LONG TERM MANAGEMENT STRATEGY

LTMS 12-Year Review
Beneficial Reuse Meeting

MEETING HIGHLIGHTS
1515 Clay Street, Oakland, CA, 94612
Conference Room 2 (Second Floor)
Tuesday, June 19, 2012, 1:00 to 5:00 PM

INTRODUCTION

MEETING ATTENDEES
Please email Katie Chamberlin for a scanned copy of the meeting sign-in sheet.

MEETING MATERIALS
The Background Information Document and meeting agenda, presentation, and minutes are available at http://www.spn.usace.army.mil/ltms/ltms_program_review.html.

MEETING PURPOSE
Address beneficial reuse issues identified at the first 12-year review meeting and identify future recommendations for improving beneficial reuse of dredged sediment under the Long Term Management Strategy Program for the Placement of Dredged Material in the San Francisco Bay Region (LTMS) program.

12-Year Review Process Overview – Presented by Bruce Wolfe (San Francisco Bay Regional Water Quality Control Board [RWQCB])

Bruce Wolfe presented an overview of the 12-year review process that began March 29, 2012. The 12-year review process involves LTMS agencies collecting and disseminating basic data about the program's performance to date and holding a series of meetings with stakeholders (each focused on a different key topic suggested by stakeholders) culminating with a summary report. This process, the summary report, and recommendations coming out of the stakeholder meetings will form the basis for discussing whether changes to the program may be needed in the future. At the March 29 meeting, stakeholders identified beneficial reuse, costs and contracting, and policy and strategy development as the three most important topics for future 12-year review meetings.

Public comments pertaining to this agenda item included:

- Athena Honore (San Francisco Estuary Partnership, Association of Bay Area Governments [ABAG]) noted that ABAG and the Coastal Sediment Management Workgroup (CSMW) are in the process of developing the Coastal Regional Sediment Management Plan for the region between Fort Point in San Francisco and Point San Pedro in Pacifica. ABAG and CSMW are looking for recommendations from LTMS agencies and stakeholders for projects along the coast in need of sediment. For more information, contact Athena Honore.

Definition of Beneficial Reuse under the LTMS – Presented by Brian Ross (U.S. Environmental Protection Agency [USEPA])

Brian Ross presented the key components of the sediment system in the San Francisco Bay and the criteria used to determine when the reuse of dredged material is considered "beneficial." These criteria include a need for the reuse project, as well as confirmation that project benefits clearly outweigh any environmental impacts or tradeoffs. The definition of beneficial reuse is broad; examples of the different LTMS stakeholders' viewpoints on what constitutes beneficial reuse include:

- Highest and best land use vs. most economically feasible
- Wetland restoration vs. agriculture in diked baylands
- Impacts vs. benefits of unconfined in-Bay placement

Brian Ross noted that beneficial reuse projects must be permittable. As such, they must meet the intent of relevant laws and policies, be consistent with regional habitat plans, and appropriately mitigate any impacts.

Public comments pertaining to this agenda item included:

- Jim Haussener (California Marine Affairs and Navigation Conference [CMANC]) noted that the LTMS originally made the decision to reduce the placement of sediment in-Bay and asked where the text regarding beneficial reuse in the Background Information Document originated because it did not appear to be the same as the LTMS's description. Brian Ross responded that the beneficial reuse definitions came from policy documents or relevant websites and were referenced to show the multiple definitions that the term has throughout the country. The LTMS Management Plan does not provide a solid definition for the term as its intent was to leave the term broad so that, as long as the required criteria were met, a project could be pursued.
- Jim McGrath (Bay Conservation and Development Commission [BCDC] Commissioner and San Francisco Bay RWQCB member) suggested revising the definition to reflect the fact that a reuse could still be "beneficial" as long as its adverse impacts were not "significant." Brian Ross responded that a beneficial reuse project must be beneficial overall (i.e., result in a net benefit).
- Tom Gandesbery (California Coastal Conservancy [CCC]) noted that while there has been a large focus on climate change at the policy-level, there has been little connection of policy efforts to projects. How should we address the carbon footprint of these projects and carbon sequestration of tidal wetlands? The footprint of bringing material to the San Francisco Deep Ocean Disposal Site (SF-DODS) is nearly ten times more than placing material at beneficial reuse sites. Brian Ross noted the relevance of addressing issues, such as a project's carbon footprint, in determining specific projects to implement.
- Mark D'Avignon (U.S.Army Corps of Engineers [USACE]) noted that potential beneficial reuse projects should be analyzed using a functional assessment methodology. Brian Ross agreed that it is difficult to weigh potential impacts against one another. He added that the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), Clean Water Act, and Endangered Species Act (ESA) also provide frameworks and thresholds with which projects must comply in order to be permittable.
- Ellen Johnck (independent) asked why there is a footnote regarding the term "beneficial use" as compared to "beneficial reuse" in the Background Information Document. Brian Ross responded that the LTMS has always used the term "beneficial reuse" to avoid conflicts with the State of California's term "beneficial use" as it is referenced in the Porter Cologne Water Quality Control Act. However, because the Engineer Research and Development Center uses the term "beneficial use" and the Background Information Document referenced their website, the footnote was added for clarification.

