outer Harbor – up to 116,000 cy
- The SAP was approved on August 15, 2019
- The last dredging event in King Harbor occurred in 2004
 - Approx. 7,000 cy of material
 - Beach placement site
 - The current study was modeled after this 2004 dredging event; hoping for similar results
- Vibracore and grab samples were collected at King Harbor between October 14 and October 17, 2019
- Dredge Area Sampling: Outer Harbor (OH) site
 - Some coring locations were relocated (from proposed) to avoid rip-rap, rocks, or dangerous sampling conditions
 - 12 vibracore sampling locations
 - 4 different composite areas for analytical chemistry and geotechnical parameters
 - 33 grain size samples
- Dredge Area Sampling: Basin 3 site
 - 3 vibracore sampling locations
 - 1 composite for analytical chemistry and geotechnical parameters
 - 9 grain size samples
- Placement: In Harbor (IH) site
 - Collected 5 grab samples
 - Samples individually tested for geotechnical parameters and composited for analytical chemistry
- Placement: OH site
 - Collected 5 grab samples
 - Samples individually tested for geotechnical parameters and composited for analytical chemistry
 - The USACE and City of Redondo Beach have used this site in the past
- No Atterberg limits tested (too sandy)
- Chemical analyses performed on composites (5 vibracore, 2 grab samples)
 - Majority of samples contained very low levels of chemical analytes
 - Human RSL exceedances for arsenic in all samples (common in Southern California)
- Physical Analyses performed on individual cores and composite samples
 - All dredging area individual core samples were classified as sand (either medium or fine grained sand) and contained $\geq 80\%$ sand, except for two samples
 - Two composite samples were classified as medium sand; the remaining three composites were classified as fine sand

- All composite samples contained ≥ 80 percent sand and are appropriate for near shore placement.
- Proposed Placement
 - Up to 29,000 cy in IH placement site
 - Up to 33,000 cy in OH placement site

Comments & Questions (paraphrased)

- Allan (EPA): Melissa Scianni (EPA) and I reviewed this project and did some calculations. We are concerned about the PCBs in composites C and D but, I heard you say you were trying to get most of that in the IH placement site?
 - Kimbrie (Wood): Correct, this site is more compatible
- Allan (EPA): You characterized the IH placement site as a “beneficial use” site, what is the rationale behind that? Is there a biological benefit? If not, what other type of benefit is there?
 - Kimbrie (Wood): The beneficial use would be to make the harbor bottom more similar at all sites. If the harbor bottom is more uniform, it could potentially help with circulation patterns.
- Allan (EPA): As far as the OH placement site, the benefit I’m guessing is for beach replenishment, correct? But this area seems pretty deep. It seems like the material will just be sitting there.
 - Bryant (NOAA): On Allan’s point, this site is also at the head of a submarine canyon
 - Joe (USACE): A pit was created in the 1960s. That site was used in the 2000 Marina del Rey dredging project. It has been used for beach nourishment of Redondo Beach. The Corps has placed material there before. It was also used in 2012 to place dredged material from another Marina del Rey project.
- Bryant (NOAA): If the ultimate purpose is beach nourishment, why not do beach placement?
 - Joe (USACE): In 2012, we placed some material on the beach. During another event, the beach did not need nourishment.
- Bryant (NOAA): The bio concern I have is that we are moving a lot of sediment back and forth in a sensitive area, with a lot of unique features. You should justify using this site, given the sensitivity of the area.
 - Allan (EPA): The history of the borrow site needs to be in the report. The EPA doesn’t oppose to the concept of “borrow sites.” I think it would have helped if this was described in a little more detail in the report. Speaking to the concerns raised by Bryant, I am wondering if there may be a good resource of sand in the general area, and maybe this particular borrow site needs to be moved. For this particular project we are supportive of getting the dredging done, especially if some good clean sand can be beneficially reused in the future. But Bryant’s concerns should be looked at in terms of assessing other areas.
 - Loni (CDFW): I support Bryant Chesney's statement: "If the ultimate purpose is beach nourishment, why not do beach placement?" Just north of the Redondo Beach Outer Harbor disposal site, there is a Giant Sea Bass nursery ground that was discovered and documented in that location as per a recent 2020 published paper. I would verify (by survey) that giant sea bass have not expanded their nursery grounds into the proposed Outer Harbor disposal site. As far as the harbor disposal placement site, recent past surveys showed that King Harbor is used by

Broomtail sea bass, and they were observed in the surveys conducted by Merkel and Associates for the Redondo Beach Waterfront Project. The survey report indicated that grouper species may be residents in King Harbor due to the natural rocky bottom areas that includes a variety of algae and invertebrates as seen in underwater photographs. The harbor placement site should be surveyed for rocky reef, boulder habitat and for sensitive species such as Broomtail sea bass, Giant sea bass as well as sensitive/rare invertebrates (Abalone and Gorgonians), and marine algae and seagrass before sand is placed at the harbor placement site.

- Kimbrie (Wood): We had a bio resources report in Appendix A. We will refer to that and re-evaluate the sensitive species in that area. We will probably need to meet with the City first and then update you.
- Carol (USFWS): We are in a perpetual search for good beach sand. It would be a shame to put good sand in a place where it might not ever make it to the beach. I agree with Bryant. Why not put it in the surf zone so that we can be sure it will make it to the beach?
 - Larry (USACE): Was there any consideration made for beach placement during the prep for the sampling plan?
 - Kimbrie (Wood): No, there was not.
 - *Unknown speaker* (City of Redondo Beach): I am hearing a preference to place this on the beach. The City does not control the beach, it is controlled by the County. We will run into jurisdictional issues.
 - Larry (CCC): If we have clean, beach-compatible sand, it ought to go to the beach or near shore. We would support a re-evaluation of this disposal project to put it on the beach or near shore. We think that ought to be reexamined by the applicants.

Kimbrie (Wood): We will probably come back to the group in a month or two, after re-evaluating potential placement sites.

Water Quality Monitoring During Dredging

Larry Smith, Corps Planning Division, made a brief presentation on water quality monitoring during dredging and beach nourishment. He discussed the advancing technology of unmanned aerial vehicles (UAV) and the possibility of utilizing those assets to replace/complement current water quality monitoring. UAV's are becoming smaller, less expensive, and profoundly more capable to use for environmental monitoring. Prior to the meeting, Larry shared an ERDC paper on using UAV's for that very purpose. It would seem feasible to monitor the size and shape of the sediment plume generated by dredging and beach nourishment projects using UAV's. They would do a much better job at this than our current monitoring programs are capable of at a much lower price. After a brief presentation, Larry opened the floor for questions and/or comments.

USEPA expressed support for the concept and added a suggestion to use similar unmanned underwater vehicles to perform similar underwater monitoring functions. This was discussed further and the possibility suggested of using these underwater vehicles for monitoring eelgrass beds during dredging was raised. A staff member at the RWQCB supported the overall concept. One difficulty in using UAV's that was pointed out was the restriction on their use in some of our harbors due either to military reasons or for civilian aviation restrictions. Our next step is to develop a proposal for using UAV's to monitor dredging and present that to the SC-DMMT.