

Southern California Dredged Material Management Team (SC-DMMT)
March 23, 2011
Final Meeting Notes

I. Participating Agencies /Attendees:

- a. Larry Simone[†] (CCC)
- b. Mike Lyons[†] (RWQCB – Los Angeles)
- c. Allan Ota[†] (EPA)
- d. Leah Butler[†] (EPA)
- e. Bryant Chesney (NMFS)
- f. Chris Osuch (Anchor QEA)
- g. Jack Malone (Anchor QEA)
- h. Dan Swenson (USACE- Regulatory)
- i. John Markham (USACE- Regulatory)

[†] participating via teleconference.

II. CSTF Meetings: none

III. Project Review and Determinations

A. Morro Bay State Park –SAP Results, suitability

- a. **Project Proponent:** City of Morro Bay
- b. **Corps comments:**
 - i. **Purpose of Discussion:** sediment analysis results (Note: additional topics discussed following the DMMT meeting are not referenced in this summary. Topics included compensatory mitigation, adaptive management, and monitoring of water quality parameters (incl. dissolved oxygen) within the Marina).
 - ii. **Background:**
 - 1. Proposal consists of dredging Morro Bay State Park Marina to a depth of -12 MLLW plus a 2-foot overdredge allowance (-14 MLLW) within dredge unit MB-DU1 and to a depth of -8 MLLW plus a 2-foot overdredge allowance (-10 MLLW) within dredge sub-unit MB-DU2A, in order to restore navigation for small vessels within the Marina;
 - 2. Approximate dredge volume within MB-DU1 and MB-DU2A would be ~28,000 cubic yards (cy) and ~23,500 cy, respectively (total 51,500 cy);

3. Disposal sites under consideration: Existing near-shore disposal site (NDS) and/or upland disposal.

iii. **Discussion:**

1. See notes from December 1, 2010 meeting for discussion concerning SAP;
2. SAR indicates grain size within MB-DU1 is approximately 52% sand, MB-DU2 (consisting of sub-units MB-DU2A & MB-DU2B) is approximately 30% sand, and MB-DU2A is approximately 63% sand;
3. Exceedances of ERL for Cr within both MB-DU1 and MB-DU2, and Cu within MB-DU2. Exceedances of ERM for Ni within both MB-DU1 and MB-DU2, may in part be derived from natural source (serpentine). Archived sample revealed similar or lower concentrations of Cr and Ni within MB-DU2A;
4. MB-DU1 composite passed Limiting Permissible Concentration (LPC) for both solid-phase and suspended particulate phase bioassays, while MB-DU2 composite failed LPC for both bioassay phases. Bioassay was not performed upon MB-DU2A due to insufficient volume of remaining sediment.

iv. **Determination:**

1. *Suitability:* Sediment within MB-DU1 is acceptable for disposal at NDS, based upon chemical and biological testing, the proposed use of an existing disposal site, and the lack of sensitive resources (e.g., kelp beds or reef habitats) within the NDS. Bioassays were not performed upon sediment within MB-DU2A due to insufficient volume of remaining sediment. However, it is expected that sediment derived from this dredge sub-unit would likely pass LPC based upon results of MB-DU1 testing, as MB-DU2A has higher sand content and similar or lower metal concentrations. Based upon this information, sediment within MB-DU2A is acceptable for disposal at NDS;
2. *Dredge depth and slope:* The applicant should evaluate the possibility of altering dredge depth within MB-DU1 from -12 feet MLLW to -8 feet MLLW in order to reduce the potential for slumping and erosion (leading to potential impacts on nearby habitat). If it is determined the project depth is to remain at -12 ft MLLW, the applicant should provide engineering justification for the proposed dredge slope of 2.5:1;
3. *Disposal location:*
 - a. The applicant should provide a detailed evaluation of upland disposal alternative(s),

- taking into consideration cost, logistics, and existing technology (practicability);
- b. The applicant should provide documentation (or references to existing documentation) of the presence or absence of sensitive resources at the nearshore disposal site (e.g., kelp beds or reef habitats);
4. *Post-Disposal Monitoring at NDS*: Corps Regulatory will obtain recent bathymetry data (2010) of the NDS, produced following the most recent dredging event of the Morro Bay Navigation Channel(s). This information will be provided to the applicant's consultant (Anchor QEA) once available, as well as DMMT members if requested. The applicant should provide post-placement bathymetric and monitor beach conditions following disposal at the NDS site, as well as develop a threshold for suspension of disposal activities should observations indicate degradation in beach conditions.

c. **EPA comments:**

- i. Elevated nickel in marina sediments compared to nickel in reference site - EMAP monitoring indicates likely source is nearby chromium mine upstream in the watershed draining into Morro Bay. Historic data shows elevated levels of nickel as well. In any case, the samples for MB-DU1 passed biological tests and concentrations of metals in sample MB-DU2A are similar or lower than that of the composite (MB-DU2). Not enough material was available to run additional analyses or biological tests but the materials should be acceptable for nearshore disposal from a chemical perspective if it is assumed that the contaminant(s) are more likely to be bound to the fine grain fraction.
- ii. Algal growth in marina - Applicant will use existing data to estimate volume of red algae within the project site and will develop a list of methods to be used to manage the red algae during dredging (e.g., removing the algae by trawling, underwater vacuum, or other debris management methods). During the pre-dredge eelgrass survey, the applicant will also survey for red algae to verify/quantify its presence in the marina. Using the results of this survey, the applicant will review the methods for handling the algae and will propose their preferred option to the SC-DMMT for approval.
- iii. Dredge depth and slope stability - The applicant will evaluate altering the project depth in the channel from -12 feet MLLW to -8 feet MLLW in an effort to reduce the potential of

slumping and erosion (leading to potential impacts on nearby habitat) and to reduce the amount of fines in the dredged material. The applicant will provide engineering justification for the proposed slope of 2.5:1, should the project depth remain at -12 ft MLLW.

- iv. Grain Size Compatibility - The applicant will evaluate the practicability of dredging the layer of fine material in MB-DU2A separately in an effort to reduce the amount of fines in the dredged sediment. This area is identified as volume V3 in the presentation provided by the applicant. If the sediments can be dredged separately, the sediments should be disposed of at an appropriate upland disposal facility or managed for other beneficial reuse. The applicant should also explore the feasibility of side-casting this fine grain layer to the landward sub-unit (MB-DU2-B) of the marina. This last option was not discussed during the conference call, but it may be feasible and should be evaluated. Similarly for the landward sub-unit (MB-DU2-B), where sediments are not compatible for beach nourishment because of predominant fine grain character, side-casting should be considered as an option to create deeper depth for navigation and access to the berths in this sub-unit of the marina.
- v. Post placement monitoring - The Corps will look for existing information (e.g., pre- and post- placement bathymetric surveys) for the near shore disposal site. EPA requests that the applicant monitor the near shore placement site (either by conducting a post-placement bathymetric survey or by beach monitoring) to measure the extent of beach nourishment following nourishment activities.
- vi. The applicant shall provide documentation (or references to existing documentation) of the presence or absence of sensitive resources at the nearshore disposal site (e.g., kelp beds or reef habitats). If such resources exist, the applicant should minimize impacts to the resources through the use of appropriate Best Management Practices (BMPs) to the greatest extent possible. Resource protection measures should be in place prior to nearshore placement.