- Deb Self (San Francisco Baykeeper) asked about the impact that the new sediment quality objectives (SQOs) have on beneficial reuse. Brian Ross responded that the SQOs do not apply to dredging projects or to dredged material management. They are concerned only with the surface sediment (i.e., the top 2 to 5 centimeters of the surface).
- Jay Ach (Port of San Francisco) noted that the Background Information Document and presentation only discuss the environmental benefits of beneficial reuse, and that the economic feasibility of beneficial reuse also needs to be discussed. It has been assumed that public ports would pay what was required to transport their dredged material to costly upland beneficial reuse sites, but this often is not possible for public ports. To do so would mean that many dredging projects would not occur. If the LTMS can fund/build a beneficial reuse site, then it will be used by public ports. If not, then it is not likely that increasing beneficial reuse will be feasible under existing economic constraints. Brian Ross noted that beneficial reuse capacity has not increased at the rate anticipated by the LTMS Management Plan, and that an important part of this meeting is to exchange ideas on how we can improve upon this.

Beneficial Reuse Lessons Learned – Presented by Brenda Goeden (BCDC)

Brenda Goeden presented a summary of lessons learned from completing beneficial reuse projects in the Bay over the past 12 years. Key points from, as well as public comments pertaining to, her presentation are noted below specific to each site.

Bair Island Restoration Project

- The project was unable to secure funding to construct a berm necessary to meet USACE engineering standards on-site.
- The dredging site being in close proximity to the placement site reduces costs.
- Selecting a dredge pipe placement location that avoids eelgrass was a logistical constraint.
- The berm will be breached by the end of 2012.
- U.S. Fish and Wildlife Service is considering changing the habitat type from marsh to more ecotone to manage the dredged material that has been placed on-site.

Montezuma Wetlands Project

- The project is open, operating, and able to accept "cover" and "foundation" material.
- The project's distance from the Bay has been a logistical constraint for some projects.
- A previous logistical constraint was the unavailability of an offloader. This resulted in the site remaining dormant for several years.
- The tipping fee includes all development and management of the land.
- Over 3 million cubic yards (cy) of dredged material have been placed at Montezuma to date.
- Public comments pertaining to this site included:
    - Doug Lipton (Lipton Environmental) noted that the 30-mile distance from the Central Bay has not resulted in a significant cost increases and has not been a logistical issue. He added that for quality sediment (not foundation), Montezuma just met the cost of going to SF-DODS.
    - Jeff Rhoads (Argonaut Company) asked whether anyone knows what the sediment deficit is and how it is defined. Brenda Goeden responded that the scientific community is still learning about the decline in sediment supply. What is known is that the suspended sediment from the Delta has declined by about 37 percent since 1998 and continues lower each year. Historically, much more sediment has entered the system from the Gold Mining era. Researchers are currently studying the micro changes within San Pablo Bay. Along with this phenomenon, a concept called Bay clearing is occurring. As the Bay's turbidity

levels reduce, we see an increase in algal blooms and associated changes in biology with a clearer system. The LTMS agencies are trying to adjust their management behaviors accordingly.

- Dave Doak (USACE) noted that USACE makes every effort to place dredged material at upland beneficial reuse sites up to the point where the next best alternative is more cost-effective.

Hamilton Airfield Wetland Restoration Project

- USACE was the federal sponsor and the CCC was the local sponsor for this project.
- This project accepted more of the Port of Oakland's material than originally anticipated, thereby reaching capacity sooner than expected.
- The project accepted sand and mud from locations throughout the Bay.
- A logistical constraint was that the offloader had to pump material over a span of 5 miles, which increased the price.
- The project will be breached in either 2012 or 2013.
- The LTMS agencies are gathering information on costs associated with this project and will have the costs during the next 12-year review meeting.
- 5.7 million cy of dredged material were placed at this site.

Aramburu Island

- The Marin Audubon Society is working with stakeholders to create and improve habitat on Aramburu Island to promote the attenuation of waves.
- This is a small project and does not require much dredged material.
- The site is seeking sand but can use a variety of types of material.
- Strawberry Channel (located nearby) is dredged every few years, and it would have been ideal to have had the two projects mutually benefit from one another.

Castro Cove

- This was a Chevron remediation project and accepted dredged material from two maintenance dredging projects.
- The site had contaminants at depth. A sheet wall was constructed, and the contaminated material was removed. The new surface was capped with clean material.
- Chevron completed several phases of dredging and reusing material on this site as well as other sites they owned.

Middle Harbor

- Middle Harbor, formerly owned by the U.S. Navy, was used for shallow habitat restoration. It is the largest in-Bay beneficial reuse project.
- This site accepted 5.6 million cy of dredged material (more mud than sand).
- The material placed has settled for the last 5 years. Though the project is not complete, it appears to have been successful.

Breakout Group Reports

The meeting participants divided into three breakout groups each focused on discussing one of the following topics:

- Habitat considerations for beneficial reuse
- Incentivizing beneficial reuse
- Logistics of beneficial reuse

Facilitators for each breakout group came prepared with questions to facilitate group discussion. Key findings from each breakout group are noted below.

Incentives for beneficial reuse:

- USACE could make beneficial reuse their highest priority rather than lowest priority (an example is the Hamilton Airfield Wetland Restoration Project, which went through the Section 204 process [a USACE funding program for beneficial reuse projects]). Smaller projects could benefit from this process' funding if the limit on Section 204 was increased.
- USACE contracting could encourage bundling projects.
- The environmental work windows could be removed or reduced.
- Consider charging for in-Bay disposal (which is currently free) to make it cost competitive with beneficial reuse, and then use that money to construct beneficial reuse sites.
- Consider requiring projects that need to dredge outside of the work windows to take their material to a beneficial reuse site.
- Develop a bond measure to fund beneficial reuse projects.
- Consider an interagency program where mitigation credits could be banked for taking material to beneficial reuse sites.
- Consider grouping small dredging projects together or with a larger dredging project to have the material taken to a beneficial reuse site.

Logistics of beneficial reuse:

- Marinas with small concentrated areas of contamination cannot afford to take the material to beneficial reuse projects so it remains in the same location.
- Work windows are restrictive to projects and increase competition for limited equipment. The National Marine Fisheries Service is currently revising the LTMS programmatic Biological Opinion. Habitat recovery programs could be used to get a species off of the endangered/threatened species list; however, it is difficult to protect aquatic species as they cannot be "fenced in."
- Pumping and offloader availability are logistical constraints to beneficial reuse projects.
- Energy use and air quality need to be considered logistical issues for beneficial reuse projects, as well as for dredging projects.
- Consider the concept of a clearinghouse to allow for pre-dredging planning to match dredging and beneficial reuse projects.
- Schedule conflicts between beneficial reuse sites and dredging projects is a logistical constraint.
- Develop a better definition for in-Bay reuse types, such as beach and mudflat nourishment and/or levee repairs.
- There is a finite potential for the beneficial reuse of sediment for habitat restoration.

Habitat considerations for beneficial reuse projects:

- The San Francisco Bay Joint Venture (SFBJV) is creating a system which will provide a matchmaking service for dredging and beneficial reuse projects. The next intern hired by SFBJV will update the list of in-need potential beneficial reuse sites based on feedback from this meeting. In particular, SFBJV wants to note the additional information fields that would be useful to the matchmaking process (e.g., whether the site is ready to receive material or whether the site need is immediate or forecasted, etc.).
- Add to the SFBJV list the certainty of dredging projects (i.e., of timing and volume) .

- Consider having a large kickoff meeting in January of every year to match up dredging and beneficial reuse projects.
- Sea level rise may require certain sites to receive material much sooner than others to remain viable.
- Sites need to know the availability of material years in advance. The Project Coordination work group could modify their dredging projects chart to look further into the future.
- Consider an expedited permitting process for dredging projects that use beneficial reuse sites.

Next Steps

The final two LTMS 12-year review meetings will focus on costs and contracting, and policy and strategy development. They are anticipated to be held during August and October, 2012, respectively.